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PRESENTED BY
PROF. CHARLES A. KOFOID AND
MRS. PRUDENCE W. KOFOID
A DOMESTIC TREATISE
ON THE
DISEASES
OF
HORSES AND DOGS

...to conduct as many able Persons to practice with ease and success on their own Animals, without the assistance of a Farrier, including likewise the natural management as Stabling, Feeding, Exercise &c. together with the Outlines of a Plan for the establishment of genuine Medicines for these Animals throughout the kingdom, by

DELABERE BLAINE,
Professor of Animal Medicine.

AUTHOR OF


LONDON,
Printed for T. Boosey, Old Broad Street, Royal Exchange.

1803.
Advertisement.

MR. BLAINE,
8, ARGYLL STREET, OXFORD STREET,
Surgeon, and Professor of Animal Medicine,

Continues to give his Advice on all the Diseases and Defects of HORSES, abroad, at home, or by letter; his capability for which he hopes is sufficiently evinced by his long attention to, and public writings on, every branch of the subject.

The Purchase of Horses to persons unaccustomed to an attentive examination of their qualities, lays them open to such a field of fraud and uncertainty, that Mr. Blaine thinks he cannot render himself more useful, than by coming forward to assist in this particular: he will therefore give his advice and assistance in the Purchase and Sale of Horses with disinterestedness and integrity.

Mr. Blaine's success in the treatment of the Diseases of DOGS, while pursuing his researches on the complaints of quadrupeds in general, has drawn him into a very extensive practice among these valuable animals, on whose various complaints he may be, therefore, regularly consulted, at home, abroad, or by letter.

Infirmary for Dogs.—Many persons not having conveniences at their own houses for sick Dogs, or wishing them under his immediate care, has induced Mr. Blaine to fit up, near his own house, some commodious apartments for their reception, where they receive the most kind and judicious treatment.
INTRODUCTION.

Farriery, in an enlarged sense (now usually called the Veterinary Art), is the art of curing the diseases of the horse, and other domestic animals; and, as these animals are essential to our comfort, so this must be a very important subject, and must interest every part of mankind. This art may be said to be learned in two ways, which, with a little latitude of expression, may be called, the one,—the scientific or regular mode; and the other, the domestic or imitative mode.

The scientific mode of learning farriery is that which all persons intending to practise extensively on the animals of others, as Farriers, or veterinary Surgeons, should adopt; and without which their exertions can never be crowned with much success, or eminence reward their labours. This mode of curing the diseases of domestic animals can only be gained by an intimate acquaintance with anatomy, which teaches the structure and composition of all the parts of the body, internal as well as external; with phy-
siology, which teaches the use and end of these various parts, and the general laws of the animal economy; with therapeutics, which teaches the art of curing disease, which is an unnatural alteration of some part, or a disturbance of some function; and with pharmacy, chemistry and the materia medica, which teach the selecting and compounding the necessary remedies. When the veterinary art is learned in this manner, the practice of it requires no set rules, no ready formed prescriptions or recipes; but the mind of the practitioner is enabled to meet any case, and to act from well grounded principles. This, therefore, is by far the most important and useful mode, and, in fact, is the only one by which either farriers who practise on the animals of others, or even amateurs who practise extensively on their own, should act. The importance of this scientific investigation of the subject has, lately, become so evident, that a regular seminary, called the Veterinary College, has been established for the purpose of teaching it: but it is not in the power of the greater number of those persons who may even wish to study farriery in this manner, to attend such a length of time from their homes, or to meet the expenses attendant on this course; therefore it is necessary to devise some other mode by which all the branches before recapitulated, as anatomy, physiology, therapeutics, chemistry, and the materia medica, may be
taught in a regular, scientific, but intelligible manner. A Work, the result of great experience and indefatigable application, I have been for some years forming, having this for its object; and which Work was, last year, presented to the Public in the following form:

1802.—M A R C H 1st.

This Day is published,

In 2 very large Volumes, 8vo., with Plates,

Price 1l. 5s. in Boards,

THE OUTLINES OF THE VETERINARY ART,

or,

Principles of Medicine,

As applied to the Medical Treatment of the Horse, the Ox, the Sheep, and the Dog.

by Delabere Blaine,


London: printed for Longman and Rees, Paternoster Row, and T. Boosey, Broad Street.

The object of the present Work is, to offer to everyone concerned in domestic animals the knowledge of the means of preserving them in health, and the art of removing their diseases, in a manner at once instructive, satisfactory, and entertaining; and, as such, interesting readers of every class. The Philosopher, turning his attention to that noble animal the Horse,
may here contemplate his natural habits, his anatomical structure, and mechanical arrangement; and admire the wisdom displayed in the economy of his organs. The Naturalist, it is presumed, may here be led to a farther acquaintance with Nature's grand scheme, by the description of the formation of domestic animals, and the several variations in their functions, habits, and manners. Amateurs, lovers of Horses, will here likewise find this valuable animal considered not in one point of view alone, but as intended for various purposes, with the form best adapted for each of these pointed out, and the general beauties and defects described, so as to enable the inexperienced to judge of these points for themselves, thus rescuing them from the imposition of grooms and dealers. The natural treatment of animals, with the varied modes of feeding, of exercising, and of stabling—the laws and modes of progression—the breeding, rearing, and perfecting—will all form points highly interesting and useful to this class of readers. The Agriculturalist, the Farmer, and Grazier, may here likewise find the Ox and Sheep considered; and it is presumed, from the broad scale on which these animals are viewed, these persons may draw many important hints, not only relative to their treatment under diseases, but of the mode best adapted to preserved them in health, and to make them prove still more lucrative and useful. The
Sportsman will here have his attention engaged by a subject not before treated on,—the diseases of the Dog; and which, though described in a concise manner, yet, as connected with the whole, will be found to prove satisfactory. Professors of human medicine are here offered a farther extension of their physiological knowledge, by the opportunity of becoming more intimately acquainted with the structure, functions, and economy of domestic animals; and, by the application here made of the general principles of the healing art to the cure of their diseases, they become enabled to give that advice, in cases of emergency, thereon, which is often required, but seldom obtained; for analogy, undirected, totally fails. Veterinarians and Farriers may here learn the art they profess fundamentally, and from its proper base; by which, being taught to reason, to think, and to draw conclusions from well grounded principles, they will banish the receipts and prescriptions of their ancestors, and have within themselves the means of suggesting whatever any case may require: from whence it may be hoped that this art, so long buried in oblivion, will gradually rise to that eminence and respectability which its utility demands.

To form a progressive arrangement of its subjects, the Work is divided into three parts.

Part I. is appropriated to the collateral branches of the veterinary art, commencing with the history
of medicine in general, and proceeding to an historical account of that branch of it, that, as applied to the diseases of domestic animals, is termed veterinary medicine; or, as immediately regarding the horse, is called farriery:---the particular history of this art in England; with a comparison between English and continental farriery:---a history of the rise, origin, and progress of the Veterinary College:---chemistry, and its relation with the healing art:---the laws of organic life; with a comparative view of the various animals surrounding us.

Part II. considers the anatomical structure, functions, and economy of the horse, commencing with his exterior conformation, and proceeding to a description of the internal parts; comparing them with those of the ox, sheep, and dog; and accompanying the whole with plates, illustrative of the subjects described, drawn from the subjects by the author.

Part III. is intended to teach the practice of this art, by a systematic arrangement of the diseases of the horse into twenty classes, united with a more concise account of those of the ox, sheep, and dog. The plan of medical treatment laid down and directed will be found entirely new; founded on reason and science, and conformant to the late great improvements in this important branch of healing: the whole being attempted in such a manner as to prove easy
of attainment, yet fully adequate to its proposed purposes.

Testimonies in Favour of this Work.

"Mr. B—— had previously published the Anatomy of the Horse, re-published in this Work, in which he professes the parts treated of have been most of them taken from his own dissections. So far he has a fair claim of originality." "The drawings appear extremely correct; are executed in the most handsome manner; and the descriptive part is very correct."

London Medical Review.

"The second division of the Work is occupied with the Anatomy of the Horse, including the physiology, or knowledge of functions. This part of the Work is materially illustrated by engravings, the execution of which has considerable merit."

"The third division is allotted to the practical part of the veterinary art, or a description of the diseases of the horse, ox, sheep, and dog, with the most approved modes of cure. From the length of the anatomical part of the Work, the present part is, perhaps, more compressed than might be wished. The classification adopted by the author will materially assist the student in this branch of medicine, who is too apt to be misled by the barbarous and unmeaning jargon adopted, in general, in books of farriery."

Med. and Chirurg. Review.
"Mr. Blaine, we believe, is the first who has attempted, in the English language, a systematic view of the whole, founded upon scientific principles, in conformity with the modern discoveries in anatomy and physiology; and with the modern theories, concerning the nature and causes of the different morbid changes which the living frame undergoes."

"In treating of each disease, he gives a clear and accurate description of its symptoms; points out its causes, states the degree of danger, and the usual modes of termination; and subjoins a simple, rational, and scientific plan of cure. What a pleasing contrast this forms to the miserable productions entitled "Stable Directories," "Complete Farriery," &c., every page of which is crammed with farragoes, called receipts; certainly not inert, but often possessing a potency of the most dangerous sort."

"It appears to us, that this Work is the best and most scientific system of the veterinary art that has hitherto appeared in this country; and we therefore recommend it to all who are desirous of acquiring a competent knowledge of the structure and diseases of the horse, and other domestic quadrupeds."

*British Critic.*

To the above Testimonies may be added,—that this Work is at this moment translating into several other languages, by order of foreign colleges.
THE DOMESTIC TREATMENT OF THE DISEASES OF ANIMALS,
which I have called the domestic or imitative mode of learning farriery, is not acquired altogether on these grounds, for to study the art fundamentally, as it requires considerable time, with great application and attention, so it neither suits the leisure or convenience of the greater part of mankind, who, having either horses or dogs, might yet be glad of a nearer road to the knowledge of their diseases and cure. This domestic practice is therefore fitted for them; and consists in having the diseases, to which the animals treated on are liable, clearly and plainly described by their distinguishing characteristic marks or symptoms, with plain practical rules for the treatment, and simple, but efficient, receipts for the cure. Now these descriptions, these rules, and these receipts, can only be formed by a person fully aware of the subject in its most extensive point of view; and such descriptions, rules, and receipts, collected, will then form a Domestic Treatise on the Diseases of Horses and Dogs, enabling all persons not within the reach of a regular veterinarian, or in cases of emergency, or in those instances in which they may choose to make trial themselves, to distinguish easily between one disease and another, and, having so distinguished, to
proceed with ease and dispatch towards the cure, without wading through laborious reasoning, long cases, or cramp technical phrases. In human medicine, a domestic treatise on the cure of disease is supposed to border on empiricism, and a man so writing is deemed liable to injure the health of mankind, and the particular welfare of the regular practitioner; but though this may in some measure apply to human medicine, because in most places, however small, there is commonly some surgeon or apothecary near, from whom the sick may find ready relief, yet in veterinary medicine it cannot apply; for even large towns, many of them, have no regular veterinarian, while smaller towns, villages, and the country at large, are all of them deprived of any other assistance than what can be gained from the neighbouring smith; or, at least, they can very seldom produce any person at all fit to be trusted: therefore any plan that renders persons in general able to treat the diseases of their animals successfully, without risk or trouble, must be a valuable one. This I have endeavoured to lay down in the following sheets.

But even when this is gained, that is, when persons are enabled readily to distinguish one disease from another, and when the treatment of the several diseases is understood, even then, in most cases, the remedies are often not within their reach; for, frequently, no chemist, druggist, or apothecary is near,
to compound the prescribed remedies; or, even when present, these medicines, on account of their expense, may be adulterated, or made deficient; or one drug, as is frequently the case, may be substituted for another; and as to entrusting a regular recipe with farriers of the common class, they, in the first place, seldom have an assortment of drugs or compounds; and if they have, it is less seldom that they have candour enough to make up any receipts but their own. I speak not here of eminent farriers, or of many of those more regularly educated, even though not dubbed veterinarians, for many of these I have met with, who are very sensible and candid.

It would add, therefore, very considerably to the advantages derived from this Domestic Treatise, if the remedies prescribed were faithfully prepared, at a moderate price, and accompanied the Work itself, being generally distributed in the hands of every respectable vendor of medicines throughout the kingdom, so as to be within the reach of every one.----

There have been many persons who have made and vended remedies, as they termed them, for several diseases of the horse. I do not wish to depreciate the merits of any one; but thus much I must be allowed to say, that no person can pretend judiciously to compound horse, or other medicines, who is not acquainted with chemistry; and what knowledge some of the inventors of these medicines have of this sub-
ject, let their writings shew. Without a knowledge of chemistry, drugs may be mixed so as to produce a third substance wholly different from their separate qualities, and which, in fact, may prove poisonous. This is by no means unfrequent; and yet many of these compounders jumble, without any judgment, a vast variety of articles into one mixture. With regard to the compounded medicines which I here offer, I can say of them, that they have been chemically considered in every point of view; and the recipes from which they are formed are the result of long experience and frequent experiment; most accurately compounded, so as to be always of one determinate strength. They are made from the very best drugs, without any eye to the expense: and, that I may always be enabled to compound them in the same way, I have affixed a price that will allow of the purchase of the best drugs; yet as these medicines are prepared in large quantities at a time, so the price set on each is such, that no individual recipe could be made up for the same price, of good drugs, and in just proportions. They are likewise so compounded as to preserve good almost any length of time, and under every variety of temperature; and which is a circumstance too seldom considered in the making up of medicines. The form I have also endeavoured to make as convenient as possible: they are likewise very portable.
Hitherto I have spoken only of these medicines as accompanying this little *Domestic Treatise on Farriery*, whereby those who read the description of a disease may advert to a ready prepared remedy for it. But when these medicines become known, they may be purchased by many who have not seen this Work: now if, therefore, these medicines contain directions merely for their exhibition, however copious; so they will do, in point of instruction, only what has been done by others; but I profess something more; for, in addition to the excellence of the recipes from which they are formed—-in addition to the exactness, goodness, and convenience of their composition—-enclosed with each medicine is a regular treatise on the complaint, or complaints if more than one, it is intended for. This little treatise on the complaint will thus make the possessors acquainted with the disease throughout all its stages, and in all its varieties; and will also have this good effect, that it will not only teach the whole treatment of the complaint, but it will direct what other remedies may be made use of in case the one purchased should fail, or if any extraordinary circumstance should render its exhibition improper. In this respect, I presume that I stand novel; and in this I conceive my medicine arrangement holds out very superior utility; and in this I hope to prove, that it is completely removed from an empirical attempt to dupe
the public; not that I pretend to any superior disinterestedness; on the contrary, I have served the public some years, and I conceive that I merit my reward.

Yet, notwithstanding this, I make no doubt of being taxed with empiricism by many, who are either too dull to be generally useful, or too envious to witness any other success than their own without repining: but to this tax I do not plead guilty; for, in the first place, I will never make up medicines for general distribution, but for such complaints as appear in almost every instance under the same form, and require in nearly all cases the same remedies. In the next place, I pretend to few secrets: some of my recipes, I do believe, have never before been compounded, and some of the drugs of which these recipes are formed are not in general use; but in general cases, I pretend to no nostrums; I only use the best drugs, which I more judiciously compound, and with which I offer the superior advantage of more general instruction. To prove, likewise, that this arrangement is not founded on empiricism, I need only cite the regular treatise that accompanies each of these medicines, which treatise holds up to view in as conspicuous a light, every other remedy proper for the complaint it treats on, as that, or those I offer ready prepared. This treatise, likewise, affects no mystery in the compound, nor attributes to
the medicine it accompanies any occult qualities, but simply considers this in common with other remedies. And, lastly, I will add, that whenever farriery is as well understood as human surgery, and its practitioners become as enlightened, and as universally distributed throughout the kingdom, then this ready prepared medicine plan shall cease.

I therefore consider, that my present plan comprehends a complete simplification of farriery, and that it opens an easy and ready road to the cure of the diseases of domestic quadrupeds, particularly of the horse and dog. It does this, by enabling the owners of these animals readily to distinguish one complaint from another, and as readily to embrace the most simple and efficacious mode of cure. As such, this Domestic Treatise, and the medicines it recommends, form, properly, one common whole, and I would advise them always to accompany each other; that is, I would recommend the purchasers of these ready prepared remedies to furnish themselves with this treatise. But that purchasers of single articles may have every possible advantage, and that the arrangement may include every attainable degree of utility, each separate remedy, though a part of the whole, stands distinct; for it contains a complete treatise on the disease it is intended to remove, and therefore is of itself sufficient for that case.
These ready prepared medicines, according to the following arranged list, are placed in the hands of all the respectable venders of medicines throughout the united kingdom. The whole are prepared immediately by myself, and signed, in red ink, with my name, and none but these can be genuine.
AN ARRANGEMENT OF READY PREPARED MEDICINES FOR THE Prevalent Diseases of Horses and Dogs.

prepared and signed by D. BLAINE,

And sold, Wholesale, by T. Boosey, No. 4, Old Broad Street; and Barclay and Son, Fleet Market: Retail, by all the Venders of Genuine Medicines throughout the United Kingdom.

Each Article encloses a regular practical Treatise on the Complaint the Medicine is intended to remove.

HORSES.

CHOLIC BALLS, 2s. 6d. each.

By Cholic is here meant what is generally known by the name of Gripps, or Fret; and not Red Cholic, which is a more dangerous, but less frequent, complaint. For the Gripps, these Balls are very efficacious; and one alone, if given according to the copious directions accompanying it, seldom fails of giving instant and permanent relief. Persons keeping
horses would find it their interest to have some of these Balls always by them, as the disease is sudden in its attack, and generally strengthens by neglect.

CORDIAL BALLS, 1s. each, or 5s. 3d. the half dozen.

Persons in the habit of giving what are termed Cordial Balls on every occasion, are often guilty of error; for it is not every one of these cases that require cordials, and, even when they are proper, the substances usually given are, in fact, no cordials at all: a little aniseed, a few juniper berries, or turmeric, &c., can produce no lasting effect on the constitution, except depraving the appetite; but when the circulation droops from excessive exertion, as, in racing, hunting, &c., and hence becomes incapable of performing its proper functions, as, eating, digesting, sleeping, &c., then, a medicine that at once allays the irritability of the constitution, and gives it strength, will be of essential service.—This is obtained by these Balls, which, therefore, are of great use after severe exercise, as, a long day's hunt, a hard contested race, a long journey, or when a cold may be suspected to have been caught. These Balls are particularly useful for tender flue horses, who on any unusual work refuse their food: they are likewise well adapted to prevent these tender horses from getting out of condition, which they are
very apt to do on any fatigue, change of diet, or when moulting, in spring and fall. These and other cases wherein they may be advisable are specified at length in the directions enclosed with them.

FEVER CORDIAL BALLS, 6s. the half dozen.

At the end of fevers, or towards the close of long and severe colds, or other lingering complaints, horses are frequently very low and faint: in these cases, the active inflammatory symptoms having ceased, these Balls will give strength to the constitution to throw off the remains of the disorder, and perfect a recovery. But in the beginning of fevers, and other inflammatory affections, the Fever Powders hereafter mentioned are preferable.

COUGH BALLS, 1s. each, or 5s. the half dozen.

The coughs which horses are subject to from being out of condition, from long continued colds, or that accompany thick wind, will always be relieved, and frequently cured, by these Balls; and in every instance of cough unaccompanied with fever, I would strongly recommend them.

STRONG DIURETIC BALLS, 1s. 2d. each, or 6s. 3d. the half dozen.

Diuretics are useful in removing swelled legs, in resolving inflammation, and promoting condition.
Whenever, in either of these cases, an active, but safe, diuretic is required, I would recommend these. They are compounded of none of those rough substances that so frequently prove fatal, but in every case will act with safety, though actively; but when it is inconvenient to give balls, or a more flow and mild plan is thought prudent, then the mild Diuretic Powders hereafter mentioned may be made use of.

FARCY BALLS, 6s. the half dozen.

A regular course of these Balls, according to the directions contained in the treatise accompanying them, in most cases effects a cure of this loathsome complaint, when it is within the reach of medicine.

STRONG PURGING BALLS, 2s. each, or 10s. 6d. the half dozen.

When brisk purging is deemed proper, as in swelled legs, general foulness, too great fatness, thick wind, or pursiveness, these Balls will be found active: but, from the excellence of the aloes entering their composition, they will always prove safe, never raking the bowels, or producing those fatal gripes often the consequence of coarse, drastic, and badly compounded physic.
MILD PURGING BALLS, 1s. 6d. each, or 8s. the half dozen.

In lesser horses, or in those more weak and delicate, or in any case where the operation of purging is required only to be very gentle, these Balls will be found adequate to the purpose.

STRONG MERCURIAL PURGING BALLS, 2s. 6d. each, or 13s. the half dozen.

