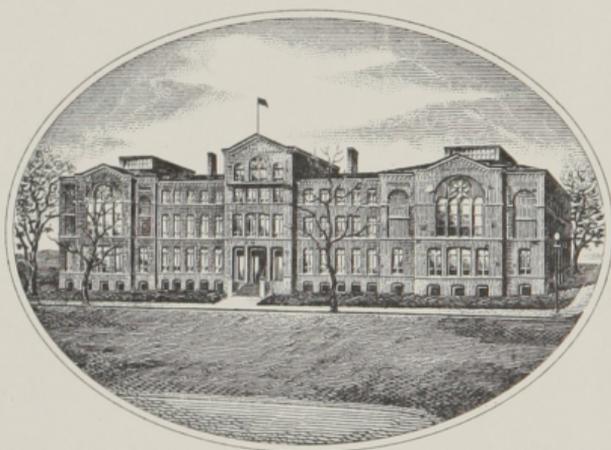


NATIONAL LIBRARY OF MEDICINE
Washington



Founded 1836

U. S. Department of Health, Education, and Welfare
Public Health Service

John y Fleet Book 2821

John y Fleet Book
September 12 1828

John y Fleet

Chc
PRACTICAL

HORSE FARRIER;

OR,

The Traveller's Pocket Companion.

SHEWING

THE BEST METHOD TO PRESERVE THE HORSE
IN HEALTH;

AND

LIKewise THE CURE OF THE MOST PROMINENT DISEASES TO
WHICH THIS NOBLE ANIMAL IS SUBJECT, IN THE
UNITED STATES OF AMERICA.

The whole being the result of nearly forty years' experience,
with an extensive practice.

==
To assist great nature in her wondrous plan,
Should be the study and pursuit of man.

==
SECOND EDITION,

Much enlarged, and embellished with three engravings.

==
BY WILLIAM CARVER, FARRIER;

OF NEW-YORK.

==
PHILADELPHIA:

PRINTED AND PUBLISHED BY MCARTY & DAVIS,

South East corner of Race and Ninth street.

1820.

EASTERN DISTRICT OF PENNSYLVANIA, to wit:

Be it Remembered, That on the thirteenth day of May,
***** in the forty-fourth year of the Independence
* * * * * of the United States of America, A D. 1820,
* L. S. * M'Carty & Davis, of the said district, have de-
* * * * * posited in this office the title of a book, the
right whereof they claims as proprietors, in the words fol-
lowing to wit:

“ Practical Horse Farrier; or The Traveller's Pocket
“ Companion: Shewing the best method to preserve the
“ Horse in health—and, likewise, the cure of the most pro-
“ minent diseases to which this noble animal is subject, in
“ the United States of America. The whole being the re-
“ sult of nearly forty years' experience, with an extensive
“ practice. To assist great nature in her wond'rous plan,
“ should be the study and pursuit of man. Second edition,
“ much enlarged, and embellished with three engravings:
“ By William Carver, farrier, of New-York.”

“ In conformity to the act of the Congress of the United
States, entitled, “ An Act for the encouragement of learn-
ing, by securing the copies of maps, charts and books, to
the authors and proprietors of such copies, during the times
therein mentioned.” And also to the act, entitled, “ An
Act supplementary to an act, entitled, An Act for the
encouragement of learning, by securing the copies of maps,
charts and books to the authors and proprietors of such
copies, during the times therein mentioned, and extending
the benefits thereof to the arts of designing, engraving, and
etching historical and other prints.”

D. CALDWELL,
Clerk of the Eastern District of Pennsylvania.

CONTENTS.

	<i>page.</i>
Plate, shewing the Skeleton of the Horse, -	10
Plate, shewing the Intestines, - -	13
Plate, shewing the Horse's teeth and age by them	15
Preface, - - - - -	17

CHAPTER I.

Some general directions in regard to the management and care of some Horses, - -	26
--	----

CHAPTER II.

On Bleeding, Purging, &c. - -	31
-------------------------------	----

CHAPTER III.

Of Colds, - - - -	39
-------------------	----

CHAPTER IV.

Of Fevers, - - - - -	43
----------------------	----

CHAPTER V.

Of the Pleurisy, and Inflammation of the lungs,	45
---	----

CHAPTER VI.

Of a Cough, and Asthma, - -	49
-----------------------------	----

CHAPTER VII.

Of an Apoplexy, or Staggers,	-	-	-	<i>page.</i> 53
------------------------------	---	---	---	--------------------

CHAPTER VIII.

Of the Strangles,	-	-	-	57
-------------------	---	---	---	----

CHAPTER IX.

Of the Diseases of the Eyes,	-	-	-	59
------------------------------	---	---	---	----

CHAPTER X.

Of the Farcin, or Farcy,	-	-	-	61
--------------------------	---	---	---	----

CHAPTER XI.

Of the Yellows, or Jaundice,	-	-	-	67
------------------------------	---	---	---	----

CHAPTER XII.

Of the Cholic, or Gripes	-	-	-	69
--------------------------	---	---	---	----

CHAPTER XIII.

Of Worms and Bots,	-	-	-	73
--------------------	---	---	---	----

CHAPTER XIV.

Of Wounds in general,	-	-	-	77
-----------------------	---	---	---	----

CHAPTER XV.

Of the Locked Jaw,	-	-	-	85
--------------------	---	---	---	----

CHAPTER XVI.

Of Strains, in various parts,	-	-	-	91
-------------------------------	---	---	---	----

CHAPTER XVII.

Of Bone and Blood Spavin, - - -	<i>page.</i> 95
---------------------------------	--------------------

CHAPTER XVIII.

Of the Pole Evil, and Fistula, - - -	99
--------------------------------------	----

CHAPTER XIX.

On Shoeing, - - - - -	103
-----------------------	-----

CHAPTER XX.

Of Founder, - - - - -	115
-----------------------	-----

CHAPTER XXI.

Of Splents, - - - - -	119
-----------------------	-----

CHAPTER XXII.

Of a Curb and Ring Bone, - - -	121
--------------------------------	-----

CHAPTER XXIII.

Of the Grease, - - - - -	123
--------------------------	-----

CHAPTER XXIV.

Of Scratches, - - - - -	127
-------------------------	-----

CHAPTER XXV.

Of Sand Cracks and Quittors, - - -	129
------------------------------------	-----

CHAPTER XXVI.

Of Relax and Scouring, - - -	133
------------------------------	-----

CHAPTER XXVII.

Of the Disorders of the Kidneys and Bladder, ^{page.} 13

CHAPTER XXVIII.

Of Alterative Medicines, - - 137

CHAPTER XXIX.

Of Consumption, - - - 141

CHAPTER. XXX.

Of Scratches, Rat-tails, &c. - - 143

CHAPTER XXXI.

On the Blood and Pulse of the Horse, 147

CHAPTER XXXII.

Of the Running Thrush and Canker, - 151

CHAPTER XXXIII.

Of the Diseases of the Feet, - 155

CHAPTER XXXIV.

Of Colds, &c. - 159

CHAPTER XXXV.

Of a Broken Wind. - 163

CHAPTER XXXVI.

Of Surfeits, Hide-bound, and Mange, - 169

CHAPTER XXXVII.