There are cases where the common forms of physic are not thought sufficient, but something that still more excites the absorbing vessels of the body is required: in this case mercurial physic is given, of which the above Balls are of the very best kind.

MILD MERCURIAL PURGING BALLS, 2s. each, or 10s. 6d. the half dozen.

These are a milder form of the above, intended for small or more delicate horses.

BLISTERING OINTMENT, 3s. per Pot.

Blistering Ointment may be, and very commonly is, cheaply prepared of euphorbium, corrosive sublimate, or other caustic substances; but, independent of the pain they give, and thereby reduce the condition of the horse, they very often act so deep as to occasion a lasting blemish, and sometimes even more
ferious mischief. The above Ointment is principally composed of Spanish flies, with a mild preparation of mercury added, to make it more certainly stimulate the absorbents; and is a very excellent Blister for strains, swellings, wind galls, curbs, spavins, splents, &c.

LIQUID SWEATING BLISTER, 2s. 6d. per Bottle.
This is a warm, stimulating application, that takes some time to produce its effect, and even in the end seldom raises a very active blister; it is, therefore, very proper to sweat away (as it is called) old chronic swellings of the back sinews, or to bathe and embrocate old strains; and, in fact, to apply to any part where it might be inconvenient to put a regular blister on. This Liquid is likewise particularly fitted for injecting into old fistulous sores.

MILD WASH for GREASE, 3s. 6d. per Bottle.
This most efficacious application will be found of the greatest benefit in the early stages of grease, and in moist cracks of the heels. It is likewise often of great service in running thrushes, when not very virulent.

STRONG PASTE for GREASE, 4s. per Pot.
This Paste can be recommended for its almost unlimited efficacy in the worst stages of grease, when
milder applications have failed. In pole evil, like-
wife, or other obstinate fistulous sores, this Paste,
melted and poured into them, seldom fails of promot-
ing a healing state. In canker, if spread over the
fore, it prevents its cauliflower sprouting, and heals
it. In running thrush of the most virulent kind,
when poured hot into the cleft in the frog, it hardly
ever fails of curing. In quittor, if it is mixed with
flour, and put into the pipes of the wound, it has
likewise the same effect, coring out the fore, and af-
terwards healing it.

EMBROCATION for STRAINS and LAME-
NESSES, 3s. per Bottle.

This will be found a valuable application for all
strains, whether old or new: it is likewise proper for
shoulder-wrung sores, saddle galls, &c. &c.

MANGE OINTMENT, 7s. per Pot.

This Ointment, intended for the cure of Mange in
horses, I never yet saw fail of producing the desired
effect, if applied according to the directions enclosed.
It is equally efficacious in destroying vermin on cat-
tle, and has often relieved wide-sparing farcy.

EYE WATER, 2s. 6d. per Bottle.

The diseases of horses' eyes are very difficult to
remove, and even when removed are very liable to
return, and end in blindness; so that no application can boast of much certainty. But the above is possessed of as much, and perhaps something more than most others; and I have used it with great advantage.

**ALTERATIVE CONDITION POWDERS, 5s. the half dozen.**

Horses are frequently hide-bound, as well as out of condition: this may arise from musty hay or oats, from moulting, or from worms; in all which cases these Powders mixed with the food will render it more nutritive, loosen the hide, lay the hair, and in every respect promote condition. They are likewise proper before and after a course of physic.

**FEVER POWDERS, 5s. the half dozen.**

In active fevers, when the heat is very great; in bad colds, and in all inflammatory affections, these Powders are proper, and will be found highly useful.

**WORM POWDERS, 5s. the half dozen.**

It is a most difficult thing to destroy worms within the stomach and bowels, and, in many instances, every medicine fails; but, in many others, these Powders, which I always use in my own practice, produce the happiest effects, and this so frequently, that I would always recommend their trial.
MILD DIURETIC POWDERS, 1s. each, or 10s. 6d. the dozen.

When an active diuretic is wanted, I would recommend the Ball; but when it is inconvenient to give a ball, or to spare the horse for a regular course of diuretics, these Powders are convenient, as they may be mixed with the corn, and will be eaten readily by the animal, who need not be confined by their operation.

DOGS.

The diseases of these animals are understood, by the generality of persons, even less than those of horses, oxen, and sheep; and, I believe, I am the first person in this country, and perhaps in any other, who has paid any direct and decided attention to them, on scientific principles. Though much remains to be done, yet the following Medicines I have found very useful in the cases, they are directed for; and, having stood the test of experience in my private practice, I now offer them with confidence to the public; at the same time remarking, that, as with the horse medicines, none can be genuine but what are signed by myself.

MEDICINAL POWDER for DISTEMPER, 1s. 6d. each.

The increasing demand for these Powders is a sufficient proof, I flatter myself, of their efficacy.
SPECIFIC OINTMENT for the MANGE, 2s. 6d. per Box.

This Ointment was before fold in lesser boxes, at 2s. each; but in large dogs this quantity being sometimes complained of as not sufficient to apply all over the body, I have increased it, by which I am under the necessity, when the present stock is out, of adding 6d. to the former price: but not only is the quantity increased, but, from my very great practice on this complaint, and the vast number of cases I see every year, I am enabled, at once, considerably to increase its efficacy, and yet to add to its mildness, by which there is not the slightest caution necessary in its application; for, should a dog lick off the whole quantity, not the least ill effect would arise.

MANGE POWDERS, 2s. a Set.

Though the Ointment is always found equal to the cure of every kind of mange, yet frequently a dog is so wholly out of condition, and his blood is so completely tainted, that it much expedites the cure, if some internal remedy is given. When there is a heat and redness of the skin, very troublesome to the dog, but not amounting to mange, these Powders will cure alone: and when a dog has had the mange, and there is reason to fear a return (which in mange often happens), these Powders, given now and then,
will be a preventive. In spring and fall, when dogs are usually very foul, they are in all cases useful.—A Set consists of several Powders, with ample directions.

WASH for CANKER in the EARS, 2s. 6d. Bottle.

There is hardly a more common complaint than the canker in the ear. I do not here mean the ulcer that is sometimes on the outside of the ear; but that issue of either blood or matter from its inside. This complaint I am very constantly consulted about; and I can with truth assert, that the above application has never in any one instance failed of curing.

WORM MEDICINES, 2s. 6d. per Set.

Worms in dogs, as in horses, are peculiarly hard to destroy, and are much more fatal to dogs than horses. The symptoms of worms in dogs, are, loose slimy stools, and often frothy; a hard belly; a voracious appetite, though frequently a lean carcase; the hair flares; and sometimes the nose runs. It is likewise not unfrequent that the convulsive fits, which dogs are subject to, are brought on by worms. The above Medicines I have given in these cases with the greatest success; and whenever there is reason to suspect worms, I would recommend them.
CONDITION PHYSIC, 2s. 6d. a Set.

To get dogs into condition for hunting, to cool them, or when they are coltive, physic is often given. For any of these purposes the above is very proper; and this is so made up, of different strengths, that the various ages, sizes, and strengths of dogs, may be exactly suited with the proper proportions.
AN OUTLINE
of
THE GENERAL FORMATION, STRUCTURE, AND
Economy of the Horse.

The body of a quadruped is most curiously made up of a great number of parts, as bones, muscles, membranes, vessels, nerves, viscera, &c. A general outline of these parts, particularly of those more internally situated, I have endeavoured to convey in the plate forming the frontispiece, which represents a headless horse on his back, with the belly cut open, and his intestines removed; the letters referring to the following parts: a, the windpipe. b, the gullet, or food passage. c, the great vein, called the anterior cava, from the right side of the heart, dividing into four branches, two of which furnish the fore legs, and two of them form the jugulars, or neck veins. Immediately by the letter c is seen the thoracic duct entering the cava: the thoracic duct is the canal that conveys the chyle, or nutriment, sucked by the lacteals from the food in the intestines, and is seen passing up between the two great blood
vessels.  

*d*, the heart: immediately above is seen the pulmonary artery, dividing into right and left: on each side of the letter are the cavities called the right and left ventricles, and above are the thin cavities of the heart, called its ears, or auricles.  

*e*, the aorta, or great artery, coming out from the left ventricle; below the heart, is seen the great artery and vein, to the left and right, called the posterior aorta, and posterior cava.  

*fff*, the lobes of the lungs.  

*gg*, the lobes of the liver.  

*h*, the gall duct, which is here only a single pipe, without any bag or reservoir, as in other animals.  

*i*, the stomach.  

*k*, the duodenum, or first gut, with the gall duct entering it at the same place with the pancreatic duct.  

*l*, the mesentery, or caw, seen hanging from the stomach.  

*m*, the spleen.  

*nn*, the kidneys.  

*o*, the great vein, called the vena cava: at its side is seen the aorta, or great artery.  

*pp*, the ureters, or pipes, conducting the urine from the kidneys into the bladder.  

*q*, the rectum, or last gut, lying in a natural state above the bladder.  

*rr*, the spermatic cords, or pipes, conveying the seed from the testicles towards the back of the bladder, to penetrate the yard: one testicle is seen drawn out of the bag, that the passage of the spermatic cord may be seen.  

*f*, the bladder.

*Bones* form the foundation of the machine, supporting the soft parts, and enabling them to be moved without injury.  

The progression of a quadruped
principally depends on the form and direction of the bones: thus the skeleton will always be found admirably adapted to the various purposes for which the animal it belongs to is intended. Bones are formed during the growth of an animal, by means of the blood vessels depositing an earthy substance within proper membranes formed to receive it. The bones are tipped with a substance called cartilage, or gristle, which, by its great elasticity, counteracts the jar and shocks of violent motion; and, to prevent the effects of friction, the opposed ends of bones, forming joints, are furnished with a very slippery fluid called synovia, or joint oil, which is formed from the blood vessels of the inside of the capsular membranes. These membranes being very full of blood vessels to form this fluid, are consequently very tender and susceptible of disease; and this is the reason that, when the joint oil escapes from a wound, that that wound is peculiarly dangerous; for the joint oil escaping, the bones rub against each other, and thus inflame the joint: therefore, in these cases, to stop this escape, and prevent the inflammation, judicious farriers apply something to the outer edge of the wound, as a hot iron, which inflames it, and thus closes the opening.

The bones, thus connected, form what is termed a skeleton, which is, therefore, nothing more than an admirable mechanical arrangement of bones. The
The skeleton of most quadrupeds presents a quadrilateral figure, having an inclined cylinder, supported by four pillars, or legs; the projection of the head and neck being counterpoised by the additional weight of the hinder parts. The strength of a cylinder is less, in proportion to its length, therefore a long-backed horse is weaker than a short one; and hence small animals can bear more weight, proportionally, than larger:---a dog can carry his own weight, which a horse cannot do. The bones forming the limbs are, wisely, not placed exactly perpendicular to each other, but in angles, by which means motion can be performed to a greater extent, and the jarring and shocks of such hard bodies prevented, as well as their fracturing: but this deviation from the perpendicular must have powers to correct it, and which is effected by the muscles.

A muscle is a red fibrous part, called flesh, possessing a peculiar contractile power, generally under the influence of the will. To the end of a muscle an inelastic cord is generally attached, called tendon, or sinew. The sinews were by the antients called nerves; and hence a strong sinewed horse was said to be nervous: a bold expression even was nervous; and the old books of farriery describe the back sinews as the great nerves of the leg.

Not only is the general inclination of the machine corrected by the muscles, but they also enable it to
transport itself from place to place; therefore muscles are the immediate organs of motion. The extent of the action of parts is the produce of their length, direction, and the different angles they are capable of forming; the force arises from the direction aided by the muscles; and though there are many circumstances, as vigour, irritability, or spirit, that operate to the advantage or disadvantage of the locomotive power, yet an animal skeleton is so admirably arranged, and formed on such just geometrical principles, that, on viewing the bony assemblage alone, we may in no small degree form a just opinion of the powers of motion possessed by any animal. It is this that has given rise to the geometrical admeasurement of the skeletons of horses, and the treatises on the mechanical arrangement of the bones. The curious will find this subject more fully treated on in the "Veterinary Outlines," page 342 to 347. The pillars, or legs, of the machine in quadrupeds move forward in progression, and gain a new centre of gravity, the different degrees of celebrity of which are called paces. The natural paces of the horse are, the walk, trot, and gallop; all others are artificial, either the effect of education, or debility. A dog has these three paces likewise; but the larger kinds, many of them, amble:---this is particularly observable in shepherds' dogs.

All the parts of an animal body are formed from what it receives from without, called the food. Dif-
Different animals receive different substances as food; as, the horse, grain; the dog, flesh; and this gives some variety to the organs of each. The food is gathered by the front teeth; it is then masticated, or chewed, by the grinders, which are wisely placed far back in the mouth, where, as being near the centre of motion, they have more power; and, as all grinding is assisted by moisture, *saliva*, or *spittle*, is poured forth into the mouth. The food being rendered small and moist, passes into a bag called the stomach, where it becomes still farther dissolved and acted on; which process is called digestion.

Some animals carry on their digestion in more stomachs than one. Oxen and sheep live wholly on herbage, which, affording less nourishment than grain, or flesh, they have need of more extensive organs to digest what they eat, very completely. An ox first collects a quantity of grass, which, as he swallows, passes into a membranous bag called the paunch: when this is filled, he lays down, and then has a power of bringing the pulpy mass up again to rechew it, and mix it with more saliva; when it is directed into a second stomach, without again entering the first, or paunch; from whence it passes on to a third, and a fourth. The horse, the ass, the hog, and the dog, have one stomach only; but in the horse this organ is of a different kind, in some respects, to that of most other quadrupeds, except asles, rats, and
mice, which animals, like the horse, appear also destined to live on grain. This peculiarity consists in having its first half covered by a thick, strong skin, which defends it from the hard bodies of grain, and perhaps acts, in a slight degree, as a gizzard on these bodies. A horse has a very small stomach [see i, frontispiece]; he therefore eats little, but often; for, being a speedy animal, it would have been inconvenient that he should eat much, and have retained it long in his stomach. Not only, therefore, is a horse's stomach small, but what he eats stays there but a little time. Thus a horse will drink three pails of water, yet his stomach will hold only one: hence, as a horse's food stays but a little time in his stomach, it is necessary that it should be broke very small before it enters; and this teaches the use of giving horses bruised food, which partly chews it for them, and thus makes it prove more nutritious: it likewise shews us why a horse bears hunger so much worse than cattle, for his stomach holds but little, and passes that little off soon. From this it will appear that the mode of treating hunters and racers is erroneous, when they are deprived of victuals many hours before they hunt or race; and hence, at the end of their exertions, they are frequently weakened too much to recover. The stomach of a dog is more muscular and strong than that of a horse, for he has to act on strong substances, as flesh, which, when
properly acted on, afford so much nutriment, that he can fast twenty-four hours after a meal without prejudice; and hence dogs who are fed with flesh once a day fatten; but, if they have vegetable food, as biscuit, &c., they should be fed moderately, but more often.

A horse cannot vomit; the principal hindrance to which arises from a very strong sphincter, or bundle of fibres, around the mouth of the stomach. If a horse could vomit, he must be choaked; as, from a peculiarity in his mouth, the returned substance would probably pass into his nose.

The intestines are a long track of membranous canal, vulgarly called guts, that reach from the stomach, and wind round the belly many times, and end in the fundament: they are divided into small and large, but both are a continuation of the same track. In animals who live on flesh, as dogs, the difference between the small and large is trifling; but the large intestines in a horse contain a vast quantity. The food here becomes mixed with the bile and other juices [see k, frontispiece], where the gall duct is seen entering the first small intestine, just as it arises from the stomach: the juice of the pancreas, or sweetbread, is likewise seen entering at the same place. Throughout this long track of intestines the food mixed with these juices passes; and, as it stays a less time in the stomach of the horse, so it
must stay a longer time in the intestines to perform its changes: and this is actually the case. This becomes necessary to keep in mind, as it ought to influence our conduct in travelling, and induce us to give a horse such food as may prove most nutritious on a short stay: it should dispose us, likewise, to give a horse time to digest his food when he has received it, and not hurry it, immediately as it is received, through the intestines by the pressure of the muscles, so that little nourishment can be derived from it. This also explains to us why physic in a horse takes twenty-four hours to operate, when in us it will work in half an hour: the intestines are here a very great length; nor is the horizontal position of the animal favourable to the passage of their contents. The intestines are furnished throughout their length with little vessels arising from them, which are called lacteal absorbents; and the rest of the body is furnished with similar ones, which are called lymphatic absorbents. Those of the intestines separate the nutritious parts, and carry them into a canal termed the thoracic duct. The lymphatic absorbents collect fluids, and even solids, from all parts of the body, and carry them likewise to this same duct, which may be seen in the plate running up the back bone between the two great blood vessels; and, passing behind the heart, it is entering the anterior vena cava, where it receives the great vein of the arm.
and of the head [vide c, frontispiece]. It is from this source that the blood is formed; and it is thus that food goes to the support of the constitution by forming of blood.

The blood, which is universally and continually circulating through the machine, consists of a solid part suspended in a fluid, which, on being cold, separate from each other. To circulate this fluid, reservoirs and canals are necessary: the reservoirs are the cavities of the heart, and the canals are called arteries and veins. The arteries carry it from the heart [see the plate, where o represents the vein, and that without a letter, next to it, the artery]. Those carrying the blood to the heart are the veins. There is what is called a double circulation; that is, while part of the blood is passing over the rest of the body, part is passing through the lungs, but so that, alternately, all passes through the lungs, and all through the other parts of the body. As the blood passes through the lungs, it is acted on by the air, becomes pure, and receives heat; and, as it passes over the rest of the body, it gives out the purity and heat which it received from the air, and the nourishment which it received from the chyle, thus to form, increase, and nourish the various parts of the body, and to support the secretions of the different fluids. The force with which the heart acts is so contrived, that at one moment it re-
ceives the blood of the veins, and at another it sends it out again, from an alternate contraction and relaxation: the arteries correspond in this; and this forms what is called the pulse. The pulse in the horse beats about forty or forty-five times in a minute: in a dog it beats eighty, ninety, or one hundred; for a small animal has more irritability, and is weaker, than a large one; and hence what the heart wants in strength it makes up in quickness: for which reason, young animals, as being weaker, have always a quick pulse; and thus a quick pulse without fulness is a mark of weakness. When the heart is stimulated to act by some particular cause with great force, the pulse is then full: if this arises from some diseased cause, the animal is then said to have fever.

The blood is the life of the machine, for it nourishes and forms every part; and this it does either by depositing its parts at once by its vessels, or through the medium of glands: but in whatever way it is done, it is called secretion. A gland is a large mass formed of an assemblage of arteries, veins, and excretory vessels, separating the secreted fluid, and carrying it off. The liver [vide ggg, frontispiece] is a gland to secrete the bile; and it is remarkable of this gland in the horse, that the bile is not kept in a reservoir called the gall bladder, as in other animals, but passes at once into the intestines as it is formed. The bile is the natural purge of the intestines; and, as we have already shewn that a horse is
almost always eating, and that the food is necessarily passing off very quickly, so in him it was necessary that the bile should constantly flow. The liver of most animals intended for quick motion is wisely divided into several lobes [vide frontispiece], and not, like that of man, formed nearly into one great mass: by this division into parts, the great exertions of the animal in leaping, running, &c., are not injurious to the organ. The kidneys are two important glands [vide nn, frontispiece], destined to separate the watery parts from the blood: these glands are more certainly acted on in the horse than in man: hence diuretics, or urine medicines, are given with certainty to horses, and never fail of their effect.

The nervous system is a species of primum mobile—a spring whereby all the actions of the body are set in motion: this system is formed of the brain, which is placed in the skull; and of white cords called nerves, that distribute the influence of the brain to all parts of the body.

The eyes in a horse are very acute; and quadrupeds in general see better, particularly at night, than man: the bottom of their eye is darker, and therefore better fitted to retain the light. Man defends his eyes with his hands; but quadrupeds, not having such means, are kindly afforded others which man is denied. A horse has a muscle surrounding the optic nerve that can draw the globe of the eye within
the socket to a great depth; and farther to defend it, as this is drawn in, a gristly curtain is thrown before the eye. Farriers call this the haw; and some of them are ignorant enough, when the eye becomes inflamed, to cut off the prominent parts of it seen at the inner corner of the eye.

Hearing in quadrupeds is likewise very acute, and their ears are wisely so formed as to receive a great many sounds, and to be able to direct them towards the objects they wish to attend to: hence their ears are very moveable. Tasting is effected by the tongue and parts around. Smelling in quadrupeds is still more acute; and to this end the cavities of the nose are very large, to enable them to distinguish the properties and qualities of every thing around them. Feeling is universally given to every part; but the more immediate organ of perception in the horse exists in his nose: in the dog, in his nose and paws. Quadrupeds are covered with strong substances called skin, or integuments: these do not differ from those of man but in the addition of a large quantity of hair, the various tints of which give the terms of bay, chestnut, black, white, grey, &c., to the horse; and yellow, liver, pied, mouse, white, black, &c., to the dog. An animal thus formed, when arrived at maturity, is endowed with a sensation morally termed love, and naturally, lust; and for the fulfilment of this passion he is endowed with
certain organs: in the male, the testes, or stones, for the formation of the seminal fluid, and the penis, or yard, for the discharge of it. In the female, the ovaria, which contain the rudiments of the future animal; and the uterus, or womb, into which it passes after impregnation. In this situation it is retained till it arrives at sufficient perfection to perform the various functions necessary to support life in the world. This is called the period of gestation, or going with young, which differs in different animals, according to their size; being longer in the large, and shorter in the small. In the mare it takes up about eleven months; in dogs, about nine weeks, or from sixty to sixty-three days.

AGE OF THE HORSE AND DOG.

Domestic quadrupeds have all of them certain alterations that take place in their bodies at fixed periods of their life, by which their age may be ascertained with considerable precision. Oxen have a temporary set of horns, which give place, at three years old, to a permanent pair, which produce a circle every succeeding year; so that by counting three years for the point of either of the horns, and a year for each circle, the age is gained.

Deer acquire an additional branch to the palm of the horn each year.
Sheep and goats do not change their horns: one year, therefore, being counted for the point, and an additional year for each circle they present around them, furnishes the observer with their ages.

Dogs have no exact criterion of their age; but their habits of domestication enable us to judge with considerable certainty relative to it. At about four years the teeth lose their points, and gain a surface, which increases as the age advances; they likewise become less white, and more uneven; and frequently by picking of bones one or more are lost. At seven or eight the hair about the eyes becomes slightly grey, which gradually extends over the face; but it is not till ten, eleven, or twelve years, that the eyes lose their lustre: whenever that takes place, the dog breaks fast, though many dogs last fifteen, sixteen, or seventeen years, and I have seen a mother and son, vigorous at twenty and twenty-one years.

The age of horses is also gained by a knowledge of the appearances their body puts on at different periods: as they become old, their eyes sink, their muzzles turn white or grey, and their eye-pits become hollow; but this so much depends on their previous usage, that the exact age cannot be gained from an attention to any of these appearances: we therefore have recourse to the teeth, which furnish certain alterations in their appearance every year in
all horses nearly alike. Till five years the age is judged of by the shedding of the twelve front teeth, or nippers. At two years and a half, the two front nippers above and below fall out, and are changed. At three and a half, the two teeth next to these, above and below, are replaced by others; and before five the two corners also; about which period the tusks likewise fall, and the colt assumes the name of the horse, and without them the filly now becomes a mare. Each of these permanent set of nippers has a mark or cavity in its upper surface. At six years the cavities of the two front nippers of the lower jaw are filled up. At seven, those of the two next of the same jaw fill up; and from this to eight the corner ones fill up likewise, when the horse is said to have lost his mark, and to be aged. The upper teeth may, however, after this period, furnish some criterion to judge by, though perhaps not altogether with equal precision; for at the same time that the cavities of all the lower nippers are obliterated, those only of the two front upper ones are effaced: so that at eight years the two front upper nippers lose their mark; at ten, those of the two next; and at twelve, those of the two corners. It must, however, be remarked, that horses for their real use are to be judged according to their constitution, and the previous use that has been made of them; some being capable of every useful exertion at fifteen, or even twenty, while others are worn out at nine or ten.
ALTERATIVES.

Alteratives are medicines that act on the body in a flow and nearly imperceptible manner, thereby correcting any latent evil. It is an improper custom to give alteratives when an animal is in health, under the idea of increasing it, or keeping him so; for it is evident that, when an animal is in health, any alteration must be for the worse.

The substances used as alteratives are of different kinds, and act in different ways; but they may principally be referred to such as act on the skin, called sudorifics, or sweats, as sulphur, antimony, mercury, warm cloathing, &c.; to such as act on the kidneys, called diuretics, as resin, nitre, cream of tartar, antimony, fox-glove, tobacco, turpentine, &c.; to such as act on the intestines, called purges, as aloes, gamboge, calomel, salts, &c.; to such as act on the stomach, increasing its tone, called stomachics; to which may be also referred cordials, as bitters of various kinds, spices, malt, beer, &c. These various species of alteratives are treated of at length under their several heads. See Sudorifics, Diuretics, Purges, Stomachics, and Cordials.

To these may be added those alteratives that act by all the above means, that is, such as gently stimulate all the secretions at the same time, as the skin, the kidneys, the bowels, &c. Various sub-
stances are used for this purpose, as nitre, antimony, sulphur, and mashes; an entire change of food, as from stable-fed to grass, may either of them prove an excellent alterative, as they act on all the secretions at the same time.

The cases that require alteratives are furfeits, swelled legs, grease, thick wind, hide-bound, general relaxation, which is shown by faintness, dulness, and constant sweating. The best general alterative that I have found in my practice is a compound that may be seen among my ready prepared remedies, called Alterative Condition Powders. See page 26.

These powders will act imperceptibly on all the secretions at the same time, and hence are very proper for furfeits, swelled legs, mange, hide-bound, and want of condition; and are very convenient, because they may be mixed with the food, and hence occasion little trouble, and require no confinement or precaution.

BALLS, REMARKS ON.

Balls are a very common form of putting horse medicines into, and they are also the most convenient form to give medicines to dogs: many substances, likewise, will not readily compound into any other form. When persons are expert at it, delivering (as it is called) a horse ball is much easier than the giving a liquid or drench. The mode
of giving balls to dogs may be seen in the Preliminary Remarks on Dogs, at the end of the book.

A horse ball should be less than a pullet's egg, but longer: it should be firm in consistence, and not liable to crumble; nor yet should it be too hard, or it may choke. This is a fault that most ready prepared horse balls have: some are so hard, that, even if they do get down, all the powers of the stomach can hardly dissolve them, and they may pass away unacted upon; this defect arises from making use of an improper substance to mix them with; it will, however, be found, that the ready prepared balls I recommend never harden by age. There is an instrument called a balling iron, often used by persons not very expert at delivering balls: it is best to give them without it; but, when it is used, it should always be guarded with cloth, to prevent the bars from being wounded. The most convenient mode of delivering a ball is, to back the horse in his stall, when the operator, raising himself on a stool (the bottom of the bucket is a very usual convenience, but it sometimes falls in, and alarms the horse), should gently draw the tongue a little out of the mouth, so as to prevent its rising to resist the passage of the hand; but the tongue should not be held out alone, or the struggles of the horse may injure it, but it should be held firmly by the fingers of the left hand against the jaw. The ball, being previously
oiled, must now be taken in the fingers of the right hand, lengthways, when the hand, being squeezed into as small a space as possible, must be passed up the mouth close to the roof, by which injury from the teeth will be avoided: having placed the ball on the root of the tongue, the hand should be withdrawn, and the tongue liberated, but not the head; when the ball passes down. The head should, during the whole, be but moderately elevated: when it is held too high, there is frequently danger of choking the horse. As the operation of giving balls, and even drenches, is a very forcible one, and produces great resistance on the part of the horse, so it is impossible to give them (except in cases of considerable emergency) more than twice a day; and yet some veterinarians, who write from theory, and not from practice, are found in common cases directing balls and drinks every three or four hours.

Balls should be prepared with very great care: the dry ingredients should be very finely powdered, and the moist most intimately mixed. In preparing them, an accurate knowledge of chemistry is necessary, or one substance may have such an effect on another as to convert it into a poison. When intended to be kept, great care is requisite to preserve them from spoiling: this is best done by compounding them in such a way as neither to harden, moulder, or ferment. The balls entering into my ready pre-
pared medicine arrangement have these advantages; they likewise retain their virtue any length of time, are most intimately mixed, never harden, and are of a proper size and convenient form. Those intended for horses are, mercurial and common Purging Balls, Diuretic Balls, Cordial Balls, Cough Balls, Farcy Balls, Fever Cordial Balls, Cholic Balls: those for dogs are, Purging Balls, and Worm Balls.

BLEEDING.

Sweats, diuretics and purges, are all particular modes of lessening the quantity of blood in the body, for what is removed from the body by them is forced to be supplied by the blood; but bleeding is a more quick and effective mode of lessening the blood, and has this difference from the former, that it removes all the parts of this fluid at once, and is, therefore, used to reduce the constitution; whereas they only remove the watery parts, and, therefore, can be safely applied in almost all cases, when bleeding would weaken too much. In all great and violent inflammations the blood vessels appear distended with blood; bleeding, therefore, in these cases, by relieving the vessels from their distention, tends to remove the inflammation. Hence bleeding is the most effective means of treating rising of the lights, or inflammation of the lungs; red cholic, or inflammation of the bowels; red water, or inflammation of
the kidneys, &c. Blood may be drawn from any part of the body, but in common cases it is usually drawn from the great neck veins that run up, one on each side in the hollow, between the windpipe and the flesh of the neck. Bleeding is not a difficult operation when once learned, and is commonly practised by a fleam, which, being held just on the vein, is struck with a stick sufficiently forcible to penetrate the vein, but not to pass through it. The most proper part to be opened is about a hand's breadth from the jaw. If a ligature round the neck is used to raise the vein, it should not be tied too tight; but it may, in most instances, be avoided by pressing one of the fingers, of the hand holding the fleam, on the vein, which will then rise. It is prudent to cover the eye of the side the blood is to be drawn from, as the flourish of the blood stick may make the horse start, and thus a wrong part be struck, or the operation frustrated. The pin should never be suffered to remain more than twenty-four hours, or the wound often fester.

The quantity of blood drawn must be regulated by the age, size, and strength of the horse, together with the nature of the disease. In violent inflammations of important organs, as the lungs, bowels, &c., too little is usually taken away: in these cases, five, six, or even seven, quarts is not too much. A horse has lost forty pounds without fainting, and has recovered.
If, in acute diseases, the blood drawn is firm, with a white tough crust on it, a repetition of the bleeding in a few hours is warranted. This particularly is the case if the symptoms yet remain in force, though the animal seems but little weakened by the former bleeding; also if his pulse, or the beating of the heart, which was before obscure, became more evident as the blood flowed. Blood, when drawn, should always be measured; that is, never suffer it to fall from the horse into straw, or on the ground, for horses have bled to death by this means.

When it is necessary to draw blood from the plate vein, or those of the legs, great care is requisite to avoid piercing through the vessel, and the parts below, which might occasion very serious inflammation. In these cases, instead of the common fleam and blood stick, a spring fleam is proper:—persons expert at it use a lancet, which is still more safe.

Bleeding in health, to prevent disease, is seldom necessary; however, to condemn it altogether is as improper, for there are cases when it may prevent very fatal diseases. When it is necessary to get a horse, from very low living, into condition very quickly, as from grass, straw yard, &c., if in this case high feeding is began upon in its full extent without previous bleeding, it is more than probable that the horse will be attacked with staggers, or some other disease. Whenever, therefore, a horse alters his
mode of living from a lower regimen to a fuller, it should either be gradually done, or he should be bled once previous to the process, and once during it.

BLINDNESS

Is a very frequent disease among horses, and is generally one of two kinds: that arising from the weeping inflamed eye, by some termed lunatic, which, after frequent attacks, ends in a white hard mass, seen within the globe of the eye, forming a cataract. The other species of blindness, among farriers, horse-dealers, &c., is known by the name of glass eyes, from the green shining appearance these eyes have; but which, to persons unaccustomed to looking at horses' eyes, is not easily observable: but it may be detected by the animal not winking when the hand is moved a little from the eye, and by his caution in coming out of the stable, lifting his legs high, and moving his ears quickly, as in alarm. The origin of this disease is supposed to exist in a paralytic affection of the optic nerve. The treatment of both may be seen under the article Eyes.

BLISTERING

Is an operation of great utility, and is, perhaps, the safest that is performed. Blisters act by inflaming the skin, which drawing a large quantity of blood to the part, its watery portion, or serum, is separ-
rated, and this forms the running. In a day or two
the irritation of the blister ceases, and the part is
then in the condition of a common wound, and, as
such, produces matter. At the same time, likewise,
that a blister acts on the skin, it stimulates the sur-
rounding absorbents to take up other fluids; and if
the blister is strong, and they are much excited,
they even remove the solids.

Mercury is known to stimulate these vessels more
than most other substances; therefore, when we wish
particularly to stir up the absorbents to remove a
part, we make use of a mercurial blister; that is,
calomel, or corrosive sublimate, is mixed with the
Spanish flies, euphorbium, or whatever the blister is
composed of. Mercurial blisters are, therefore, used
for splents, curbs, ring-bones, &c.; but when we
only wish to inflame a part, thereby to draw the in-
flammation from some other part, we content our-
selves with the flies, or other simply irritating sub-
stance.

It is a law in the animal economy, that two in-
flammations seldom exist in the vicinity of each
other; therefore, when an inflammation has taken
place in any part, and we wish to remove it, we at-
tempt to raise an artificial inflammation in the neigh-
bourhood, by means of blisters, which, if we effect,
we remove, or at least lessen, the more natural in-
flammation. Therefore, in inflammations of the
lungs, bowels, &c., it is proper to blister the chest, belly, &c., very extensively, by which means the inflammation may be removed from the vital organs to parts of less importance.

The substances used as blisters are various; the more active are, corrosive sublimate, butter of antimony, oil of vitriol, euphorbium, &c.: the more mild are, preparations of Spanish flies, of horseradish, mustard, &c. Great care is necessary in the compounding of blisters to advantage, as well as much judgment: they are frequently so strong as to leave a blemish through life. I have compounded an ointment for all the common purposes of blistering, distinguished in the medical arrangement under the title—

Blistering Ointment [see page 23]. This will be found efficacious in all bony swellings; blistering the skin actively, without destroying the roots of the hair, and blemishing the part, as is frequently the case with the blisters in use for these complaints.

Liquid Sweating Blister [page 24]. In some cases it is thought more proper gently to stimulate a part without raising the skin, or inflaming it much; and this is done by what is termed a sweating blister, which is very proper in thick gourdy legs, when the back sinews are thickened, and in all old strains and weaknesses. The Liquid Sweating Blister, and the Blistering Ointment, mixed together,
prove a very excellent application to the chest in inflammation of the lungs, and to the belly in inflammation of the bowels.

**BREAKING DOWN.**

What is usually termed *breaking down*, is a rupture of some of the ligaments described in "Veterinary Outlines" as suspensory ligaments. Vide vol. ii. plate 8. In these cases there is great weakness of the leg, and the fetlock is brought to the ground nearly; but real breaking down takes place when the back sinews themselves become ruptured. In either case, but particularly in the latter, a perfect cure is seldom obtained. The limb should be kept in a relaxed state, by elevating the heels, and any cooling application made use of. A very proper one will be the

**Embrocation for Strains** [page 25]. This should be applied to the part, either rubbed in with the hand, or cloths applied wet with it constantly, and from which great benefit may be expected. Blistering and firing, when the inflammation has subsided, will complete the cure, as far as it is able; but the horse is seldom, after, fit for much active exercise.

**BROKEN WIND.** See Wind.
CANKER.
When a running thrush has been neglected, and has made its way through the frog, and attacks the fleshly sole of the horse's foot, it is called a canker: its tendency to spread is such as to appear as though the part was inoculated with the disease, and, unless stopped, it very soon destroys the whole foot.

The cure must be begun by cutting away all the luxuriant fungus, or proud flesh, that appears even with the surface, then spreading some butter of antimony over it; or it may be touched with oil of vitriol; or, what very seldom fails, it may be smeared well over with the Strong Paste for Grease [page 24]. When this is done, a firm but regular pressure must be applied on the whole surface, by means of cross bars of iron placed under the shoe. This mode must be repeated every other or every third day, till the part is well.

CATARACT. See Eyes.

A COLD.
A cold, as applied to disease, is what in human medicine is termed catarrh, and in old books of farriery morfounding; and, when it becomes epidemic, it gains the name of distemper in horses, and influenza in man. It consists of an inflammation of the
membranes of the nose, which sometimes extends to the gullet, and produces fore throat. As it attacks with more or less violence, the fever is more or less, and the disease becomes formidable or trifling.

All colds are, in the first instance, to be treated as fevers and inflammations. If the symptoms run high, bleed, open the body, give mash, clothe the head, and keep the stable regularly warm, but not hot; and by no means expose the animal even for exercise. Night and morning give mixed with a mash one of the

Fever Powders [page 26]. If there is much cough, treat as under Cough. When the disease has lasted some days, if the horse appears weak and faint, as is sometimes the case, give malt mash, and every morning one of the

Cordial Fever Balls [page 21]. By this means the cure will be soon completed; and by keeping him to this diet, and not exposing him too early, he will avoid being so completely out of condition, as is usually the case after long colds.

Cholic Spasmodic, called Griplies or Fret.

The cholics of horses are of two kinds, extremely different to each other in their nature, and totally opposite to each other in their treatment, and hence requiring the utmost nicety of distinction; but which
is frequently neglected not only by indifferent persons, but by the generality of farriers; and hence cholic becomes a very fatal disease, and kills many hundred horses every year.

The two cholics I hint at are, first, that which forms our present subject, and which is known to farriers and grooms by the names of *Gripes* and *Fret*, appearing to consist of a spasmodic affection or constriction of the intestines from the application of some morbid matter or cause, producing, by its irritating quality, those convulsive and painful twirlings we have reason to believe take place in them. The other species of cholic is that which is known to farriers by the term *Red Cholic*, either from the high coloured urine made in it, or from the dark red appearance it gives the intestines. *Red Cholic* consists in a greater determination of blood to the intestines, which constitute their inflammation: hence red cholic is what veterinarians call inflammation of the bowels.

The *Gripes*, or *Spasmodic Cholic*, may be occasioned by air distending the bowels; being let loose from green food, particularly when unripe, or in a state of fermentation, as is the case with green food when it has been cut some time. This species of cholic is frequent where horses are foiled, unless great care is taken.

Too *large* a quantity of food may occasion it: thus horses newly turned to grafs, particularly into
tares, clover, &c., are very apt to have it; and, likewise, after having long fasted, when their eagerness induces them to eat voraciously.

Cold, applied in any way, likewise, is a frequent cause of cholic; but cold water drank when a horse is warm is the most frequent cause of all.

The principal point is to distinguish these two kinds of cholic from each other, which an attention to the following circumstances will generally render not difficult. When a horse is suddenly seized with a violent pain, kicking his belly with his hind foot; laying down, and suddenly getting up again, and when down, rolling on his back; his pulse being but little affected; breaking out in cold sweats, but the legs and ears not much altered in their general warmth; the distress very great, and the pain having sudden remissions;—when all these symptoms appear, a horse may be safely concluded to be labouring under the gripes.

But when a horse is more slowly seized, and his pain, though violent, is fixed and constant, not having intervals of ease; when he rolls, he does not usually turn on his back; the pulse likewise, and the beating of the heart, not being easily felt, but very obscure; and the legs and ears cold, with a frequent painful staling of a red coloured urine, and appearance of fever, accompanied with costiveness;—when these appearances take place, the horse may be said to have red cholic, or inflammation of the bowels.
The distinguishing marks between gripes and red cholic are, that gripes usually attacks very suddenly, but red cholic more slowly. Gripes usually presents some intervals of ease; but in red cholic the pain is fixed and constant: and though, in both these cholics, the horse may lie down and roll, and then rise again, yet, in gripes, he commonly has a disposition to turn on his back. In gripes, likewise, the beating of the heart and pulse, though it may be a little quickened, is yet as evident as usual; but in red cholic it is small and obscure. In gripes there are seldom any marks of fever, and the legs and ears remain warm; but in red cholic the mouth is hot and dry, and the legs and ears are usually cold.

The Cure of Gripes should be began, if very violent, by bleeding the horse, which is always safe; frequently of great advantage. Next to this, unless the horse's body is evidently open, he should be raked [see the article Raking], and a very large clyster of warm water thrown up. Various internal medicines are given by different practitioners; gin and pepper is a common mixture: a more proper one would be gin and oil of turpentine, a quarter of a pint of each, with one ounce of laudanum. But the best and most ready means I have found are the

Cholic Balls [page 19]. One of them given according to the directions accompanying them, fel-
dom fails to give relief. Immediately after any medicine is given, the horse should be walked briskly for a quarter of an hour, and then his belly should be well rubbed with a coarse brush, or it may be fomented with hot wet cloths. The following clyster I have known to do good, when every thing beside had failed:—

A large onion bruised.
Oil of turpentine, two ounces.
Gruel, tripe liquor, or broth.
A quart; mix.

INFLAMMATION of the BOWELS, called RED CHOLIC.

This, as we have said, is an inflammation of the bowels, and requires a very different treatment from the former, being a much more serious but a less frequent complaint. It may be distinguished from simple gripes by its having no cessation or intervals of ease; for, though the horse may cease to make violent efforts, from fatigue, yet he will still appear restless, in pain, and his flanks will heave. To a person accustomed to feeling a horse's pulse, this complaint presents usually a great difference to that of gripes; for in this case the pulse is small and oppressed, but much quickened; the ears and legs are cold; the mouth dry and parched; and the horse, though he lies down, from the excess of pain, yet he gets up
again generally without rolling: whereas a horse in gripes has a constant inclination to roll on his back, the urine is frequently voided in small quantities, and very red.