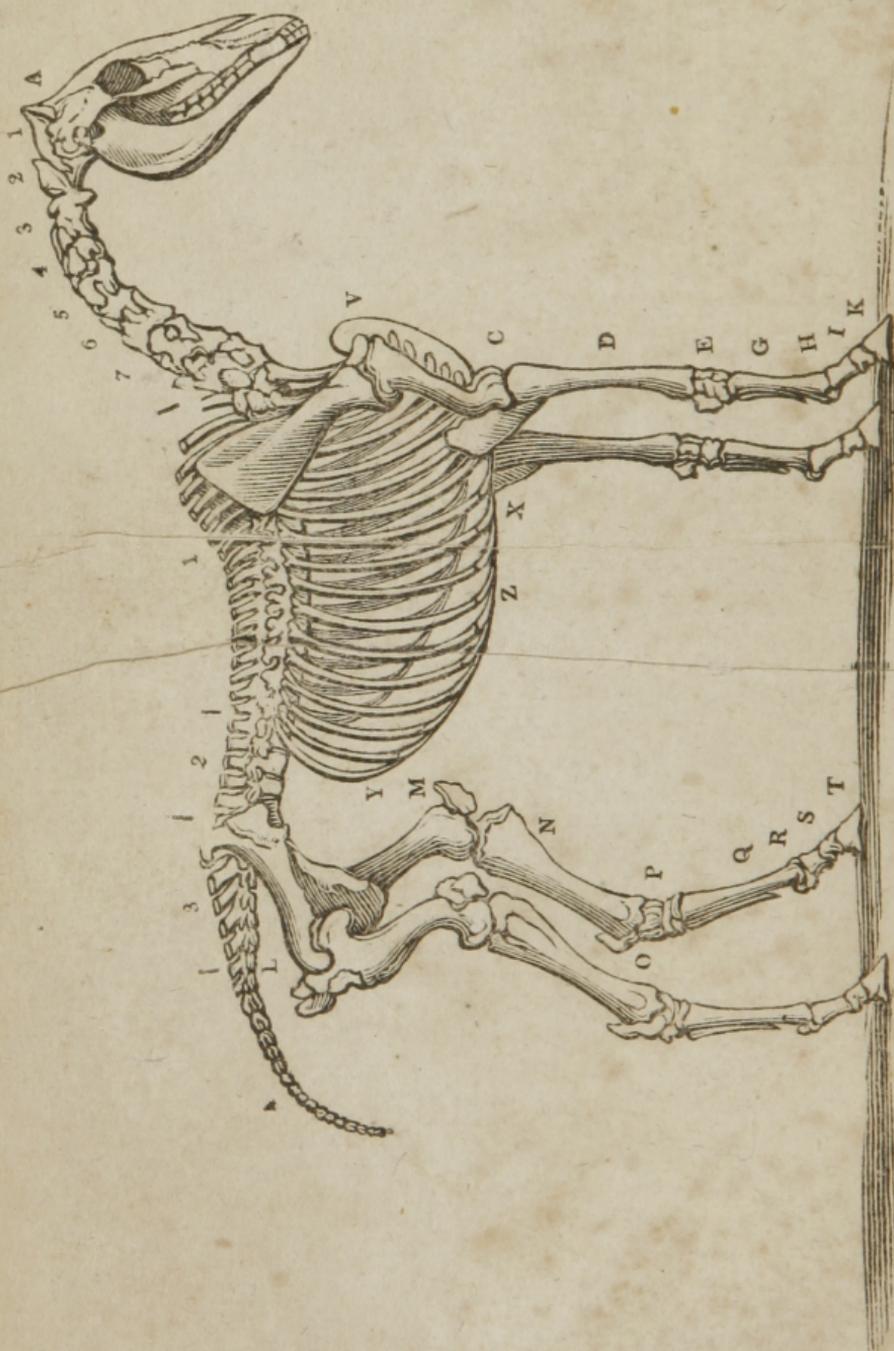
Disease of the Mouth and Tongue, -	<i>page.</i> 177
------------------------------------	---------------------

CHAPTER XXXVIII

Nicking, Docking, and Cropping, -	183
-----------------------------------	-----

APPENDIX.

Advice to purchasers of Horses, with instructions how to ascertain the age of the horse by his teeth, and otherwise, -	191
The Stallion, - - - - -	224
Breeding Mares, - - - - -	227
Parts of a Horse's Body, - - - - -	232
Signs of Disease in Horses - - - - -	238
Conclusion, - - - - -	247



DESCRIPTION OF THE PLATES.

PLATE I.

SHOWING THE SKELETON OF THE HORSE.