There are balls and other medicines advertised for this complaint; but whoever pretends to cure this kind of cholic by the mouth, either deceives himself or the public. The fact is, no medicine can reach the whole line of intestines sufficiently quick to do much good; and, moreover, they are at this time in such a state of tenderness and irritation, that even the mildest medicines prove hurtful: solid food even, therefore, should be denied, and nothing but bran water or thin gruel allowed.

The cure must be begun by bleeding, and that very plentifully; six or seven quarts may be taken from a large horse: back rake immediately, and throw up some warm water; and, if the horse is constive, a quart of castor oil may be given, mixed with a pint of warm water, as a drench: nothing more active must be admitted into the stomach. But a most essential circumstance to attend to is the raising an external inflammation on the outside of the belly. This may be done by rubbing in two ounces of the

Blistering Ointment [page 23], melted with two ounces of oil of turpentine; or four ounces of flour of mustard may be mixed as in making it for eating, into which two ounces of spirit of hartshorn
may be poured to make it more active. This paste, applied over the belly, and kept there, will raise a considerable inflammation. But a less troublesome, a more speedy, and less expensive mixture, is the following, which should be well rubbed over the belly, avoiding the sheath:—

Oil of vitriol, half an ounce.
Oil of turpentine, four ounces.
Mix very gradually.

All the particulars of the treatment must be repeated, if complete success does not attend the first efforts.

CORDIALS.

Cordials and stomachics are such medicines as are given either to invigorate the circulation in general, or to act on the stomach in particular.

Cordials invigorate the constitution either by their contents being immediately received into the mass of blood from the absorbing vessels, or they act by sympathy through the medium of the stomach: thus a dram, when a person is faint, instantly exhilarates before it can get into the blood vessels; but the eating of any thing requires some digestion before it can invigorate much, because it principally depends on being received into the general mass of blood for its effects. Nevertheless, it is not easy to draw exact lines; and all cordials, natural and artificial, act
probably in both these ways, but in different degrees. Natural cordials may be said to be the common food and drink; artificial cordials, such substances as we make use of to produce an invigorating effect on the constitution. These artificial cordials are given to horses very frequently, and, in many cases, very improperly. A horse, as living a life of art, and taking, in some measure, artificial exercise, may sometimes require a cordial; but to suppose that whenever a horse appears dull, or whenever he may have done a little more work than usual, or whenever he eats a little less, that in these cases he always wants a cordial, is erroneous.

But, on the other hand, there are cases in which the judicious use of cordials may do much good. When a horse has been remarkably fatigued from a long journey, a very severe day's hunt, or several hard-contested heats, the powers of the constitution may flag so much, that either the horse refuses to eat at all, or, if he eats, he has not strength to digest; for the circulation, which was kept up by the exercise above its natural standard so long, now, as the exercise is over, diminishes below the natural standard as much as it has been before urged beyond it, and with the circulation the whole powers of the constitution: any thing, therefore, that artificially supports the animal by furnishing the stomach with the means of accelerating the circulation, and keeping up the flag-
ging powers till the constitution is able to re-establish itself, will be of very material assistance to the animal.

And, again, when a horse may have been exposed to cold, and appears rather sluggish from the effects of it, without any strong symptoms of disease, in this case a proper cordial prevents the access of what otherwise he might the next day labour under, ---a cold.

Tender horses who readily purge, get out of condition, and lose their appetite on very slight exercise, very frequently benefit by a cordial. In these cases, one proper cordial ball will frequently prevent the necessity of a fortnight or three weeks' active care to get such a horse into condition again.

Lastly; after the inflammatory symptoms of very serious colds are gone off, at the close of fevers, and particularly where horses are weakened by strong physic, in these cases cordials are very useful.

It is not only the cases that require cordials that should be attended to, but the drugs used for this purpose should be to the full as attentively examined. Cordial balls have always been a fruitful source of gain to farriers, druggists, &c.; and but few persons are aware of the trash they introduce into a horse's stomach under this name. Even those who compound good drugs, reasoning from analogy only, make in most instances, as cordials, compositions
wholly inert. A horse's stomach bears little analogy to a man's. Four grains of emetic tartar irritates the human stomach to absolute danger: four ounces even has not so much effect on the stomach of a horse, and twice the quantity could not make him vomit: therefore Spanish liquorice, liquorice powder, aniseed powder, turmeric, &c., can be readily supposed to have little effect in stimulating the stomach and exhilarating the spirits of a horse. Nor, on the other hand, is it strong caustic substances that are necessary; but a judicious mixture of such as have been found by experience to raise the pulse without making the mouth dry, and of those that increase the appetite to-day, without vitiating it to-morrow; giving permanent vigour, without the consequent debility arising from substances that act in the temporary manner of a dram.

The Cordial Balls [page 20] are compounded of such substances; and I can venture to recommend them as a preparation embracing all the advantages pointed out above, and applicable to all the above cases, as well as all others requiring an active but not heating cordial. There is another kind of cordial; but as it is more particularly applicable to fever, and the close of acute diseases, it will be described with Fever.

Stomachics are intended to express such medicines as act more immediately by determining a greater
quantity of blood to the stomach, hence increasing the secretion of its gastric juice, as warm spicy bitters, &c.; or those supposed to act by strengthening its muscular tone, as bark, steel, acids, &c. A very efficacious stomachic may be gained in either of the following, given every or every other day.

Oak bark, one ounce.
Aloes, one dram.
Ginger, one dram.
White vitriol, one dram.
Powder finely, and make into a ball.

Or, Oak bark, two ounces.
Tincture of aloes, half an ounce.
Ginger, in powder, one dram.
Forge water, one pint.

Boil the oak bark in the forge water, and, when cold, add the ginger and tincture of aloes.

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Corns.

Corns arise from bruises on the sole of the foot, and are occasioned by the shoe losing its proper bearing, or from a stone getting between it and the sole. They are difficult of cure; but it is erroneous to suppose them incurable. They produce great tenderness; and on removing the shoe, and paring the heels, a speck of extravasated blood may be observed within the horn. In this state the cure must be begun by removing the whole surrounding horn and
diseased portion: this opening must be stopped up with some wool, lint, or tow, dipped in tincture of myrrh, but by no means pressed in. And as pressure brought on the evil, so any thing that continued the pressure would only aggravate it: to prevent any possibility of this, the shoe should be properly chambered opposite the part, and then put on; and if there is any chance of the ends of the shoe making a pressure on the part, a chambered bar shoe ought to be used. This being done, the horse should stand on soft litter, and by no means be exercised till the horn is renewed; after which, it will still further ensure success, if he is turned out to graze with short shoes, or tips only, on the affected foot.

**COUGH.**

What I mean by cough, here, is not that which accompanies other complaints, as inflammation of the lungs, glanders, nor yet broken or even thick wind; though the cough I here mean frequently is a fore-runner of both these affections. But sometimes, without any difficulty of breathing, a horse has a permanent cough, which is usually more considerable night and morning, after eating or drinking, or on any violent exertion. It is very commonly the effect of a cold, which leaves such an irritable state of the windpipe, that, when cold air is breathed, the difference of temperature between the inspired and the
expired occasions repeated convulsive efforts of the chest to get rid of the offending cause. A permanent cure is seldom obtained, unless it is attempted soon after its appearance; in which case, blistering the throat, keeping the horse in a mild regular temperature, and giving him, night and morning, calomel, tartar emetic, and opium, to the amount of half a dram of each, will commonly remove it: but, in every case of cough unaccompanied by fever, I have given with the greatest success, even in cases of long standing, the

**Cough Balls** [page 21], which not only relieve and remove this species of cough, but likewise alleviate that which accompanies thick wind, and prevent either from degenerating into broken wind.

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**CRIBBITING.**

This affection is prevented by placing a strap round the upper part of the horse's neck, tightened till the cribbiting action ceases, without hurting his breathing.

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**CURB.**

A Curb is sometimes an enlargement of the bone at the back part of the hock; at others, it is only a thickening of the ligaments of this part; but in either case it is usually the effect of weakness, brought on by strains, too early or too hard work. In the
early stage of the complaint it is generally cured by a blister once or twice applied.

The Blistering Ointment [page 23] will be found a very efficacious application for this purpose; but should the complaint have existed a considerable time, and great callosity have taken place, the part should be first fired, and the next day the blister before mentioned applied over it.

DIURETICS.

Diuretics are substances that act by determining a greater quantity of blood to the kidneys, and by stimulating them to separate a larger quantity of water from this fluid. The blood, therefore, losing a larger quantity of its serum, or watery part, must be supplied from other sources: this is done by the absorbing vessels, which take up, in that case, any superfluous fluids they meet with to supply the deficiency; therefore it is that in swelled legs, in cracks, in grease, or in any preternatural enlargements occasioned by fluids, we give diuretics with great advantage.

When, likewise, the kidneys secrete too little, as in gravel, which sometimes brings on a sparing and painful flow of urine, we promote a more plentiful formation of it, and a removal of the cause, by diuretics: but when the urine is in small quantities, from inflammation of the kidneys, diuretics only ag-
gravate the complaint; for by stimulating the kidneys, and driving more blood to them, they heighten the inflammation. Inflammation of the kidneys may be distinguished from the common cases of strangury, by the symptoms of fever that accompany it, and by the very high colour of the urine. Bloody urine is sometimes made after very severe exercise; here likewise diuretics are hurtful: plenty of mild diluting liquids are the most proper means of cure.

Diuretics, though of great service in the cases above noticed, should never be given too strong, or too long continued; otherwise they may bring on a weakened state of the kidneys. Various substances are used as diuretics; and whatever is used as such, acts with infinitely more certainty in the horse than in man: hence these medicines are much more frequently employed in the one than the other. Water given to a horse who has been deprived of it for twenty-four hours, proves a very strong diuretic. Nitre, mixed with the food, is frequently used as a mild diuretic, and, when it does not gripe, is a very good one. Resin is likewise a very common diuretic; but it is strong and active, and, whenever given, an interval of three, four, or five days, according to the force with which it acts, should be allowed between each dose. But, to prevent the fatal effects of giving improper substances, I would recommend, that whenever an active diuretic is wanted,
The Diuretic Balls [page 21] should be made use of. These are compounded with great care, and will in every instance be found adequate to their intended purpose, and yet perfectly safe; removing purgiveness, swellings of the legs, inflamed eyes, &c., as well as loosening the hide, and promoting condition.

When a more mild diuretic is wanted, as is frequently the case when a horse is very weak, or when he cannot be spared to lay wholly by, or when it is not convenient to give a ball, and likewise in those cases where diuretics are given merely to promote condition, then

The Mild Diuretic Powders [page 27] are peculiarly proper, being readily eaten with the food, and acting so mildly as to need no confinement. Both these forms contain further practical remarks on the general effects of diuretics, and on the particular rules necessary to be observed in their administration.

DRINKS, or DRENCHES.

Many medicines are more readily and properly compounded into drinks than into balls, and some horses take the one more readily than the other. Most grooms, ostlers, and farmers' servants, can give a drink, but few are expert at delivering a ball; therefore, in the medicines I have compounded for public sale, I have, wherever remedies are to be often repeated, and wherever the case would admit of
it, adopted the form of powders; because, if the horse refuses them in his food, they can be infused in a drench. The mode of giving drenches is sufficiently known; the tongue being held by the fingers against the jaw, or within the mouth, so as to be incapable of pushing the horn away; the head is elevated by means of a noose introduced between the upper tusks and grinders; when the drink being poured into the mouth, the tongue is liberated, but not the head, which nevertheless must not be held too high, or it impedes swallowing, and disposes the horse to resist.

A bottle is not a safe vehicle to give a drench from, though it is not an inconvenient one; for sometimes, in the struggles the horse makes, the neck may be bit or broken off.

EXERCISE.

Nothing is so convincing a proof of the necessity of exercise to animals, as their love of play in a state of nature; from which natural act we likewise infer, that it is much more necessary to the young and to the robust than to the old and weakly: this remark should influence our domestic management of horses, and of dogs likewise.

Horses and dogs live a life of art, when they become domesticated; some of them more so than others: a racer and a lady's lap dog are as remote from a natural state as art can make them. Now,
as luxury has introduced these refinements, nature, in order to keep pace with them, has introduced numerous diseases, unknown in a state of nature: and as animals, thus artificially treated, have a constant tendency to fall into disease, it is our duty to counteract it as much as lies in our power.

We confine horses and dogs not only to have them at our immediate call, but to bring them into particular states, which are artificial.

The wind, durability, and emulation of the race horse is increased by artificial means: the same art is requisite to form the manage horse's cadences, which could not be retained, was he permitted constantly to run at grass. The speed, docility, and scent of the sporting dog is, in a great measure, acquired by his education and constant practice.

Nature is always equal to her wants, but is never lavish of her gifts. Horses in a state of nature are strong and active; they can fight when necessary, or they can fly swiftly from their enemies; but the profoundest philosopher, and the strongest advocate for nature, would confess that no Arabian, browsing on the simple herbage of the field, would be equal to the continued exertions of Eclipse: therefore, if we expect peculiar and unnatural exertions, we must also give unnatural powers; and this we do by our grooming and high feeding: but as this is a deviation from Nature, so she always punishes it with a
tendency to disease, which we again counteract by art.

Horses under strong exercise require full feeding; and so long as the exercise is proportioned to their feeding, they seldom hurt; but there are times when we do not want to exert them, and yet we wish to keep them in a state to be able to it when we do want their exertions; and it is at this time that they frequently suffer; for the necessity of exercise proportioned to their keep is not sufficiently considered, or the time cannot be spared, or servants neglect them; and thus the horse becomes pursive, accumulates fat, his legs swell, and his heels crack, and at length become greasy, and which must necessarily be the case: for the receipts of the constitution being great by the high feeding, so the outgoings, by perspiration, &c. &c. ought to be large likewise; and if the secretions do not find their natural vents, they will find themselves artificial ones.

The muscles we have described as being composed of fibres, have a contractile power, by which all the motions of the body are performed. These fibres act best when they are in a right line to each other; but it is not always that they are so placed. Every one has seen beef, whose fleshy fibres were interspersed with fat: it is the same sometimes with horses; and these muscles, therefore, having their
fibres separated from each other, cannot act to advantage.

The absorbents of the body, or the vessels that are continually taking up both solids and fluids, are stimulated to act by various means. Exercise is one of the strongest of these; it is by this means, therefore, that fat horses are made lean: for this fat becomes taken up from the interstices of the muscles, and placed where there is less pressure; so that the horse, if well fed, still continues lufty, but the fat is more advantageously disposed. Exercise enlarges the muscles, for Nature endeavours to become equal to her wants; therefore, when horses or dogs are trained for hunting, or racing, they have regular and long continued exercise. Exercise improves the wind, by taking up the surrounding fat from the heart and chest, and, thus, allowing the lungs to expand: it also enlarges the air cells of the lungs; and hence, by imbibing more air, the animal can remain longer between his inspirations.

To give rules as to what quantity of exertion is necessary, we should know exactly what is the age, constitution, and feeding, of the horse. A young horse requires more than an old one; but, if very young, it must then be neither very fatiguing, nor very long continued. Some colts are observed to come out of the hands of the breaker with windgalls, or splents. A full-fed horse should have his exercise continued
for some time: if once a day only, not less than an hour and a half; if twice a day, which is the most proper, an hour each time. Horses exercising should be always walked a considerable way; they then may be gently trotted, and, if intended for hunting, or racing, may be moderately galloped. I am not here giving directions as to the training for either: I am only speaking of exercise as necessary for health. However a horse is exercised, he should never be brought home hot, otherwise he frequently contracts serious indisposition: this is more particularly hurtful, if, as is frequently the case, he is washed with cold water, and permitted to dry at leisure: this is always a bad custom, for the heat and moisture encourage a determination of blood to the legs, and occasion swelling, and often grease. A horse, therefore, should be brought home after his exercise as cool as possible, and, if washed, he should be carefully rubbed dry. Friction may be considered as a species of artificial exercise, and as the best substitute; and whenever, therefore, circumstances prevent exercise, a greater share of hand-rubbing should be made use of.

EYES.

The eyes of the horse, from his artificial manner of living, are more subject to disease than those of any other animal we are acquainted with. The dif-
cases of the human eye are more numerous, but less destructive.

**INFLAMMATION OF THE EYE.**

Inflammation of the eye, called in human medicine ophthalmia, and among farriers lunatic, is a very common disease among horses, and a very destructive one to the organ it attacks. That it is brought on by some alteration from a common or natural state is certain, as the disease is little observed but where horses live nearly a life of art. Draught horses are particularly subject to this disease, apparently from the pressure of the collar preventing the free return of the blood. All horses subjected to violent exercise are liable to it, because, under any violent exertion, the breath is held, which prevents the passage of blood through the right side of the heart, and hence it accumulates in the head. Young horses are more subject than old, because their vessels are incapable of resisting the increased impetus of the blood. The acrid urine confined in hot stables is a very general cause of the disease. Want of exercise, and too full feeding, have a great share in the production of the complaint. When the inflammation of a horse's eyes recurs every five or six weeks, the farriers call it lunatic, thinking the moon has some influence over the complaint. Sometimes one eye only is inflamed; at others both; and sometimes they are alternately so. After one or both
eyes have had repeated attacks of this kind, there
appear some specks in the centre, or within the
pupil: these gradually increase; and though the
horse may have no more inflammation, yet he goes
blind, having, what is termed, a cataract.

The cure is seldom permanent; it should, how-
ever, be attempted by clean stables, bleeding mo-
derately, keeping the body open, putting a rowel
under the throat; but, above all, the eye must be
kept covered with a linen cloth, wet with some ap-
plication. Vinegar and water, goulard, salt and
water, &c., may be tried; but the best remedy I
have found is the

Eye Water [page 25]. This, applied accord-
ing to the directions that accompany it, will, in most
instances, remove the complaint, though it will not
always prevent its recurrence. When the affection
has lasted some time, calomel blown in will often
have considerable effect in removing the opacity or
film. Through the whole complaint a great deal of
exercise should be allowed, but not of a violent na-
ture. The custom of putting out one eye to save
the other is a cruel one, but it often succeeds.

To prevent the return of the complaint, the cause
bringing it on must be attended to: if the stables are
too hot, let them be ventilated, and kept very clean;
if the horse is very fat, lower his diet, avoid irre-
gular work, as sometimes severe gallops; at others,
intervals of several days rest. Avoid drawing for some time after an attack; and though, under the immediate effects of the disease, grazing only adds to the complaint, yet in a young horse, when he has recovered the fit, a six months run at grass frequently prevents a return.

In no case remove the spongy excrescence at the corner of the eye, by farriers called the haw: this never occasions the disease, and its removal always aggravates it.

**GLASS EYES.**

Horses sometimes have one or both eyes of a glasy appearance, and greenish colour, with the pupil or figt of one determinate shape: such an eye is blind, however deceptive it may appear. The disease arises either from blood thrown over the retina, or from a palsy of this nervous expansion. Ster- nutories, or sneezing powders, have been used, and stimulating applications, as brandy, gall, &c., introduced within the eye; but the benefit derived has seldom been considerable. Dogs now and then have a similar complaint: a remarkably handsome pug in my possession, at this time labours under it.

**FARTY.**

Farcy and glanders have some connection with each other; but how much, or of what nature, it is difficult to say. Farcy is, however, more worthy of
notice in this place, as it is sometimes curable. Farriers have long supposed it a disease of the veins; but it proves to be a disease of what we have spoken of as the absorbents of the body. The absorbents of the skin follow the track of the veins, and hence farriers thought the disease had this seat. Every one knows that farcy appears in the form of small buds, which are first hard and indolent, and then burst, and discharge a thin watery matter, which at last degenerates into extensive ulcers. It appears to be both caught and generated: while it confines itself to the skin alone, the horse lives; but when it degenerates into glanders, or attacks the lungs, it soon produces its fatal effects. While it is confined only to the buds, even though they should run matter, it may be cured, provided the poison is destroyed in each of these; but without this a cure is seldom made. In the first stage of farcy, while it is confined to the buds, the cure may be effected by outward means only, in the following manner: Let the horse be twitched; then proceed to cut open every one of the buds with a red-hot iron, knife shaped; after which, sprinkle the sore with verdigris, or red precipitate. In this manner do with every bud, taking particular care to avoid leaving any unattended to, as a single one would ensure the return. The animal may now be turned to grafs, if at a proper time of the year.
But when the ulcers have become extensive, and the constitution is affected, nothing but internal means can save the horse; and these even fail in many cases. The sores in this stage should be washed with a solution of lunar caustic, a dram of it to four ounces of water; but if the expense of this is objected to, one ounce of spirit of sea-salt may be diluted with the same quantity of water; or oil of vitriol, or aquafortis, with water in the same proportion. Besides which, the

Farcy Balls [page 22] should be given, as directed, with unremitting care; but I would likewise remark, that as many cases offer themselves, when one medicine fails in this disease, therefore if, on a fair trial of these balls, benefit does not appear to be derived, any of the following may be tried, as all have in turn succeeded under my inspection, but the composition of the Farcy Balls the best. Corrosive sublimate given to the amount of ten grains, morning and evening, and increased gradually to twenty grains, has sometimes done good.