- A. The head, including all its parts as articulated with the neck.
- C. The humerus, or shoulder-bone.
- D. The bones of the leg, or fore-arm, consisting in each of the radius and ulna.
- E. The joints of the knees, with the small ranges of bones.
- G. The shank-bones, consisting in each of the cannon bone, and the two metacarpal, or splent-bones.
- H. The great pastern bones, with the two sesamoid bones of each fetlock.
- I. The lesser pastern bones.
- K. The bones of the feet, consisting in each of the coffin and navicular bones, with the lateral cartilages.
- L. The bones of the pelvis, called ossa innominata.
- M. The thigh-bones.
- N. The bones of the hind-legs; consisting in each of the tibia and the fibula.
- O. The points of the hocks.
- P. The small bones of the hocks.
- Q. The bones of the insteps; consisting, in each, of the cannon bone and two metatarsal bones.
- R. The great pasterns and sesamoid bones of the hind legs.
- S. The little pastern bones of the hind-legs.
- T. The coffin and navicular bones of each hind-foot, with the lateral cartilages.
- V. The sternum, or breast-bone.
- X. The point of the sternum.
- Y. The ribs.
- Z. The cartilaginous ends of the ribs on the breast and abdomen.
- 1, 2, 3, 4, 5, 6, 7. The seven vertebræ of the neck.
1. The eighteen vertebræ of the thorax and back.
2. The six vertebræ of the loins.
3. The five spines of the os sacrum,
The eighteen joints of the coxendix and tail.

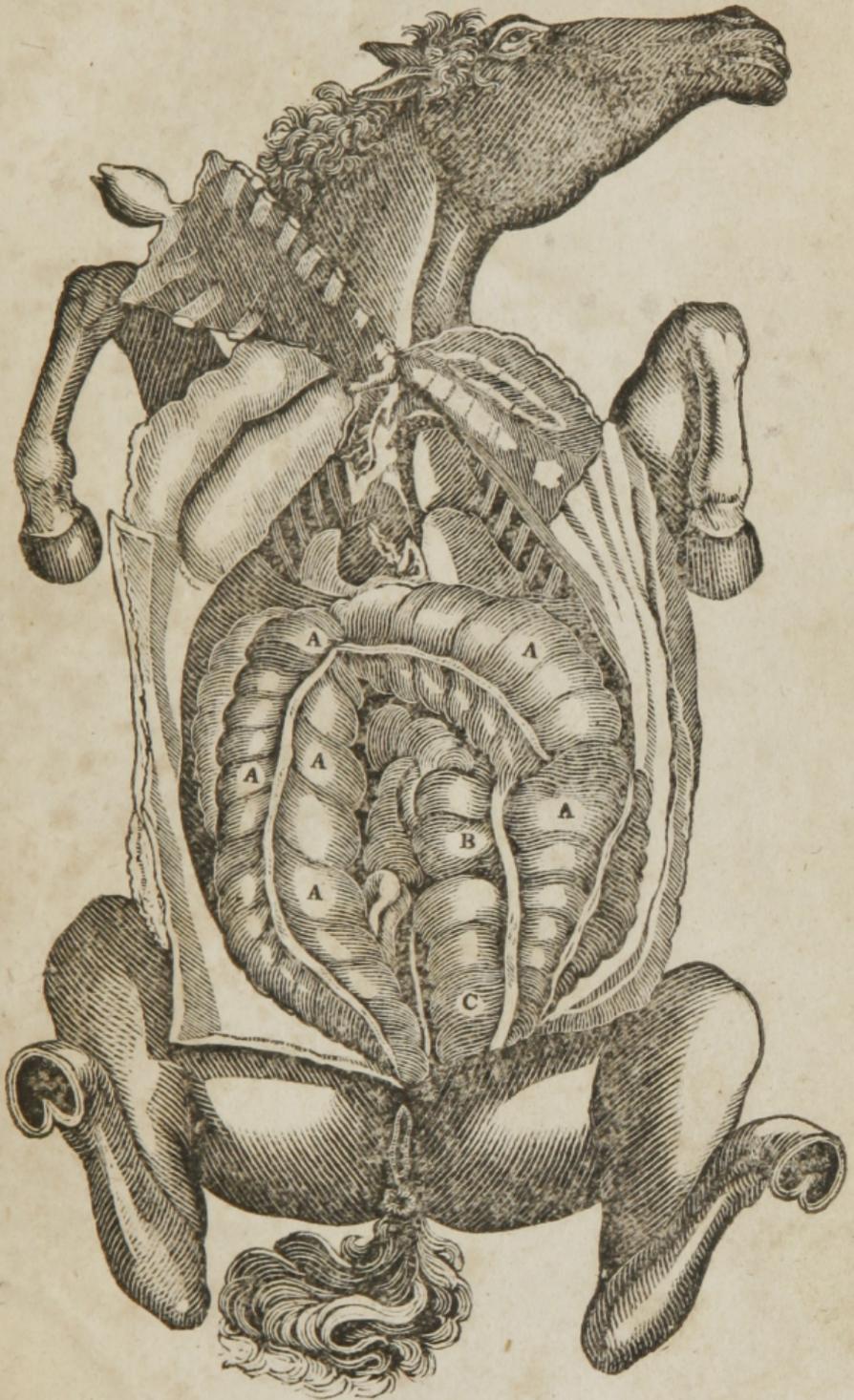
PLATE II.

Representing the intestines of the horse as they appear in their natural situation, when the abdomen is laid open.

AAAAAA. The colon, with its various circumvolutions and windings together with its numerous folds, and under which lie the small intestine.

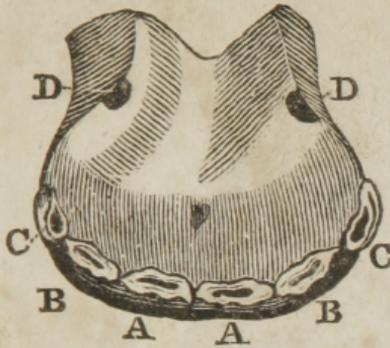
B. The cæcum or blind gut.

C. The rectum.



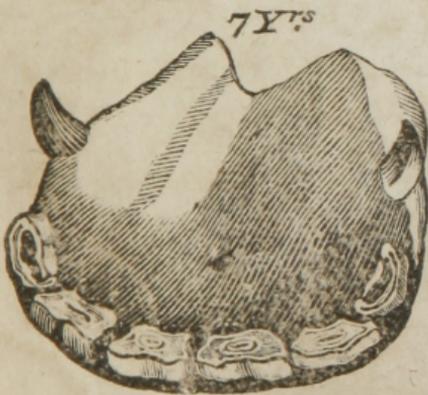
B

State of a Colt's teeth, from 3 months to 3 years old.



A. the Pincers
B. the Separaters

C. the Corners
D. the Tusks



The age of the horse determined by the Teeth.

PREFACE.

THE author of the following treatise is aware that his work will meet with objections, on account of there having been many large volumes published on Farriery by men of science, who were acquainted with the dead languages. It was on this ground that he thought the undertaking more necessary, as the greater part of those that are owners of the noble animal, the horse, are, like himself, unacquainted with the Greek and Latin. And he believes that the anatomy of the horse, as well as the human body, can be as well understood and defined, by the language of our own mother tongue, as by the dead languages: Yes, and that those languages only serve

the purpose of those who wish to keep the world in ignorance, and profit by the credulity of others. For my part, I believe that neither the Greeks nor Latins taught their pupils the languages of any other nations : at least I never saw an author, that informed me that they did so.

It is probable, by this time, the reader may think that I am an enemy to science and a friend to ignorance—but the case is otherwise. I should feel myself happy to see science flourish, stripped of her grab of mystery and quackery : and if the Veterinary College of London had pursued this laudable method, Mr. Blaine, and his contemporaries in that college, would have deserved immortal praise : But their books are at too high a price for the common reader to purchase—and too voluminous to be read—and too obscure to be understood, but by those who have had a classical education.