Verdigris has succeeded, given in doses of a scruple three times a day, increased by degrees to a dram. Turpith mineral, in the same proportion, has likewise now and then done good. Arsenic, in the proportion of the corrosive sublimate, may be also tried.

Green food has a particularly good effect on this complaint: putting a horse into tares or clover has
sometimes alone cured farcy: and when grass cannot be had, the corn may be speared; that is, wetted till it sprouts, as in malting.

That kind of farcy that appears in the legs only, swelling them to an enormous size, is to be cured only by a free use of the internal medicines, united with warm fomentations of strong alum water.

**FISTULA.**

Fistulous sores are such as have an external opening, with a large surface under the skin: if the sinuses are numerous, they are called by farriers pipes. *Pole evil* is an instance of bad fistulous sore. *Fistulous withers* is another. *Quittor* forms a third; together with several others. The cure in essentials must be the same. A depending orifice must be gained; that is, an opening communicating with the skin should be made at the lowest part of the fistula, that the matter may run out freely. This may be done with a common pen-knife, or a lancet; but the best method is by means of a long serton needle passed from the natural opening to the bottom of the wound, and so out through the skin. But sometimes even these means are not equal to the cure; for the whole surface has, in some cases, become so diseased, that no healing will take place. In this case, the *Mild Wash for Grease* [page 24] may be syringed into the wound every day, which will bring
on a more healthy action, and heal the fore: but, should this fail, even stronger means must be used; and the best possible that I know of will be the

**Strong Paste for Grease** [page 24]. This should be melted and poured into the pipes, of a proper warmth, neither scalding, nor cold enough to become stiff. In some cases I have found that syringing the part with the

**Liquid Blister** [page 24] has brought on a cure, when every thing else has failed. As the last resource, in the most desperate cases, the horse should be thrown, when the whole of the sinuses must be laid open, and they may be dressed with the Strong Paste for Grease, in this case made scalding hot.

**FOUNDER.**

A foundered horse is thought by ignorant farriers to be affected in the loins or shoulders: but founder is nothing more than an inflammation of the very tender and sensible substance within the foot, the vessels of which become so full of blood, that their own coats and the surrounding nerves become pressed upon, and produce intolerable pain, and become incapable of performing their office: hence deformity of the feet in the end takes place. Founder is brought on by any of the means that bring on inflammation of other parts: riding fast, and for a long time, on a hard road; riding in snow, and then suddenly put-
ting the horse into a very warm stable; placing a horse in cold water when he is hot, &c. As soon as the disease is perceived, which it may be by the horse's impatience of standing on the affected legs, immediately draw blood from the neck, and likewise very freely from the foot, by paring the toe to the quick. The horse should be then treated altogether as directed in fever, and the feet themselves kept constantly in warm water, which will encourage an oozing of blood from the toe: but, should the disease still proceed, to prevent permanent lameness, he should have his feet pared, and be turned to grass.

GANGRENE, or MORTIFICATION.

When an extensive wound is made, particularly if it is much torn, some part of it usually gangrenes, as it is called, or mortifies: if it is extensive, the constitution suffers; that is, the horse becomes very weak, and, unless strength is given to support the separation of the living from the dead parts, the animal dies. Gangrene is known by the dark colour of the part, the peculiar offensive smell, and black thin discharge.

Gangrene is always to be considered as a weakened state of the part, and as such the whole affected portion must be strengthened into action; and if this is extensive, the body in general must be strengthened
likewise; that is, the horse must be liberally supported with corn and malt mash; and if he will not eat, ale and gruel must be forced on him. The wound should be dressed with camphorated spirits of wine, or with an ointment composed of equal parts of lard and oil of turpentine. When the offensive smell ceases, and the part produces proper matter, the case may be then regarded as likely to terminate favourably. The healthy parts surrounding the mortified edges should never be cut or scarified: that is only producing a greater effect on the constitution, and bringing the living into the same state as the dead parts.

GLANDERS.

When a horse has confirmed glanders, it would, perhaps, be better, in every instance, to kill him; though there is little reason to doubt that the disease is curable, although the means are unknown to us. A London farrier, of the name of Cunningham, has, I understand, a nostrum that has succeeded in a few cases. By the violent effects it produces, there is reason to suppose it consists of some of the mineral acids, as arsenic, corrosive sublimate, or verdigris.

If a convenient place can be set apart, a course of the

Farcy Balls [page 22] may be tried, and they now and then do good. The principal caution ne-
cessinary is to distinguish glanders from other complaints: it is not every running from the nose that is to be considered as glanders, even though it lasts some time; for strangles may produce it, or a severe cold, a blow on the nose, or inflamed eye, &c.: but when to the running is added little ulcers within the nose, the disease is certain.

GLYSTERS

Are of very great use in many cases: they are always safe, and, in general, very easy to give; therefore they are peculiarly worthy of notice in a Treatise on Domestic Farriery. Glysters are particularly useful to open the bowels in the horse in some diseases, because physic by the mouth takes so long to act, that the animal is often lost before the effect can be produced. They are particularly useful in those cases in which it is not proper to give much medicine by the mouth, as in most great internal inflammations. They are very useful to give nourishment to the horse in those cases where it cannot be got down the throat, as in locked jaw, some instances of strangles, wounds of the gullet, or stab of the small guts, long fevers, &c.

When glysters are given to remove costiveness, it is always proper to back-rake first [see Raking], as it removes any hardened dung that might obstruct the passage of the liquid. The apparatus should be
a large hog's or ox's bladder, capable of holding three or four quarts, with a smooth wooden pipe an inch in diameter, and fourteen or sixteen inches long. The liquor should not be too warm; but the pipe being oiled, the whole must be conducted gently, so that the horse may not be surprized with its being thrown up too suddenly.

*An opening gruel.*

Thin gruel, or tripe liquor, four quarts.
Oil, four ounces.
Salt ditto. Mix.

*A gruel against gripes.*

Mash two moderate sized onions, over which pour oil of turpentine, one ounce.

Thin gruel, four quarts.

*A nourishing gruel.*

Thick gruel, three quarts.
Strong ale, a quart.

Or, Strong broth, two quarts.

Gruel, two quarts.

This should be repeated three or four times a day.

*A gruel against violent purging occasioned by too strong physic, or other causes.*

Tripe liquor, or suet boiled in milk, three pints.

Thin starch, two pints.

Laudanum, half an ounce.
GREASE.

This disease may be much more easily cured than persons in general find it; for the generality of farriers, by treating all cases alike, fail in three out of five. Grease is always the effect of some deviation from a natural state; that is, horses in a state of nature never have grease: therefore the owner of a horse having grease would always do well, first, to consider in what principally the treatment of his horse differs from the natural habit of the animal; and it is more than probable that this particular is the cause of the disease, the removal of which alone would tend greatly to the cure.

Thus, when a horse exercises very severely two or three following days in the week, and then rests entirely the remainder, it follows, of course, that the fluids will stagnate in the heels, where they have to rise in a direction perpendicular and contrary to their own gravity. To a horse very full fed, and who gets, perhaps, only two or three miles of exercise every day, it is evident that, the feeding and work of this horse not being proportionate, the superfluous blood made, must have an exit somewhere: cracks in the heels are thus formed, and ichor or serum flows out, and the blood vessels unburthen themselves in this way. To a horse rode through the snow, with his legs and heels benumbed, and then put into a warm stable without his legs being rubbed, the pre-
vious cold having weakened the legs, the warmth is only a temptation, or a drawing of the blood and juices to that part; and the limbs hence swell, and grease follows. Does a horse work violently, and yet gets but little food, he falls into a state of debility; that is, he becomes thin and weak. Now his weakness is general and universal; but those parts the farthest from the source of life, from the spring of the whole, and the fountain of animal warmth,—which source, spring, and fountain, is the heart;—the parts, as I have said, that are the farthest removed from this, which are the hind legs, will, it is evident, suffer the most; and hence the blood accumulates in them, the parts not having strength to propel their contents; and from this accumulation cracks take place, and grease follows. Standing in wet litter may bring it on; and the obliquity of the stall, likewise, by weakening the parts.

Grease, it may be gained from this, may be the effect of too full condition, or it may be occasioned by too little; that is, by weakness. It therefore becomes essentially necessary, whenever a case of grease occurs, to consider whether it is brought on by the exertion being greater than the support, or the support greater than the exertion; for, in the one case, we must feed the horse liberally, and lessen his work; but, in the other, we must diminish his food, and increase his exercise.
Grease appears under several forms, and it has several stages. Horses, when full fed, have sometimes a dry scurvy eruption at the heels, with here and there a slight scratch, as it were. These heels itch intolerably, but no great moisture comes from them: if suffered to remain long in this state, they become greasy. In this early stage, washing with soap and water, night and morning, and rubbing them carefully dry, giving gentle but long continued exercise, plenty of grooming, with bran mashes at night, will generally remove this stage of the complaint. The only internal medicines necessary will be the

Diuretic Powders [page 27]. One of these may be given every day till the urine flows freely, and then one each other day, continuing the whole of this treatment till the cure is complete.

But when these scratches become deepish cracks, and matter oozes out plentifully, in that case, to the above treatment must be added the bathing them very frequently with the

Mild Wash for Grease [page 24], first having, for one day, washed them well with warm water.

Swelled Legs, with Discharge. There is a state or kind of grease differing from the former, and which sometimes comes on very suddenly, particularly when a horse has been for some time out of condition. In this case the hind legs (but seldom the fore) become hot, painful, and swelled; and matter, or a
watery serous discharge, issues out from the cracks. The first treatment proper for this kind of grease, is, to apply a poultice to the legs and heels formed of bran with warm water, into which put two drams of sugar of lead. This poultice should be repeated night and morning till the swelling abates, and the parts get into the state of simple cracks or scratches. A rowel should be put into the inside of each thigh, and one or two doses of physic may be given. When the swelling is completely reduced by these means, combined with plenty of exercise, the cracks may be washed with any mild astringent: the best I know is the

**Mild Grease Wash [page 24].**

*When grease becomes confirmed,* that is, when there is a general ulceration over the skin of the heels, with a peculiar smell that strongly characterizes the complaint, the cure becomes more complex; and it will commonly require a skilful farrier's attendance, though determined care might render this unnecessary.

If the horse is in full condition, the cure should be begun by giving a dose of mercurial physic; but if the horse is not very full and fat, then the

**Mild Diuretic Powders [page 27] may be substituted; or the**

**Strong Diuretic Balls [page 21],** giving one every fifth, sixth, or seventh day, as they ope-
rate. A rowel should be put into each thigh; and if the heels run a thin ichorous discharge, then a poultice composed of powdered charcoal and oatmeal, equal quantities, mixed with stale beer grounds, should be applied; or a fermenting poultice made with water and flour, or oatmeal fermented with yeast: either of these, after a few applications, will bring the parts to run better matter, when the

**Strong Paste for Grease** [page 24] may be applied according to the directions contained, and the cure will be completed.

When the legs swell much, support may be given by flannel rollers, or rolling hay-bands round them. It is likewise often requisite, in long continued cases, to complete the cure by a run at grass.

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**HIDE BOUND.**

This is rather a symptom of some other disease than a disease of itself, and may arise from any long continued complaint, and is a very common attendant on worms. To effect a cure, the disease it springs from must be attempted to be discovered; but as sometimes this is not evident, proceed in the following manner. Clothe the body warmly, give only mild exercise, and every night a malt mash, with which mix the

**Alternative Powder** [page 26]. By this means a cure will be soon effected, provided the horse is
exposed to no excess of cold during the treatment; for, as the whole of this treatment is intended to determine more blood to the skin, a default of which is commonly the principal cause, so any check at this time must peculiarly aggravate the complaint. See Condition of Horses.

HAW, or HAWES, of the EYE.

In inflammation of the eye the haw is found to protrude over a part of its surface to produce its salutary office, that of protecting the weak pupil from the light; but farriers, in these cases, ignorantly regard the haw as the cause of the disease, and cut the protruding part off, which frequently blinds the horse, and is always cruel and hurtful.

JAUNDICE.

This disease in horses seldom arises from a defect in the secretion of bile, but commonly from its redundancy, or diseased quality; hence is often accompanied with purging. Now and then, however, it is accompanied with costiveness.

In jaundice, the horse is dull and heavy, the appetite bad, the urine dark coloured, and the eyes and mouth yellow. When fever is present, the disease arises from inflammation of the liver, and must be treated as other inflammations.
The cure of jaundice, when there is constiveness, will consist in giving three doses of

**Strong Mercurial Physic** [page 24]; but when the bowels are already loose, the following will be preferable, given every morning:
- Calomel, one dram.
- Opium, half a dram.
- Powder of chamomile flowers, and powder of gentian, of each two drams.

Make into a ball with honey.

**INFLAMMATION OF THE LUNGS.**

Inflamed lungs is a very frequent disease among horses, and kills more of them every year than any other complaint. Nothing so much shews the improved state of farriery in this country as this disease: heretofore, when a horse died of inflammation of the lungs, he was thought to have died rotten; and, therefore, during the complaint, hot spicy cordials were usually given, which only hastened the fatal termination. The progress of this disease is commonly very quick, and in thirty-six or forty-eight hours from the attack the horse is often dead. The treatment must, therefore, be very active to be efficacious; for a less active treatment, if it succeeds, is only temporary in its success: for though the horse appears to amend from the first violence
of the attack, yet water is formed in the chest, and a second attack soon comes on, and proves fatal.

It is of great consequence to be able to distinguish this disease from any other. When a horse is found dull, holding his head low, with a difficulty of breathing, and quick heaving flanks, uneasiness and anxiety in the countenance and manner, but no fury, as in cholic, or other inflammatory affections, it may be conjectured he has inflamed lungs; and if to these are added cold legs and ears, with a hot mouth, and a very obscure beating of the heart, the case is certain.

But the strongest characteristic symptom is, that the horse hardly ever lies down in this disease, till he falls from weakness.

The principal treatment to be depended on in this complaint consists in active bleeding, and blistering. No time must be lost; but as soon as the complaint is ascertained, take seven quarts of blood from a cart-horse, six from a hunter or roadster, and four from a galloway or poney; after which, the beating of the heart will probably become more evident. On letting this blood cool gradually, without shaking, it will exhibit a white or yellow tough crust over the red part: this warrants a repetition of the bleeding presently. As soon as the first blood is drawn, back-rake, and throw up the opening clyster;
after which, rub the sides of the chest, and between the fore legs, with the following:

Oil of vitriol, half an ounce.
Spirits of turpentine, two ounces.
Venice turpentine, two ounces.

Melt and mix the two turpentines together, and to which very gradually add the oil of vitriol.

The reason of applying this mixture is, that it inflames more speedily than a blister, and hence is far preferable.

The legs should now be very well hand-rubbed, and then bound up in hay-bands, but not tightly. The horse must likewise be warmly cloathed, but the stable should be rendered cool, though not cold.

A Fever Powder [page 26] may now be given in a horn of warm water; and, in three hours from the first bleeding, if the beating of the heart is still obscure, and the breathing difficult, take away two-thirds of the original quantity of blood drawn, without fear, and renew the application to the sides.

After the first symptoms are removed, if there is great weakness, give thick gruel, with malt mash; but avoid heating cordial drinks.

LAMENESS.

Lameness may be the consequence of strains in the muscles, ruptures of the tendons or sinews, or of some of the small ligaments. It may originate also
in splenls, spavins, ring-bones, thorough pins, &c.; or it may, as is very usual, arise from some disease within the foot, as contraction, founder, thrush, &c. When a horse becomes lame, it is sometimes no easy matter to fix upon the right limb; and, even if that is ascertained, what part of that limb is affected is often very difficult to determine on. When a recent strain takes place, there is generally heat in the part; therefore the first thing to examine is, whether all the limbs are equally cool, and each limb in every part.

A strain in the shoulder is known by the heat; besides which, the horse usually rests his toe only, on the ground, or, if he stands on it, he points the foot very forward. When he walks, he drags the limb, and swings it round; and going down hill appears to distress him very much. When the strain is of long standing, the shoulder is frequently found to be wasted.

Lameness in the pattern usually shews itself by the pattern being carried more upright in action, and the whole limb likewise more straight; and though the horse willingly bends his shoulder and knee, yet he carries the leg in general but little forward.

Lameness in the foot is discovered by the violent catches the horse gives in his paces, to take the weight from off the affected foot, which is not so observable in other cases.
Strains of the back finews, when recent, always are accompanied with heat; and when old, with a hard swelling.

Bony swellings, as splents and ring-bones, are evident to the eye.

When the loins are strained, the horse has a most irregular gait: he crouches as he walks, and flinches from any weight on his back. In the stable he stands with his legs all together. If the hand is drawn down the back, he flinches from it; and this sign seldom, if ever, fails.

Lameness in the whirl-bone, or joint of the thigh with the body, is known by the peculiar and low dropping of the haunch, more than in any other lameness.

Lameness in the stifled is known by the circuitous motion of the limb, to prevent the bending of the joint between the leg and thigh.

Spavins and thorough pins are evident to the eye.

Founder produces a lameness often mistaken among farriers for either shoulder-wrench, or strained loins; for, when the fore feet are foundered, the horse stands with his hind legs under him, to relieve himself from the weight before; and when the hind feet are affected, which is less frequent, he stands with his fore feet under him, to relieve the hinder extremities. When all four feet are affected, he obstinately refuses to
For the cure of these various lamenesses, see the articles themselves.

LOTIONS, or WASHES,

Are liquid applications, chosen in this form for the convenience of compounding, or of application. The washes I have thought proper to compound, and keep ready prepared in my arrangement of medicines, are,

Mild Wash for Grease [page 24].
Embrocation for Strains [page 25].
Liquid Sweating Blister [page 24].
Eye Water [page 25].
Wash for the Canker in the Ear of Dogs [page 29].

Lotions are rubbed in with the hand, if spirituous; but if merely aqueous, and it is necessary that they should produce their effects slowly, as in eye-water, embrocation for strains, &c., it is better to keep a cloth moistened with them over the part.

LAMPAS.

The swelling at the roof of the mouth of young horses, so called, frequently gives way to a little alum and honey rubbed on; but if it is thought proper to scarify, it should be done very lightly, to prevent unpleasant consequences.
LOCKED JAW. See Stag Evil.

MANGE.

This disease is not only generated by filth, and low living, but it may be caught. It shews itself by the animal's rubbing and biting himself; by the hair coming off, and leaving the skin scabby. The Mange Ointment [page 25] is the most effectual application, and never fails of curing; and seldom requires any other assistance than one or two applications of it. If, however, the horse is too fat, it may be proper to bleed once; and, if very lean, he should be better fed. Cleanliness is necessary in either case. When the disease is of very long standing, it might be prudent to give a course of the Alternative Condition Powders [page 26].

MALLENDERS and SELLENDERS.

The first is a scurvy eruption at the back of the knee joint; the second a similar breaking out within the ply of the hock. Wash with soap and water every day, and rub in a little mercurial ointment after each time; or a little of the Strong Paste for Grease [page 24] will cure alone, being once well rubbed in.

MOULTING.

Nature is ever equal to her wants, but she is seldom superfluous. In autumn, as winter approaches
the coat of the horse, in common with many other animals, lengthens, and much new hair is added also; but that nothing may be given in vain, in the spring, a new coat, short, fine, and adapted to the approaching warmth, is given. These changes are called moulting; and the forming these coats appears to call much of the powers of the constitution forth; for at this time there is a great debility pervading the animal frame, and the horse is very dull in spirits: in some instances this becomes so great as to approach disease. When this is the case, the exercise should be moderated, and malt mashes given; and should it still continue obstinate, and the hide becomes bound, it will be highly proper to give a course of the

**Alternative Condition Powders [page 26]**; and, after they are finished, to complete the cure, give a

**Mercurial Purging Ball [page 23].**

**POULTICES.**

Bread would be too expensive an article to make poultices in common cases. Bran, therefore, is very commonly used; and, to give it a proper consistence, some linseed meal may be mixed with it; or, in default of this, a little of any other meal. A *poultice* should be made of a sufficient consistence, that it may not run through the cloth it is put in; and
yet it should not be so thick as to dry too quickly, for a poultice acts principally by its moisture; therefore it should be frequently wetted through the cloth with the predominating fluid, of whatever kind. In applying poultices to the legs, care should be taken not to tie them too tight, as is frequently done, and thereby the mischief aggravated instead of relieved. A piece of broad lift is, for this reason, very proper to fasten it on with. They should never be applied too hot; very little good can be derived from it, and much pain may be occasioned. A hot poultice soon comes to the heat of the part; and as, in most cases requiring poultices, the part at the moment of application is in a state of comparative debility, too great heat only farther weakens it.