I have been an eye witness to the dreadful effects of the ignorance of those who have undertaken to doctor the horse, both in this country and England. A coachman who lived with a gentleman in this

city, undertook to bleed one of his employer's horses in the mouth, and, as there is a large artery that comes from the heart into the mouth, the man had cut that artery asunder and could not stop the blood, and the horse had continued to bleed for two hours before he was brought to me, and it was with great difficulty that I stopped it: and believe that the horse could not have lived ten minutes longer if the blood had not stopped, as the poor animal was struck all over with a cold sweat, and trembled like a leaf.

One more instance I will relate, which is, that a groom belonging to a gentleman in this city, also undertook to clean the yard of his master's horse—in doing which he drew down the yard beyond its natural extremity, which overstrained the leading tendons, or nerves of the yard, like a violin string that is overdrawn, and has lost its elasticity, so that the animal had not power to draw it back to its place. When the man brought the horse to me he said, Mr. Carver, what is the matter with this horse? I told him immediately that he had forced down the yard with

his hand, beyond its natural position: He at first denied the fact—but on my insisting on its being the case, he confessed, and begged that I would not inform his master how it had happened; by applying restraining medicines, I brought the yard to perform its natural functions. It was a judicious remark of Lord Pembroke, when he said—“Any gentleman who permitted his groom to administer any thing more to his horses, than messes or warm gruel, would soon find himself on foot.”

I am certain that there are persons in this city, who undertake to doctor the horse, that cannot either read or write their own names—and consequently know nothing of the quality or power of medicine; and I have seen them apply a restraining, when they should have applied a relaxative: In consequence of this ignorance, they cannot consult the state of the blood of the horse, which is the first thing to be considered in all kinds of fevers. And I furthermore believe, that they know not where to find the pulse veins—or how many times the pulse beats in a minute, in order to judge of the state of the animal, they pretend to cure.

I have read a great number of authors who have attempted to describe the method or best manner of shoeing the horse ; and they have given what was, in their opinions, the form or the shape of the shoe that should be placed on the foot ; but I have found by long experience, that they for want of practice, have been, almost all of them, very erroneous : the author that comes nearest to the point, so as to preserve the foot, is Clark. As shoeing the horse is a most essential point to be considered, I have attempted to describe the best method that I have discovered, in thirty year's practice, in the chapter on shoeing : and this I think the more necessary, as I have witnessed the dreadful, and the most evil consequences, of horses being placed in the hands of unexperienced shoers in this city. I have known smiths to open shops, and undertake to shoe horses, who never had shod a horse in their lives ; and the result has been, that the feet have been ruined, and the horses have been obliged to be turned to pasture, in order that nature might replace the injured foot. The most celebrated authors, and

judges of horses, have considered the knowledge of the foot, and the manner of shoeing, as very essential points: Bracken has said—no foot, no horse: and Mr. Blaine, of the Veterinary College of London, says—that he would not trust many of the pretended shoers, to drive a single nail in the foot of his horse. And, for my own part, I would not permit three fourths of the smiths, of this city, to take off a single shoe from my horse's foot, was I not present at the time.

I presume the public will consider that I have not written this small treatise with a view of deriving any pecuniary advantage, as I am now arrived at an advanced period of life; but that my only object is that of being useful to those who are in possession of that useful animal, the horse. And as there are thousands in this city, and in the United States, whose whole dependance for the support of themselves and families, is on the health and labour that they derive from the horse; and gentlemen who travel, are often retarded on their journey, owing to the misconduct of those that take charge of their horses—or

by the smiths that shoe them : I therefore believe, that this small pocket companion will enable the traveller to set both the groom and the smith right, when they have committed errors, or prevent their committing any

It is probable that this publication will be criticised on, and in a measure condemned, by those that profess themselves judges of orthography and grammar ; but the only apology that I shall make, is, that the common reader in general will understand my meaning, or ideas, and this is grammar and orthography sufficient for them. I know that Bailey, Sheridan, and Johnson, have told us that each syllable must be spelt with such and such letters and vowels ; and that they must be pronounced in such and such a manner, with such a tone of voice ; but I find that what is called grammar in one century, is condemned in an other—As a proof of this, let any one refer to books that were published one or two centuries past—let them read Sidney on Government, Fox's Martyrs, or any old authors, and they will find that the language or grammar materially differs

from that of the present day : a word spoken, that can be understood, is far better than ten thousand words spoken in a language that cannot be understood. Had I been acquainted with the Greek or Latin languages, or terms of art and obscurity of expression, I should have avoided them as much as possible. I am more desirous of being intelligible to the meanest capacity, than ambitious of writing in what is called a polished style, to which I make no pretensions—on this account I expect indulgence from the candid reader. It will be found that I have given but few receipts, and those that are given have been proved by experience. I have been always opposed to giving a variety, or complication of medicines, either to man or beast ; for, should not few medicines be found to relieve the patient in a short time, it is better to leave nature to struggle with infirmities, as she at times performs wonders : this I have proved by the horse—likewise by my own family, as I am my own family physician, and have been for more than twenty years past ; and, during that time, I have not paid five dollars to any one of the faculty to attend them, although they (as is

common to mankind) have had their share of sickness. If man would but take the trouble to examine and think for himself, he might then be his own physician, and save himself a great deal of expense. I would recommend every father of a family to provide himself with Buchan's Domestic Medicine, and the Edinburgh Dispensatory.—The assistance of these books, and study, will, in most cases, supersede the necessity of employing a physician.

Although there are a great number of horses kept in this city, I do not find one citizen that makes the economy or welfare of the horse so much his study that he might examine this work, or to whom I might dedicate it. I therefore dedicate it to the public at large, leaving them to judge of its merits, and my experience or veracity. I have given in the appendix a most valuable receipt for the pleurisy, or pain in the back or side, for the human species. This receipt I have communicated to many gentlemen of the faculty, which they have proved to have the desired effect.

WILLIAM CARVER.

New York, November 3d, 1818.

CHAPTER I.

Some general directions, in regard to the management and care of Horses.

THE horse, by nature, is doomed to roam at large in the woods or fields, and, while remaining in this state, his wants are easily supplied, and his diseases are few; but, when brought into a domesticated state, his diseases are many and his wants are great, and he requires the fostering hand of care and diligence to keep and preserve him in health. It should be observed to give horses as few medicines as possible, and not follow the ridiculous custom of frequently bleeding and purging, when the horse is in perfect health.

Proper dressing, feeding, and exercise will alone cure many disorders, and prevent most. Proper care should be taken to procure good sweet hay and oats, for, should either of these articles be either musty or foul, they will affect his lungs, and at times, cause him to be broken winded; and, what is commonly call-

ed shorts or bran, is frequently in a state of fermentation before it is given to the horse, and this is what I apprehend to be the cause of so many horses dying with the worms, or bots. If a small portion of clean cut straw be given, either with oats or bran, it will have a tendency to eradicate those insects.

All stables should be ventilated, so as to admit a free and constant circulation of fresh air; for without this, the horse is constantly breathing, or taking into his stomach or lungs, the foul air that arises from the dung, urine, or the perspiration that flies from the body of the horse; and, when the stable is crowded with horses, the effluvia must arise to a high degree, which, of course, will give rise to the most malignant fevers, and also chronick complaints.

Having visited many stables in this city, I have found many stalls where horses have stood in their dung, to the thickness of six or seven inches, which I could attribute to nothing but the indolence of those that had the care of horses committed to them. And I have likewise observed, that horses standing in this situation, have fallen back in their stalls as far as their halters would permit; and this was done, in order that the poor

animal might escape the fume that was constantly arising and flying into his nostrils, every time that he drew his breath. I have given this hint, in order that the owners and lovers of horses might attend to this, and have the neglect remedied.