No. 1. A COMMON SOFTENING POULTICE.
Bran, any quantity; pour on it boiling water, to form a thin paste; add linseed meal sufficient to make it adhesive. After this, stir in one or two ounces of sweet oil.

No. 2. A COOLING POULTICE.
Instead of common water, form the above with goulard water.

No. 3. A POULTICE AGAINST GREASE. [See GREASE.]

No. 4. A POULTICE AGAINST GANGRENE.
Linseed meal, or flour, any quantity: mix with boiling water, and ferment with a table spoonful of
yeast; and, as it rises, put in an ounce of oil of turpentine.

POLE EVIL.

As this is only to be regarded as a fistulous sore, so its treatment, when it has broke, is the same as is described under the article Fistula.

But before it breaks, it must be treated as a common inflammation; that is, by bleeding, keeping the horse low, and constantly applying the saturnine or goulard poultice [see Poultice, No. 2], and never making use of hot, spirituous, or oily embroocations, when it is in this state, as that only advances the disease. The cooling treatment must not be continued after the tumour is felt to fluctuate, that is, after it feels soft: in this case the horse must be better kept, and the common poultice [see Poultice, No. 1] applied till it breaks, or is fit to open, which should be done with a jeton needle passed from the top of the tumour to the side, so as to let out all the matter gradually. If the tumour is large, from the top opening, another jeton should be passed through the other side, as near the bottom of the sac, or abscess, as possible.

POWDERs.

Powders are medicines prepared in a dry pulverized form, and are hence convenient for carriage
and package. They are very convenient likewise to administer, because they may be made into either a drink, or a ball; or they may be mixed with food, if not very nauseous. Powders, however, when composed of any thing very volatile, are apt to spoil: they should, therefore, in these cases, be kept very dry and close. In my prepared medicine arrangement, I have compounded as powders, only such articles as will readily preserve themselves, without any particular precaution. I have compounded into powders some articles, because then it is optional with the giver what form he will choose to give them in, as some horses will not readily take balls, and many grooms and ostlers cannot give them; but most horses will take, and most persons can give, a drink: sometimes, however, even this trouble may be avoided, for the powders sprinkled with the food will be readily eaten. Of this kind are the

**Alterative Condition Powders** [page 26].
**Worm Powders** [page 26]; and
**Mild Diuretic Powders** [page 27].

**PHYSICKING HORSES.**

This is a very important subject, and deserves very attentive consideration; and though I shall introduce here all that is practically necessary, yet those who wish for more extended information will find it in my Veterinary Outlines, vol. ii. page 760.
It has been the opinion of some modern veterinarians, that purging is not so necessary to horses as it has been thought; but though there is reason to think that purging is often made use of when unnecessary, yet this opinion has led into error; for horses are, in many cases, more benefitted by purging than any other animal; and it is certain that they cannot be got into condition so readily by any other mode. But one thing is likewise certain, and allowed by all who consider the subject attentively, that there is no occasion, in any case, for the violent purges grooms and farriers commonly make use of; on the contrary, they, in all cases, do much mischief, weakening the stomach and bowels, and even the constitution, for a great length of time, and not unfrequently prove fatal.

Horses are purged to bring them into what is termed condition; that is, into a state in which they are fitted to undergo active exercise, having wind enough to render it easy to them, and strength enough to continue it. Purges are given likewise to remove worms: in this case they should be tolerably strong, to dislodge them, if possible; and it is thought mercurial physic is particularly adapted both to kill and remove worms. Physic is given to remove swellings from the legs, or other parts of the body. It produces this effect by purging out the fluids of the stomach and bowels, by which means the absorbing
vesiels remove the fluid from the legs to make up the deficiency. Purges are given to remove too great fat, the fat being one of the fluids; and the body becomes absorbed to supply the waste occasioned by the purging: thus the fat that was too redundant, and hindered the lungs from expanding, and the muscles from contracting, is removed; and hence the horse becomes more vigorous and lasting, and his wind strengthened;—and this is called being in condition.

Horses are, some of them, purged more easily than others: hence the first purge should be mild; for, if it does not operate, it does no harm, though it is often erroneously supposed so to do.

From the horizontal position of the body, and the long track of intestines, with their peculiar structure, it requires not only a medicine of considerable strength, but likewise it requires a long time to purge a horse. It is from this cause that purging affects the constitution infinitely more in a horse than in ourselves: but it does not require ten or twelve days for a horse to recover himself between each dose, as is usually supposed, unless the operation has been very severe, which is always hurtful, and unnecessary.

Exercise is of particular importance in physicking; but I do not recommend very active trotting: brisk and continued walking, or, at most, a very gentle, trot, is to be preferred.
The exercise should be proportioned to the physic's working: it should be continued at short intervals of two hours, till it operates favourably, and then may be omitted, as it would fatigue. Cold water should never be allowed; but if the horse will not drink it warm, it may be cool, but never cold.

Unless a horse is very open in his body, he should always be prepared for physic, one or two days at least before, by bran mashies.

During the working, he should be kept warm; and he must be exercised (if in winter) in cloaths proportioned to the cold.

A purge is to be given thus:—A horse having fasted an hour or two in the morning, the ball is to be given him; after which he should be offered some warm water, as it will not be improper to let him have his ball a quarter of an hour after he has had about half his usual quantity of water only lukewarm; for it sometimes happens that the ball disgusts him, and then he will not drink for some hours after, which is not so favourable. After the ball is given, he should be fasted another hour, or an hour and a half, when a small quantity of good hay may be allowed, or a bran mash, with a very few oats sprinkled in it, to make it palatable: he should, at noon, be walked for half an hour, and again half an hour in the evening, being allowed warm water during the day, and hay and bran mashies again towards night.
Early on the following morning the physic will probably begin to work, which if it does briskly, no more exercise need be given; but if not, an hour's walking motion should be allowed, when the horse may have a mash, and his warm water. After this, another hour's exercise should be given (walking only), and which is to be repeated every other hour or two, till the physic works kindly, allowing mashes, clean hay, and warm water between times. Should the horse appear griped and uneasy, a warm clyster of the common kind may be given, which will generally relieve with exercise; but if the griping still continues, which can hardly ever be the case when good physic is used, then the following drink will at once remove it.

Sound ale, a pint and a half, into which pour two table spoonfuls of Holland's, or gin, and give it rather more than blood warm.

On the next day the physic will be usually set; that is, the horse will cease to purge: should it, however, continue with violence, he must have a drench of thin starch, and starch and tripe liquor as a clyster; but this super-purgation only happens when very strong coarse physic has been used.

The horse may now return to his former habits, giving him corn at first rather sparingly, with moderate exercise; and, in three or four days from its setting, if the operation has been only moderate, a
second dose may be given, which is sometimes required a little stronger than the first; and after this, if deemed necessary, a third, which is usually considered a course of physic.

PHYSIC, FORMS OF.

The substances used to purge horses are usually compounded in the form of balls, by which their nauseous taste becomes hid. Jalap, rhubarb, salts, &c., are not found to purge a horse, at least not so readily as has been supposed, and they are, therefore, abolished from the prescriptions of intelligent farriers. Castor oil is sometimes used, and with great propriety, in cases that do not admit of rougher cathartics, as in inflammation of any of the internal organs, cholics, &c. The preparations of mercury, particularly calomel, are given as purges; but from their peculiar properties, and disposition to gripe and salivate, are seldom given alone, but as auxiliaries to other substances, as aloes. Mercurial purges are peculiarly fitted for horses having worms, or when there is much water in the system, or fat; but as merely condition physic, they are not, perhaps, so advisable.

But the most common substance used as physic is aloes; and which, when properly prepared, and when the aloes themselves are of a good kind, is certainly not only the most convenient, but the best.
physic. It is, however, too common to powder aloes very grossly, which alone frequently occasions gripings and other bad consequences; but when to this defect is added a bad quality in the aloes themselves, such as is often found in the coarsest kinds of Cape and Plantation aloes, the mischief is commonly serious. It is usual, likewise, to introduce too much heating spice, or oils, into physic, which often inflame the bowels.

Aloes should be of the very best kind, and very finely powdered; and the quantity given, regulated by the size, age, and strength of the horse, from three drams to ten. But that no mistake may arise about proportions, and that such physic may be always obtained as persons may be assured are prepared of the best drugs, and in the most judicious manner, there enters into my medicine arrangement the following varieties of purges:—Strong Purging Balls, suitable for strong horses; Milder Purging Balls, adapted for the first dose given to most horses, and likewise those that are lesser or weaker. There are also

**Strong Mercurial Purging Balls, and Mild Mercurial Purging Balls** [see pages 22 and 23, medicine arrangement].

PURGING. See Looseness.
In a Domestic Treatise on Medicine, more, perhaps, may properly be said on the prevention of this disease than on the cure; as the one is often easy, and the other must claim the assistance of the experienced farrier.

A quittor almost always arises either from a wound or bruise on the coronet, or from a nail prick; either of which, if taken in time, would hardly ever produce this diseased state. But when one or the other has been neglected, inflammation follows, and an abscess forms within the coffin, which at last makes its way out at the quarters above the coronet. The only proper method is that which farriers term coring out the wound; for curing it by cutting is some months about, and leaves an irreparable blemish, and often a false quarter. When the direction of the fistulous pores forming the wound is ascertained, some of the

Strong Paste for Grease [page 24] should be mixed with flour, so as to make it hard enough to be forced with a probe to the bottom of all the fistulous pipes; or blue vitriol coarsely pounded, and mixed with pitch or tar, may be introduced. This raises a considerable inflammation, the consequence of which is, that a large slough comes out, which farrier's call the core; and if the substance has reached the whole of the sinuses, the wound then
heals; if not, it must be repeated. The principal management is in introducing the substance to the bottom, and into all the pipes, or sinuses.

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**BACK RAKING**

Is a method of emptying the bowels by means of the hand. The right hand arm (if possible, of a small man) being stripped, and oiled; with the left hand the tail is drawn aside, when the right hand, being made as small as possible, and cone like, is gently introduced up the fundament, and any quantity of hardened excrement the hand meets with carefully removed in small pieces. From this it will at once be evident that back raking must be useful in a vast variety of cases. It should always be made use of previous to giving a clyster, otherwise the hardened matter may prevent the passage of the fluid. It is proper always, also, in cholic; and in all cases of costiveness it should never be dispensed with.

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**RING BONE.**

This is a bony swelling about the coronet. When it has been of long standing, it is seldom curable; but in early cases a blister may be tried. See Blisters.

And if this is not found sufficient, firing must be had recourse to.
RISING of the LIGHTS. See Inflammation of the Lungs.

ROT in HORSES.

In the north of England, and, indeed, in many other parts, the rot is made to express either inflammation of the lungs, or intestines, or liver, or of any internal organ, because the gangrenous appearance of these parts in these cases makes farriers conclude that their horses have long been rotten: but improved farriery has now not only given more proper terms to these diseases, but has taught us how to distinguish them from each other, from whence has sprung a more active and judicious mode of treatment.

ROWELS.

These, like blisters, act by inflaming the surface, whereby more deep-seated inflammations are removed. The mode of making a rowel is well known. A slit being cut in the skin, about an inch in length, the finger is introduced to separate the surrounding skin from the flesh, &c., leaving, by this means, a circle of the size of half-a-crown, into which is introduced a piece of stiff leather of the same size, smeared over with blistering ointment, or yellow balsam: the sooner the inflammation is wished to be raised, the more active is the substance we choose to put on the leather; hence, in rising of the lights, in
red cholic, staggers, &c., when we use rowels, it is proper to smear the leather with blistering ointment. Rowels are of great service as a drain in farcy, swelled legs, inflammation of the eyes, greafe, &c. &c. The parts they are usually placed in are, under the throat, between the fore legs, along the belly, and within side the thighs.

SADDLE GALLS
Are usually easily removed by bathing them with the
EMBROCATION for STRAINS [page 25].

SPAVINS
Are of two kinds; blood spavin and bone spavin. Blood Spavin consists, outwardly, of an enlargement of the vein that passes over the inside of the hock; but, inwardly, there is another enlargement, which is, in fact, the real cause of the disease; this is in the mucous reservoirs that lubricate the joints, the nature of which enlargement is similar to windgalls below; so that, in fact, blood spavin is only a windgall of the hock, and the enlargement of the vein is only the consequence of this windgall: therefore it is evident that taking up this vein, as is usually practiced, can only afford temporary relief. Blood or Bag Spavin, as it is sometimes called, does not often occasion lameness till it is very large, in which case
blisters and rest give some relief: but it is seldom that a permanent cure is obtained.

*Bone Spavin*, in its early state, may be known by the lameness it occasions in the hock, and the heat of the part; but the swelling is seldom considerable at first. It is at this time only we are at all certain of a cure, which may be usually brought about by an active blister. If it should not give way to this, fire, and apply at the same time another blister. In the advanced stages of it, when the swelling is of long standing, blister actively; and as soon as quite well, fire, and blister over it.

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**SPLENT.**

Splents are usually situated on the inside of the fore legs under the knee, and are to be treated exactly in the same manner as bone spavins. Splents are brought on by being too early put to work: and there is another very common cause, but not usually attended to, which is the raising the outside of the foot by calkins, or by a thick heel, which, throwing the weight on the inner side, puts the parts on the stretch, and weakens them.

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**STABLE.**

The limits of this little Treatise do not permit more than a few hints, of the more important kind, on this subject. Stabling of horses, as it is wholly a deviation from nature, so it is surely paving the way
to the attack of many diseases; and we really find that the higher this artificial system is carried, so much the more are the horses who are the subjects of it obnoxious to disease. As, therefore, our comforts and convenience have made a life of art necessary to these animals, and thereby rendered them liable to disease, so should our endeavours be turned towards the prevention of those maladies, which a little attention will, in most cases, in a great measure effect.

A stable should be airy: in nothing are the horsemen of this country more erroneous. However congenial warmth may be to the constitutions of horses, particularly of the blood kind, as being originally natives of a warm climate, it is self-evident that breathing and re-breathing the same air, as must be the case in all close stables, must be pernicious; and as being completely removed from what in a state of nature they must enjoy, it must be highly productive of disease. The very great difference of the temperature without doors, and that within, subjects horses kept so warm to that vast chain of diseases arising from what is termed catching cold. A stable should be only moderately warm, and it should be always ventilated; the ventilation should likewise be as near the top as possible, for the foul air is always uppermost. A stable should likewise be very light; when it is otherwise, the new received light the horse gains when he goes out, is a painful stimulus to the eyes, and his imperfect vision makes him start; and, how-
ever horses may fatten in dark stables, it must be the fat of a pig, and not with the lufty and cheerful gain of a horse, open to the cheering influence of the sun. Stables should be well ceiled, and that very closely: when this is not the case, not only is the dust from the hay-loft coming down on the horse, and frequently in his eyes, but, what is as bad, and much less thought of, the foul air, which is always uppermost, lodges in the hay, which becomes its receptacle, and the hay-loft by this means proves a source of contagion. In fact, no hay-loft, properly, should ever be over a stable; neither should corn be kept over it: they both imbibe falt acrid particles by this means, and this more particularly if it is not ceiled. Neither is it a wholesome practice for servants to sleep over a stable. As little hay or corn should be kept, likewise, in the stable as possible; but as it is wanted it should be brought to the horses. Narrow stalls are very prejudicial to horses: strains in the back are often occasioned by them. Bars or bails are also objectionable, from the ease with which horses may play with each other over them: they may likewise kick each other by this means. It is seldom that horses eat alike in point of quickness: when they are separated by bars only, the slowest eater gets robbed of his food.

The acclivity of the generality of stalls is also a very serious objection to them, for they occasion a horse to have a false bearing: the greater weight is
thrown on the heels, and the back finews are put on the stretch; and there is little reason to doubt that many of the lamenesses of horses are attributable to this cause. The ground should be made even, or nearly so, with a very slight slope, and which should not be towards the bottom of the stall, but towards the center of it, where there should be a small grating communicating with a cesspool, which ought to be emptied every day, if it is within the stable; if it is without, it should be covered over, that no draught of air may be encouraged up the grating.

There is much contrariety of opinion relative to the propriety of permitting horses to stand during the day on litter. There are cogent arguments for and against it. Litter entices horses to lie down during the day, which, if they are in constant severe work, is certainly desirable. Litter, likewise, when the stable is paved roughly, prevents the unevenness of the stones pressing on the feet.---On the other hand, horses are very apt to eat the litter, and which proves unwholesome. It is likewise apt to retain the urine, whose acrid salts, ascending, impregnate the air, and stimulate the eyes. Horses standing constantly on the litter appear to feel the difference of the road, and hence are more liable to be tender footed: the warmth and moisture retained, likewise, is very apt to occasion cracks and swelled legs. Those who are advocates for litter under horses
during the day, should be very careful to have it changed as often as it is either foiled or wet, for wet litter is one of the strongest causes of blindness.

A horse should always be brought into a stable with his skin nearly of the temperature of that stable. It is not generally known, though certainly the case, that passing from a cold atmosphere into a warm one will give cold, with almost as much certainty as from a warm into a cold situation. But if a horse is brought home very hot, he must not be hung by the bridle at the door till he gets cool; he should be walked till he is cool, but not cold. The feet and legs, in dirty weather, should be always washed, and carefully picked; after which, unless they are rubbed dry, it is better not to wash them. A cool stable, with a good proportion of clothing, is a great desideratum in stable management, and, if more attended to, would lessen the maladies these valuable animals are liable to.

STAG EVIL.

I shall waste no more time on this fatal complaint than is necessary to make persons acquainted with it when it happens. From long exposure to cold, from a prick, or any wound made into a very tender part, a horse sometimes becomes rather suddenly stiff in his limbs; his jaws by degrees become set, his ears pricked, his tail cocked, his eyes stare, with the haw
partly over them, and he looks animated, but he can hardly move:—this is stag evil, of which not one horse in a thousand recovers; and, as such, it is, perhaps, always better to relieve the suffering animal by putting him to death, than to prolong his misery by fruitless efforts.

STAGGERS.

This disease is divided by farriers into sleepy and mad.

In sleepy staggers a horse is always dozing, and resting his head in the manger; and, if waked from this state, he soon relapses into it again.

From this state it sometimes degenerates into a frantic state, when it is called mad staggers: at others, the horse becomes more and more stupid, and at last sinks.

Bleeding is the principal means of relief to be depended on. Four, five, or six quarts should be taken away; after which a blister may be applied to the top of the head, and a feton put under the jaws: the horse should be back raked, and an opening clyster thrown up, after which a diuretic ball may be given, if practicable. In four or five hours the bleeding should be repeated; and on the following day, if the stupidity is only slightly decreased, it must be again had recourse to, by which means a cure will commonly be obtained.

M
Mad flaggers. Very frequently the sleepy flaggers degenerates, after a few days, into this; at other times mad flaggers comes on at once. In this diseaese the horse is furiously delirious, so as to render it very dangerous to come near him. He should be carefully secured; and, if possible, either flung, or kept on the ground. Five, six, seven, or even eight quarts of blood, according to his size, should be taken away, and which, if necessary, in a few hours, should be repeated; but the first bleeding gives the greatest chance of recovery. If the horse cannot safely be got at, plunge the fleam into the vein, and let it bleed without any attempt at stopping it: even fainting from the loss of blood will be of no prejudice. If the horse can be approached, a similar treatment in other respects should be pursued as in the former case.

STOMACHICS. See Cordials.

STRANGLES.

This disease consists in an inflammation of the glands under the throat, which usually attacks young horses between four and five years old. These glands commonly proceed to suppuration, and burst; and during this process the horse is a little dull, has a cough, and a discharge from his nostrils. Sometimes the disease is not so mild, but is attended
with considerable fever and sore throat, and with symptoms of strangulation. In all cases, if a horse is fat and strong, bleeding is proper before the tumour forms matter: but here, when the disease is violent, it is essentially necessary. The bowels should likewise be opened by raking and clysters, and the swelled glands poulticed, first cutting off the hair. If they seem to have a disposition to go back without suppuration, suffer them so to do, as it will save the animal a painful disease, and no harm can arise from it. When the throat is so much affected as to prevent the animal’s swallowing, blister it, by cutting the hair close, and rubbing the

Blistering Ointment [page 23] down the throat, and near the brisket. To allay the fever, the

Fever Powders [page 26] may be given. The horse should have his head cloathed, and be kept generally warm, with mashies and warm water allowed; and in every respect he should be treated as a horse in fever. When the glands have formed their matter, which is known by the increased swelling and softness, open with a fepton, or common lancet, and gently press the matter out.

The horse should now be supported with picked hay, and malt mashies, till the cure is completed.
STRAINS.

No affection is so much mistaken as that called a strain, nor no complaint so variously treated. This arises from two sources: the one is, the considering the tendons, the frequent seat of strains, as elastic substances, put too much on the stretch; and the other arises from not considering strains as having two stages,—one composed of inflammation, and another of the debility left in the part from the effects of the inflammation, and of the violence. A strain is an unnatural extension of an elastic part, and a rupture of an inelastic part: now the muscles may be relaxed, but the tendons, perhaps, are seldom or ever extended, but more usually their sheaths have some of their connections, or perhaps some of their fibres, ruptured. The treatment is the same in either case; for inflammation always follows a strain, and the part becomes hotter and larger than usual; this must, therefore, be treated as other inflammations: the horse should be bled when it is violent; he should be allowed perfect rest, and his bowels opened. The Embrocation for Strains [page 25] should be constantly kept on the part, till its heat and swelling are reduced: when this is the case, exercise must be gradually made use of; and, if any lameness remains, the part must be considered as in the second state of strains, and must be strengthened. An excellent application for this purpose is the
LIQUID SWEATING BLISTER [page 24], rubbed well into the part night and morning, or the following:

Sal ammoniac, crude, one ounce.
Vinegar, one pint.

Should lameness still remain, a regular blister may be applied; and if this also fails, firing is often useful, as it forms an artificial bandage to the part.

SURFEIT

Is what every body talks of, but what no one can exactly describe; it is, something like a cold, a convenient term for any disease of the skin that appears under no regular form, and has no assignable cause. What, however, is most generally understood by this name is a disease of the skin, appearing in small tumours, or bumps, under the hair; frequently the effect of perspiration suddenly checked, and as suddenly promoted. It is readily removed by the

ALTERATIVE CONDITION POWDERS [page 26], and by the loss of two or three quarts of blood.

THOROUGH PIN.

When the mucous reservoirs that lubricate the hock joint, from great exertion become enlarged between its point and ply, so as to be seen on the inner and outer sides, the enlargement is called a thorough pin. Like spavin, it seldom lamens, unless
very considerable; and, like that, when it does, the cure is seldom more than temporary. A mild blister may be tried, which, if it does not remove it, pressure may be made use of by a bolster on each side of the hock, directly over the swelling, fastened on by means of a coarse worsted stocking drawn over the hock.

THRUSH, RUNNING.

This disease consists of a running of stinking matter from the cleft of the frog. In many horses it proves very obstinate of cure, and this is particularly the case in contracted feet; hence it is reasonable to infer that this is one cause of thrush: another appears to be the standing in hot fermenting litter; and of this kind is that rotten thrush that often attacks the hind feet, increasing till it eats away the whole frog, making the foot hollow, and at last degenerating into canker. Common running thrush is, however, more frequent in the fore feet, because those hoofs are more liable to contraction; and when the discharge is small, it seldom does much mischief.

It often is an outlet to the constitution, and hence comes on and increases from high feeding and want of exercise. It has been said to be brought on from the frog being raised by calkins, and paring, so as not to be pressed on when the horse is at rest; but which pressure it always enjoys in a state of nature.
The cure must be attempted according to the cause producing it. In common running thrush of the fore feet, apply the

**Strong Paste for Grease** [page 24], melted in a spoon, and poured in night and morning, till the running ceases. When contraction appears the cause, the hoof should be pared, and kept moist, previous to stopping the discharge. When want of exercise, or full feeding, has brought it on, bleed, or give a dose of physic, and give more regular exercise. In the rotten thrush, affecting the feet behind, remove all moisture from under the feet; let the hoofs be pared down, which are usually high in these cases; let the whole be washed in vinegar, or beer grounds, three or four days, during which time give a diuretic, and bran mashes; after this pour in the

**Strong Paste for Grease**, melted as directed with the paste.

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**WIND, BROKEN.**

If the appearances that usually precede this complaint are attended to in the early state, it may sometimes be prevented, but never, I believe, is cured, when confirmed. Broken wind is often occasioned by a severe cold remaining some time, or being improperly treated; or from a horse being exercised violently during it: it is brought on by the foolish custom of
riding hard after taking water, or after a full meal. Horses who feed grossly, and eat their litter, become so. It is generally preceded by a pursiveness and cough, which is most troublesome in the morning, and likewise after eating and drinking. Bleeding, moderately, must be the first means made use of; after which a dose of mercurial physic should be given; and, when this is yet, a course of the

Cough Balls [page 21] should be tried; but, should they not succeed, recourse may be had to the following:

Extract of hemlock, one dram.
Opium, tartar emetic, of each a dram.
Anisated balsam of sulphur, half an ounce.
Make into a ball. Give one every or every other morning.

When broken wind is become complete, the treatment may yet be so conducted as to be palliative. Little water should be given; the hay and corn should be of the oldest and best quality, and given in moderate quantities frequently.

Mixed food, as bran, chaff, &c., should not be given in this disease; but chopped carrots are often found serviceable. If a journey is to be attempted on a broken-winded horse, one of the

Cough Balls given in the morning will assist the wind during the day.
WIND, THICK.

The foregoing treatment applies equally to thick wind, only here the addition of a blister to the throat is sometimes of considerable service. The Mild Liquid Blister [page 24] rubbed into the throat, half way down the neck, every morning and evening, for three or four days, will answer the end. Here, likewise, there is greater relief to be hoped from a course of the Cough Balls [page 21] continued some time.

WINDGALLS.

Motion requires, in most instances, a fluid to take off the effects of friction: the friction of the bones is prevented by the joint oil, and that of the tendons, by little bags containing a very slippery mucous. Now, as motion increases, so this mucous increases; and hence, in very hard-worked horses, these bags become very much enlarged in the neighbourhood of considerable tendons. It is these preternaturally enlarged mucous capsules that form what are termed windgalls, but which do not lame, unless they become so large as to press on any of the parts, and impede their functions; but they always shew the effect of considerable exertion, and hence evince the liability to future lameness. It has been recommended to open them, and in the hands of a skilful operator it might perhaps be attended with some
success; but the operation is hazardous, particularly in the hind legs, and still more so in capsules about the hock. I would, in preference, recommend pressure, with absolute rest for some time. A small bolster should be so formed as exactly to apply over the windgall, without slipping from off it, and which should be kept in its situation by means of a strong worsted stocking fewed around; but no very tight bandage should be used. At the same time, this bandage and bolster should be kept constantly wet with the Embrocation for Strains. By these means, continued for a month or six weeks, the contents of the windgall, or fac, will become absorbed, and moderate exercise will keep them down; though, it must be remarked, they will be likely to return to their former size, on hard work.

A more quick mode of treatment is blistering them, and which is often attended with good effects, especially if followed by a run at grass. But in cases where neither the one or the other of these plans can be pursued, from the horse being constantly wanted, the windgalled limb may be constantly bathed, after the horse returns from his work, with the

Embrocation for Strains [page 25], and then bandaged up with an elastic roller made of strong flannel; by which means they will slowly amend, or, at all events, their increase will be prevented.
WORMS.

Worms produce a large belly, voracious appetite, hot foetid breath, a frequent looking towards the sides, and sometimes a striking of them with the hinder foot; but, more particularly, the horse looks unthrifty, his hair stares, and is dry; and though his belly may be large and hard, the rest of his carcass is lean. Bots are a short round worm, and inhabit the stomach; and unless they exist in prodigious quantities, which is sometimes the case, they do not often do so much mischief as is supposed. There is a dark round worm, longer than bots, inhabiting the large intestines, and which are apt to do more mischief; there is likewise, but less frequently, a long round worm, similar to those found in children. Horses are subject likewise, now and then, to the small ascarides, or thread-worm, which commonly confine themselves to the rectum, or last gut, and occasion an intolerable itching of the tail.

Worms are known to exist not only by the foregoing symptoms, but likewise by the presence of a yellow matter at the anus, which horses having worms are seldom without.

All worms are very difficult to destroy. Bots can hardly be killed, even out of the stomach. Salt has been said to destroy them; or, rather, that horses who have had salt now and then sprinkled in their food have never been troubled with them. The
mineral poisons, as mercury, arsenic, &c., have been thought to kill them; but the effect is uncertain.

The other kinds are also nearly as difficult of removal; but here mechanical means may be employed to more advantage, that is, the juices of the intestines may be rendered unhealthy by a course of medicines, which loosening them from the surrounding mucous, they come away by purging the horse. Bitters, simply as bitters, cannot destroy worms; for these animals live in the most acrid bitter we know, the bile; but a course of aloes in small quantities, as a dram a day, till purging is produced, has proved useful. But I have experienced the greatest benefit from the

**Worm Powder** [page 26], followed up by a strong dose of mercurial physic. After this has set, another half dozen, and a second purge, should be given. This treatment does not often fail of relief, particularly in the intestinal worms.

**WOUNDS.**

The wounds of abscesses, ulcers, &c., have been considered in their several places; but by wounds here is meant accidental laceration. A wide gaping wound, made with a sharp cutting instrument, should be closed up with stitches, one to every inch of flesh. These stitches should take in a portion of flesh, as
well as skin, to hold them together, and they should not be too tight. Over this closed wound a double cloth, wet with a saturnine wash, should be placed; and if the wound is in a situation likely to be influenced by motion, a bandage must be carried over the whole. When matter appears, dress with any simple ointment, and keep the surface from the air, but do not bind it tightly up.

When a wound is much torn, or bruised, stitches are better avoided. In this case the part should be well washed with warm water, if it is suspected any dirt, or other extraneous substance, is within. Warm fomentations should then be made use of for the first day or two, repeated every four or five hours, and then the part may be dressed with yellow balsam; or it may be washed (instead of fomented) with the following:

- Spirit of turpentine, half an ounce.
- Tincture of myrrh, one ounce.
- Opodendron, two ounces.

When this complicated wound runs good matter, dress with common ointment, guarding it from the air.
A

Concise Description

of the

Most Prevalent and Important

of

The Diseases

of

Dogs.

N° 2
INTRODUCTION.

I believe I am the first person in this country, and, perhaps, in any other, who has paid any very direct and decided attention to the diseases of dogs on scientific principles; and as this is now very generally known, some improvements are of course expected from me, and some publication on the subject naturally looked for. But it must be remembered, that as I am almost, if not wholly, original in my attention to this subject, so I labour under manifest disadvantages; for I can derive no assistance from the labours of others, but have to trace out every part of the medical treatment step by step. Many experiments must be made, many subjects under disease attended to, and every variety of remedy tried, before any detailed publication on this subject can properly appear; but such a work, I hope, some time hence, to be able to offer, in which I shall describe the structure, functions, and economy of these useful animals, and their natural and artificial treatment, with the best mode of cure to
be adopted for their various complaints. But at present I must content myself with laying before the public the outlines only of the improvements I have made, and a sketch of the treatment I pursue in the more prevalent diseases among them. And though, unaided as I am by any previous instruction, nothing perfect can be expected, yet it will be found that much has been done towards ameliorating the sufferings of these faithful domestics, there being few of their diseases I am not enabled to offer some curative instructions relative to, and as few that I cannot point out efficacious remedies for. These remedies, some of them, I shall at present offer to the public ready compounded, as the only way of reimbursing myself for the expenses I have been at; but the attendant treatment is at the same time detailed, and as I offer these remedies universally, and place them within every one's reach, so I still think I do every thing that may prove useful, though I make no doubt I shall, by the envious and malicious, be taxed with empiricism. At a future time, when my experiments and attention have made still farther improvements, as I have before hinted, I shall give a more detailed publication on this subject, in which I shall develop the whole treatment I pursue in every disease, and describe at large every remedy I use.

But before I proceed farther, I must beg leave to say a few words relative to myself, in some measure
as an apology to my friends and the public for my present pursuits.

Having been educated as a medical man, and by the liberality of my relations having been enabled to embrace all the advantages that an attendance on numerous lectures, and a considerable residence at one of the first hospitals in London could afford; and having afterwards practised with some success as a surgeon, both privately and in the army, it greatly offended my relations, as well as surprised my friends and acquaintance, that I should stoop, as they considered it, to study and practise on the diseases of animals: but, above all, my attention to the diseases of dogs has given offence to some, and occasioned surprise in others. A surgeon is universally esteemed a respectable character. A veterinarian is now above the vulgar. But a dog doctor is yet a complete stumbling block. Alas! how long, how very long a time it requires to completely enlarge the human mind!—However, as I sincerely wish to conciliate all, I would beg my relations and friends still to consider me as a surgeon, for I still practise in my profession when called on. And those who think I have relinquished the higher title of veterinarian, I beg to inform, that my practice is at this moment extensive among horses, and that I am always willing to give advice and assistance in every case of veterinary practice I may be consulted upon. But, at the same
time, I must beg leave to remark, that so extremely fond am I of dogs, and so unconquerably attached to them, that a much more opprobrious term than that of *Dog Doctor* would not compel me to relinquish my attention to them; in which resolution, I have the satisfaction of stating, I am supported by the advice of some of the most eminent professional men, and by the countenance of some of the most distinguished characters for rank and fortune.

An enlarged way of reasoning is a long time in becoming general, even among a civilized and enlightened people. Till the establishment of the Veterinary College, and the practice of the veterinary art by men of education and respectability, farriery was deemed a low and servile pursuit; but at present, by a retrograde step towards enlarged reasoning, it has become ranked among the liberal arts: for, though its practice is of sufficient importance to ennoble its practitioners, it was not till the situation, manners, and character of some of these practitioners had conferred a portion of dignity on the subject itself, that it was even creditable to seem to understand it.

Precisely as farriery or veterinary medicine then was situated, a curative practice on the diseases of dogs now stands. A person practising on these animals has hitherto been considered as following a very mean pursuit; and the very term of dog doctor conveys an idea remote from gentility: but it is not the
unworthiness of the pursuit, but the kind of persons who have hitherto followed it, that has made it so. I believe no one will dispute the value of dogs; common humanity dictates the necessity of alleviating their distresses; and their faithful attachment to mankind claims not only the exertion of our humanity, but the full efforts of our gratitude and affection. And though, in real utility, they are subordinate to the horse, they are, in many points, more essential to our immediate comfort; and are certainly, by their domestic habits, connected to us by much more winning ties.

If, then, they are so valuable, and if it is our duty to attend as well to their sick as their healthy moments (which it undoubtedly is, for it is the life of art we have subjected them to that has entailed disease upon them); surely those who improve this branch of the healing art deserve attention, and not reprobation. But, in the first instance, it must, in this as in farriery, be the respectability of the practitioner that must rescue the pursuit from ignominy; and afterwards, as the ideas of mankind become more liberal and extended, and the public eye opens on the necessity and utility of the subject, the art will then not only bear itself up, but even add respectability to its practitioners. In every country the practice of medicine, in all its branches, has been esteemed a liberal and noble pursuit; and it has always been
deemed necessary that its professors should possess refined manners and extensive education. The study of medicine embraces a great variety of subjects, and is necessarily divided into a great number of parts; and as greater individual improvements can be made by devoting the attention to one of these parts than to the whole, so it has given rise to the various medical occupations of physician, surgeon, apothecary, midwife, veterinarian, &c. Animals are healed by the same means as ourselves; hence their treatment is only a branch of the healing art: and though, for the above reasons, this branch is usually pursued alone, yet it is equally a part of a great and noble whole, which, as its attainment must be accomplished by the same means, so it should be pursued by similar persons, namely, those of education and refinement.

If, therefore, dogs, as being faithful, deserve our gratitude; if, as being generous and brave, they merit our protection; and if, as being useful, they call for our utmost care; it is evident, that whatever develops the means of preserving them in health and curing their diseases; whatever tends to improve their condition, and make them more subservient to our use, must be a useful, and even a noble pursuit: for it has for its object (that which only truly ennobles any one)---universal philanthropy, and general utility.
I have, from my attention to this subject, been taxed with a want of common and proper pride. I believe it might not be difficult to prove that this very pride would be a sufficient motive, independent of a strong affection for the animal in question, to stimulate some persons to the pursuit; for in human medicine there are so many ingenious practitioners, that there is little chance of rising to superior eminence: in the attention, likewise, to the diseases of horses, an individual has also too many cotemporaries to be able greatly to signalize himself; but the diseases of dogs offer an unbeaten track: and here the practitioner may start alone and unrivalled, and for some time, at least, is likely to reap his honours and emoluments undisturbed. And, for myself, I must own, that I think it more satisfactory to stand first in a subordinate pursuit, than unnoticed in a superior one.
DISEASES OF DOGS.

Dogs are much more nearly allied to ourselves in constitution than either horses, oxen, or sheep; hence their diseases are more like our own; and living, as they do with us a life of art, their diseases become not only very numerous, but very mixed and irregular. This renders it a subject not at all within the reach of the common farrier; and even the veterinarian, who follows analogy only, without a particular attention to the structure, economy, habits, and manners of the dog, will find himself totally at a loss in the treatment; and though the similarity of their constitutions, from their eating, like us, mixed food, and being immediately domesticated with us, give their diseases a resemblance to our own, yet the great difference in their mode of expressing these diseases, and the peculiar effect that some medicines have on them, render the human surgeon, without a decided attention to the subject, perfectly incapable of acting from analogy: independant of which, dogs have several specific diseases equally unknown to horses, or ourselves.
Without a very strict and very extended attention to the subject, no one would be aware how very numerous are the diseases of these animals. Rheumatism, both chronic and acute, is very common among them. I have seen an affection producing chalkstones in the joints of the toes, not unlike human gout. Pleurisy destroys many of them; and inflammations of the stomach, bowels, and kidneys, are not infrequent. They are subject likewise to consumptions, and are not free from the whole train of nervous affections, as apoplexy, lethargy, spasm, palsy, epilepsy, &c. Distemper, worms, and mange, are too well known to need comment.

The distinguishing the diseases of dogs, and the proper mode of treatment, are not the only difficulties to be overcome; but how to administer the remedy, when the others are evident, is often a very serious difficulty. Now and then, dogs prove very refractory; but, in the greater number of cases, medicines may be easily given to them; but to a large dog, not less than three persons are often requisite. In general cases, however, two persons can manage it readily in the following manner: Place the dog upright on his hind legs between the knees of a seated person, with his back towards the person; then apply a napkin around his neck and shoulders-behind, bringing it over his fore legs, and securing it by the knees of the person holding the
dog; by this means his fore legs cannot act against the medicine. The jaws being now opened by the person between whose knees he is, a second attendant now holds the tongue down with one hand, and with the other places the medicine on the root of the tongue; when his mouth being closed, and kept so by the hands, it is of necessity swallowed. Nutrient may be given in a similar manner.

Dogs in sickness must be attended to with the same care that a child requires: whatever is worth doing at all, is worth doing well; and if dogs deserve any attention, they must deserve good attention, and humanity demands that our utmost exertions should be bestowed to relieve them; and if in a state of health they are allowed to come near the fire, to sleep warm, to be caressed, and to eat good food,—in sickness they require still more; and when, merely to avoid trouble, they are in this case confined in a cold room, or outhouse, attended by a neglectful servant, without solace, and with cold food and water alone, neither can we expect their recovery, or answer to our own minds their deaths. Dogs are very irritable; and though it may seem an affectation of tenderness, it is yet a very necessary caution, that when they are ill their minds should be soothed by every means in our power, or their complaint, in many instances, will be greatly aggravated. I have seen a sick dog fall into convul-
sions at the momentary fight of a dead one; and I have many times witnessed an angry word spoken to a healthy dog have the above effect on a sick one, who was near. Joy and surprife will produce the fame. A dog, under my care, who was rapidly recovering from a lingering illnefs, was visited by a fervant, of whom the animal was particularly fond: on feeing this fervant, he at once fell into convulsions, and never afterwards recovered from them; and this I have seen frequently happen. So great is the gratitude and attachment of these animals, and fo feelingly alive are they to kindnefs, that even in death they are not unmindful of their benefactors. A large fetter, who, after being tenderly nurfed in diftemper for three weeks, had lain on a bed for three days in a dying fituation, without the ability to rise;---a lady, who had been very attentive to him, on entering the room after a short absence, obferved him fix his eyes attentively on her, and make an effort to crawl across the bed towards her: this he accomplishèd, evidently for the fole purpofe of licking her hands; which having done, he expired without a groan. I am as convinced that the animal was fenfible of his approaching dissolu­tion, and that this was a laft forcible effort to ex­pres his gratitude for the care taken of him, as I am of my own exiſtence; and had I never witneffed but this proof of excellence alone, I should think a
life devoted to the amelioration of their situation far too little for their deserts.

Being engaged in a subject, on which I professed myself an enthusiast, I beg to be indulged in one more story, to which, though I was not, as in the above instance, a witness, yet, from the authority on which I received it, I can venture to answer for its authenticity. In the parish of St. Olave, Tooley-street, Borough, the church-yard is wholly detached from the church, and surrounded with high buildings, so as to be wholly inaccessible but by one large closed gate.

A poor tailor, in this parish, dying, left a small cur-dog inconsolable for his loss. The little animal would not leave the dead body, not even for food; and whatever he ate was forced to be placed in the same room with the corpse. When the body was removed for burial, this faithful attendant followed the coffin. After the funeral, he was hunted out of the church-yard by the sexton, who, on going to ring the morning bell the next day, again found the animal, who had made his way by some unaccountable means into the church-yard, and had dug himself a bed on the grave of his master: again he was hunted out, and again found in the same situation the following day. The minister of the parish now hearing the circumstance, had him caught, taken home, and fed; and by every means endeavoured
to win his affections: but they were wedded to his late master; and, in consequence, he took the first opportunity to escape, and regain his lonely situation. With true benevolence, the worthy clergyman permitted him to follow the bent of his inclinations; but, to soften the rigour of his fate, he built him on the grave a small kennel, which was replenished once a day with food and water. Two years did this example of fidelity pass in this manner, when death put an end to his griefs; and the extended philanthropy of the good clergyman allowed his remains an asylum with his beloved master.

Warmth is always congenial to the feelings of dogs; but in sickness it is even more necessary than fresh air: their diseases are very apt to end in convulsions, if they are not kept warm.

Liberal feeding is essentially necessary in most diseases to which dogs are liable: living, like ourselves, a life of art, their complaints are most of them those of weakness; that is, under disease, they seldom can bear to be much lowered: there are cases, however, as active inflammation, where a cooling plan only can be proper. When dogs are very weak, their stomachs cannot digest meat, even if they willingly eat it; but in these cases they receive more nutrient from broth, jelly, &c., but most of all from gruel; for broth often purges, but gruel never. They must be enticed to eat likewise by the same
little arts we use to persuade sick children to take nourishment; for they are, under these circumstances, to the full as fickle, and as fanciful. A steak very nicely dressed will entice them frequently; and pork, in many cases, when no other meat will. Broiled or roast meat is always taken in preference to boiled, and is more nutritive. Game bones will often be taken even by sporting dogs, when every thing beside is refused. But in all cases of sickness, when a dog obstinately refuses to eat, he must be forced; and the best food for this purpose is thick oatmeal gruel, poured down by means of a butter-boat. In cases requiring cordials, ale may be mixed with the gruel, or even wine in some instances, as in putrid diseases.

Cleanliness is not only essential to the health, but to the comfort of dogs, and in sickness is refreshing to them.

Not only are dogs improperly treated in sickness, but the means of preserving them in health are not sufficiently attended to. The want of exercise is a great cause of disease among dogs: by this means they become mangy, get obstinate coughs, canker in the ears, and cancerous swellings, or they become absolutely choked with fat. The not permitting the females to breed is in them a fruitful source of disease:—cancers along the line of the teats originate from this; obesity, foul coats, and cankers in the ear, likewise are brought on by this neglect.
Vomiting is a natural act in dogs, and they purposely excite it in themselves by eating dog-grass; but where they are confined, as in great cities, from the want of this natural cleanser, they fall into disease. An artificial vomit, therefore, is very proper to be given now and then, and will greatly tend to prevent disease. This subject may be seen treated on more at length under the article Emetics.

Constiveness is a great cause of disease in dogs: all animals living on flesh require very active exercise to carry off the contents of the bowels; when, therefore, dogs cannot be regularly exercised, they should have some vegetable food; or, if this cannot be given, they should now and then have an artificial purge. See the article Physic.

ALTERATIVES.

Dogs are very subject to diseases of the skin from too full feeding, want of exercise, &c.; in which cases alteratives are very useful. Some dogs, as those of light colour with wiry hair, are subject to redness and itching of the skin at all times, which, if not prevented, degenerates into mange. A course of alterative medicines, in these cases, now and then, will keep these dogs in health, and prevent this itching and redness of the skin from becoming more troublesome. In spring and fall most dogs are more or less affected in their hides; and at this time alter-
atives are of great service, and frequently prevent the attack of worse complaints.

Many substances are used as alteratives: the compound I use, I have, from experience, found to be a very excellent one; and I can recommend it strongly to the notice of others. It has a place among my ready prepared medicines, where it is called

Mange Alternative Powder [page 28].

CANCER.

A cancerous state of various parts of the body, but particularly of the teats in bitches, is very common; and usually, in them, is brought on by not permitting their breeding. The most effectual cure is to extirpate them; but it should be done by a very skilful hand.

CANKER within the EAR.

An effusion of blood, or matter, within the ear, called canker, is a very common complaint among dogs, which frequently ends in total deafness. The Wash for Canker in the Ear [page 29] is a medicine that I never yet found to fail in the cure of this troublesome complaint; but before I tried this application, all others proved very temporary in their relief.
CANKER on the Outside of the EAR.

This, though it bears the same name, is by no means a similar complaint to the former, nor is it so common. It is an ill-disposed ulcer on some part of the flaps of the ear, very commonly on its edge; though I have at this time, in my Infirmary, a case where it exists on the outer surface of both ears. It proves very difficult of cure, and, unless stopped, it sometimes spreads so as to destroy the whole ear. When it affects the edge of the ear only, it may, after scraping the whole of the scab away, be touched with lunar caustic. Should it, after this, break out again, the best mode of cure is to cut off the affected part. When it exists on the outer or inner surface of the ear, the treatment is not so easy; but here, likewise, something must be applied that will raise an active inflammation, as the following:

Oil of vitriol, one dram:
Lard, four drams.

Mix, and apply a little over the whole surface of the fore, and then cover the head up, and watch the dog, that he does not tear off the covering, or rub it into his eyes.

CONDITION.

The *condition* of dogs is a point of much importance to sportsmen: like horses, unless they are in good condition, they cannot hunt. *Condition con-
fists principally of two essential circumstances: the having all superfluous fat removed, so as to have the wind clear; and the being free from all foulnesses, so as that the scent may be perfect, which it never is in a dog with a foul skin.

Condition is promoted in dogs as in horses, naturally, by exercise, and by food that contains the greatest quantity of nutriment in a given bulk, which must evidently be flesh: artificial condition is promoted by alteratives and physic. When dogs are wished to be got into high condition, the following will be found an excellent plan to pursue. Begin by giving one dose of

**Condition Physic** [page 30]. When this has worked off, give, according to the directions, half a dozen of the

**Alterative Powders** [page 28]. When these are done with, give another dose of physic, which may be followed by another half dozen of Alterative Powders, and a third dose of physic, giving during the whole time, except on the days the physic is taken, regular hunting exercise. When the exercise is regular and active, flesh is the best food for promoting hunting condition; for it not only gives vigour and durability, but it promotes a sanguinary disposition in the pursuit of the game: but the flesh should always be sweet.
COUGH.

A cough is a common complaint among dogs. It is almost a constant attendant on distemper, and it is also frequent on taking cold: but there is a cough distinct from these, that attacks dogs as they grow old, particularly those who are highly fed, have had little exercise, and have grown too fat. It resembles, in a very slight degree, the human asthma, and is known to some sportsmen by the name of *hysk*: among others, this term signifies the cough that accompanies distemper. In many cases there appears an enlargement of some of the contents of the chest, as of the heart or lungs; in others, dissection shews nothing.

When it first appears, I have seldom failed to cure it by blisters to the throat and chest, united with proper alteratives; but when it has been some time confirmed, it is more difficult to remove: however, by great attention, even in this state, it has been relieved.

DISTEMPER.

For information on this head, I would refer the enquirer to the Treatise on the Distemper [price 1s.], which little work has passed through two editions within two years. The treatment and cure of this fatal disease are there detailed at length. It may-be purchased at any respectable medicine venders, as well as the Medicinal Powders [page 27] for this
complaint, whose rapidly increasing sale is a sufficient testimony of their efficacy.

**EMETICS.**

Vomiting is so often repeated in all dogs, and with so little difficulty, that we are warranted in concluding it is in them a natural and a salutary act, tending to keep them in health. They are themselves so sensible of this, that they purposely excite it by eating a species of broad-leaved grass, which proves a vomit to them. Now, if vomiting is necessary to dogs living in the country, where they have fresh air, and plenty of exercise, how much more so must it be to dogs in places like London, or other great cities, where they are pampered, highly fed, and get little exercise? Yet, in these cases, they very seldom can get at this natural emetic; for, even if they walk, the highly cultivated fields around large cities seldom produce this grass, and without it they seldom vomit. I have no doubt, myself, that many of the diseases to which dogs are subject are brought on by the want of this natural act; for their stomachs become over-loaded, and too much is taken into the constitution, which either produces fat, or ends in mange. Naturally, when dogs have eaten more than is proper for them, they have recourse to this grass, by which their stomachs are soon relieved; but in cities and large towns, where they are confined from this means
of relief, the accumulated contents of the stomach, after distressing that organ some hours, pass into the intestines, where the weight adds still greater distress, producing sometimes costiveness, and not unfrequently cholic.

Being perfectly convinced of these circumstances, I have long been in the habit of recommending for dogs thus situated, once or twice a week, an artificial vomit; and where it has been regularly persisted in, it has been attended with the most beneficial effects. Dogs beginning to get pursive, and fat, have been kept by this means in moderate case; and the early state of diseased chest, producing short breath and constant cough, has been removed. That constant sickness, likewise, united with cough, in which a dog, after some violent efforts, brings up froth alone, has been done away by a regular emetic now and then.

I have tried for this artificial emetic all the various substances used in common as emetics among ourselves; but I found that some of them acted too roughly, and hence defeated their own ends; while others that were more mild were uncertain in their effects; this set me upon more closely imitating nature, and extracting the virtues of the dog grufs from the plant itself; and which so completely answered my expectation, that I have ever since invariably used it.
This Essence of Dog Grass I now always keep by me; and I would strongly recommend it to the use of persons keeping dogs at all confined, as a most healthy cleanser, imitating nature, by mildly puking a dog once or twice at the utmost; tending, by this means, to correct a vitiated appetite, and increase a healthy one; and to prevent the attack of all those numerous diseases, the consequence of an artificial manner of life. The Essence of Dog Grass may be procured at my house, packed in bottles, with ample directions, price 2s. 0d. each, containing a sufficient quantity for many months use. A small quantity of it may be mixed with the food, for the taste will not prevent its being eaten; or it may be forced down, if most convenient; after which, in a quarter of an hour, the contents of the stomach will be brought up without much reaching: but it will prove a much easier act, and a more natural one to the dog, if he takes it after eating; and, as such, it is always most prudent to give it after a meal.

FITS.

Fits in dogs, though not very different in appearance from each other, arise from very different causes, and, therefore, require very different treatment. The fits that attack apparently healthy dogs of all ages are commonly arising from either costiveness or worms. In the treatment of fits, it is
evident the cause producing them must be removed to effect a cure. The immediate fit itself may be removed at the time, by plunging the dog into cold water. The fits that are the consequence of distemper must be treated as is directed under distemper. When fits appear whose cause is more obscure, it would be prudent to state the case accurately to the author, who might judge thereon, and probably direct a salutary treatment.

HUSK. See Cough.

INFLAMED LUNGS.

Dogs not unfrequently are attacked with this complaint from shearing, or other exposure to cold. It may be distinguished by the extreme coldness of the paws, moisture from the nose, elevated head, and difficult breathing. The cure must be attempted by bleeding largely, blistering the chest, and opening the body by a brisk purge.

INFLAMED STOMACH.

This is likewise not an unusual complaint among dogs, and is characterized by incessant sickness, with excessive thirst; the anxiety of the countenance is great, and there are evident marks of great distress. I believe it seldom admits of cure in dogs: the at-
tempt may be made by bleeding, and bathing in warm water.

INFLAMED BOWELS.

This produces similar symptoms to the above; but the distress is not so great. I have seen several dogs under this complaint who have appeared tolerably lively, and even not refused their food till within a very short time of death. The incessant thirst and vomiting in this is the same as in the former, only the sickness is not so immediate on taking any thing as in inflamed stomach. The cure must be attempted, as in inflamed lungs, by bleeding and blistering, united in this case with warm bathing.

LOOSENESS.

The purging of dogs may be usually checked by starch, suet and milk, or rice gruel, in common cases: as medicines, rhubarb, ginger, opium, and chalk, are proper; but for the cure it is necessary to ascertain the cause producing the affection, which, in many instances being very different, must render the treatment so likewise. It is a very common attendant on distemper, when the Distemper Powder frequently checks it. It is as frequent, likewise, a symptom of worms; when a proper worm purgative, by removing the cause of the irritation, would stop the looseness.
MADNESS.

This dreadful complaint is frequently confounded with distemper, to the terror of many persons; and in many cases it really requires the judgment of the experienced to decide between them. I have, in the Treatise on Distemper, endeavoured to lay down such exact directions for the mode of distinguishing these two affections from each other, that I think will enable any person, having recourse to it, to decide in a moment between them. Since distemper has been so prevalent, madness is much less frequently seen: but as it is generated within this genus of quadrupeds, and only to be caught by all others, so there is reason to fear it will never be wholly exterminated.

MANGE.

This is a very frequent and troublesome disease among dogs, all of whom appear subject to it, but some more so than others. White dogs are peculiarly subject to it; and those with wiry coarse hair more so than any others. It puts on different appearances; that is, there are several varieties of it, but two are most common: that called the rank mange, with ulcerated scabby skin, and that producing only a red inflamed skin, called the red mange.

When dogs are very much reduced in flesh, there is a scurvy state spreading over the whole body,
which removes on more liberal feeding, and leaves only some slight symptoms of common mange. There is a variety of it, consisting of spongy ulcers, from the little pores of which spongy surface, serum, or the watery parts of the blood, in the form of a yellow thin fluid, constantly issues in small drops:—this variety is nearly incurable.

*Red mange* is less easy of cure than the rank scabby mange; it is often, likewise, constitutional, particularly in coarse wiry-haired dogs: that is, every spring and fall it makes its appearance in some, and in others it is constant; for, as soon as the treatment ceases, it appears again. The progeny of these dogs possess an hereditary mange; and I would, therefore, never recommend breeding from either dogs or bitches under this disease.

The *rank scabby mange* is not difficult to cure; but its recurrence in some dogs is certain, without a very early repetition of the same means with those before adverted to.

Mange may be *generated*, or it may be *caught*. It is generated by the opposite extremes of too full feeding, and too sparing a diet; that is, dogs may be crammed into it, or starved into it. Gross food, as horse flesh, greaves, &c., will produce it, particularly if the exercise is not proportioned to the food. Filth is a very great cause of it; for which reason the dogs of the poor commonly have it more or less.
It may be caught by living with another having the disease; but accidental intercourse will not produce it: sleeping on the same straw, or in the same kennel, is a strong means of producing it; but it is, generally, not so contagious as has been imagined.

It is not so readily caught from a dog having it constitutionally, as it is from a dog having himself caught it.

The slight redness and itching of the skin so common among dogs at all times, particularly in summer, will degenerate, without care, into mange; and fleas, in great quantity, promote a disposition to it: but these cases may be prevented from becoming true mange, by washing, together with a course of alterative medicines. See page 28.

But when it has made its appearance as real confirmed mange, though these alterative medicines assist in the cure, an outward application is necessary to complete it: indeed, in most cases, nothing but an outward application is essentially necessary. Many substances are used for the cure: brimstone forms the principal, and, if thoroughly applied, is equal to the removal of common cases; but brimstone alone, or any one substance unaided by others, is seldom sufficiently efficacious for bad cases; nor does it cure milder mange so quick as a judicious compound. By seeing many hundred cases of this disease, under all its varieties, every year, and by giving every sub-
fiancé a fair trial, I am become tolerably well aware of the relative efficacy of every thing in common use for the cure of mange, and of many things not in common use; by which means, after repeated alter-

ations, I have at length succeeded, so as to be under no necessity of any further alteration; and I can recommend the Mange Ointment [page 23] as a certain specific in all the varieties of real mange. The principal difficulty in forming a compound that is really efficacious for this complaint, is, the making it active, yet safe should the dog lick it. This de-

sirable end I have at length attained; the medicine in question being so mild, that the whole quantity may be eaten without danger, and yet so efficacious, that slight cases are removed by once applying it: those with greater inveteracy seldom require more than twice; and the very worst stages of it are re-

moved, in general, by three applications.

It is believed by many, that mange cannot be cured without bleeding; but the reverse of this is the fact: however, so certain is it that the blood be-
comes affected in this disease, that the blood of a mangy dog introduced into the veins of a healthy one would produce mange. Therefore, when the complaint has attained a very great degree of inver-

teracy, it may not be imprudent to begin the cure by bleeding. The food in this disease must be changed; that is, if a dog before ate flesh, he must,
during the cure, be fed on vegetables, as biscuit, potatoes, &c.; and if, before, he was fed on these latter substances, meat during the cure will assist it. If bleeding is not judged necessary, a dose of physic is not an improper preliminary; and, as I have said before, the cure in all inveterate cases will be expedited by proper alteratives, and recurrence more certainly prevented. See Mange Powders, page 23.

PHYSIC.

On many occasions, purging medicines are very proper and useful to dogs. In sickness, by purging we frequently restore health; and in health, by the same means we often ensure its continuance. Constiveness is very prevalent among dogs, particularly those who have little exercise, and are fed wholly on flesh: this complaint frequently occasions piles, and likewise not unfrequently degenerates into absolute and obstinate constipation; and numerous are the dogs I have seen destroyed by this means. In these cases, a proper purgative now and then is highly proper. The disposition to fatness some dogs shew, and which certainly ends in disease, is kept down by proper physic. Fits are frequently arising from a costive habit, and the want of proper physic. Worms are removed by purgatives frequently. Without physic, dogs cannot readily be got into hunting
condition: when it is of a proper kind, it increases their wind, vigour, and durability. In the first stages of distemper, purging is particularly salutary, and should always be encouraged by proper purgatives.

Dogs should be very carefully purged: they do not bear strong physic; and I have seen very fatal effects from administering them too strong, particularly of the mercurial kind. It is not safe to give a young small dog more of any substance than would purge a child; and a large full grown dog will seldom bear more than a hearty man.

The physic I generally make use of for all the aforementioned purposes, and which answers these purposes with safety and efficacy, may be seen under the title

CONDITION PHYSIC [page 30]. It is so compounded, as to have regulated doses in each package, adapted to the various sizes, ages, and strengths of dogs.

WORMS.

There is no complaint, distemper excepted, that destroys so many dogs as worms: almost every dog has them at some period of his life, and many have them always. There are several kinds of worms that affect dogs. The tape worm is a common kind; and it is not an unusual circumstance for a puppy to pass
four or five hundred joints of these worms, whose united length would encircle the whole body many times. I have seen instances where one of these worms coiled itself up into one ball, and so made an impenetrable obstruction, of which the dog died. Another kind is the long round worm, similar to the human. These sometimes crawl from the intestines into the stomach, and, making the dog sick, are brought up; at others, they pass only from the anus; but I have observed they more frequently produce fatal effects when brought by the mouth. There is a third kind, not much unlike maggots, with red heads: these are not so frequent as the two former, and I think not so fatal. A fourth kind, which are likewise less fatal, are similar to the human ascarides, or thread worm.

Worms are particularly fatal to puppies; and when they exist in any considerable quantities, they commonly destroy them. Worms are easily detected, even though they should not pass away; for, when a dog has many worms, his coat always stales; he eats voraciously, but seldom fattens; he has frequently a cough, and in puppies the nose commonly runs: but the stools are the most unequivocal symptoms; for these are commonly loose, slimy, and mixed with froth. Sometimes, when loose stools are the consequence of worms, on the taking any astringent medicine, they become of a proper consistence,
but they soon return to their former state. The belly likewise is often hard, and sometimes swelled. When puppies have worms, the first that are passed are seldom but little noticed, for they seem to affect the health but little; but gradually purging becomes more frequent, and the animal, though lively, wastes, and his hip-bones may be plainly felt, though the flaring of the coat may make him still appear fat: the growth likewise is completely stopped, and in this way it is very common for puppies to continue, till a fit or two carries them off. In grown dogs, worms are less fatal, though, from the obstructions they form, they not unfrequently kill; they likewise, in grown dogs, produce fits, the first of which is passed over, and little notice is taken till a second appears, and so on. It does not follow, because no worms are seen to pass away, that the dog has none; nor, because they are not seen, does it follow even that none pass: for if they remain long after they are dead in the intestines, they are digested like other animal matter: this is frequently the case when dogs take medicines that destroy them; for they become digested, and pass away dissolved.

I wish I could say any thing satisfactory on the cure. Worms occasion such an irritability of the bowels, particularly in young dogs, that strong purging medicines to dislodge them cannot with safety be given; and no substance that I am acquainted
with kills them within the bowels with certainty. The remedies I make use of with the greatest success may be found in my medicine arrangement; and though these often fail, they likewise not unfrequently succeed. Accompanying these medicines are very ample directions for their exhibition; and the whole treatment, under a variety of circumstances, is pointed out. See Worm Medicines [page 29].

FINIS.
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