All stables should admit of a sufficient quantity of light, as nature has provided this for the benefit of both man and beast. All horses, standing in dark stables, are liable to have their sight affected; as a sudden transition from a state of total darkness to the brilliancy of that of the sun, at noonday, will have a powerful effect upon the optics of the eye, and will cause excessive pain, and probably, in time, the total loss of sight. As to the custom that is prevailing in this city, in regard to the blanketing of horses, and driving them with the blankets on their bodies through rain and snow, must certainly be pernicious to the health of the animal—as the labour that they perform will cause a perspiration, and consequently the pores of the skin are more open than they are while remaining in a state of inactivity; therefore, the water that is contained in the blanket must be absorbed into the system of the horse, which, according to reason, must make the horse liable to

colds, and stiff limbs, or what is commonly called founder. If nature, that is complete in her works, had destined the horse to wear blankets, she would have sent him covered with them! When the horse is standing in the stable, if he must have a blanket, it should be a light one, and not two or three at one time, with a broad roller girted tight, as grooms will tell us, in order to take up the belly, as they call it, which prevents the expansion of the lungs, and causes the animal to breath with difficulty.—Blankets should be taken along with the traveller, and thrown on when the horse stops on the road.

Common observation teaches us that nature, at proper seasons of the year, designed the pasture for the horse, and the horse for the pasture; therefore, if the horse could possibly be spared for two or three weeks, in the month of May or June, he ought of course to be turned out to roam at large.

A proper degree of exercise is of the utmost consequence, to keep the horse in perfect health and vigour; but a horse should never be rode hard, or put on violent exercise, when his belly is full of feed or water—move him gently at first, and he will naturally mend his pace. Many diseases are

brought on for want of proper exercise. I have seen horses that have stood in their stalls for two or three months, without being exercised at all, and by this neglect, they have fell victims to the lock-jaw, and farcy. Nature demands exercise, as well for the animal as the human species, in order to keep the blood and fluids in circulation.

It must certainly be obvious to every one of common understanding, that great care should be taken, that after a horse has had violent exercise, or come off a hard journey, that he cools not too fast—that he drinks no cold water, and that he is not washed with cold water, which is too often practised in this country, by those that have the care of horses, in order to save the labour of rubbing and cleaning of them; and it should likewise be observed, that their feet should not be permitted to stand in a damp or wet stall, which will have a tendency to bring on a founder.

CHAPTER II.

On Bleeding, Purging, &c.

THOSE horses that have been standing long in the stable, and have been full fed, require at times to be bled and physicked, especially when their eyes look heavy, dull, and inflamed, as also when they feel hotter than usual, and mangle or waste their hay. But the cases that chiefly require bleeding, are colds, fevers of most kinds, falls, bruises, hurts of the eyes, and all inflammatory disorders. All horses should be bled by measure, in order to know the quantity that is taken away—two or three quarts is always enough at one time, but must be repeated in case of the pleurisy, which may be known by the blackness of the blood, which should be carefully examined, when cold, to see whether black, florid, sizy, &c. The neck is the safest place to bleed, or in what is commonly called the jugular vein: and it should be observed to bleed near the head, and not, as is frequently done, down the middle of the neck, which will often cause a swelled neck, if not a mortifi-

cation in the vein. During the course of my practice, I have been obliged to take off a part of the jugular vein of the neck of two horses, owing to their having been struck too low down the neck, when bled by unexperienced hands; and to perform what is commonly called netting the vein, which is done by tying the vein with a silk thread, at a certain distance, in two places, so as to admit of the cutting away, between the two threads, that part of the vein which was in a state of mortification; and, by this method, I saved the lives of both the horses. All blood should be drawn from the part where there is least danger, which is the vein I have described, and not on the thigh vein, or the corinett of the foot, or the mouth. All blood flows from the heart, let it be taken from what part of the body it may; but, in case of a shoulder sprain I have found it beneficial to bleed in what is called the plate vein, which is a large vein on the inside of the fore legs; and, in case of a founder, I have drawn blood from the toes of the fore feet.

The first purge that is given to a horse should be mild, in order to know his constitution. It is a mistake, that if a purge, pro-

perly prepared, does not work according to expectation, the horse will be injured by it. Although it may not pass by stool, it may operate, and be more efficacious as an alterative, to purify the blood: and it often passes by urine, or other secretions. Horses that fail of their stomach, whether it proceeds from too full feeding, or engendered crudities, and indigested matter, should have a mild purge or two. It should be remembered, that a horse is purged with difficulty---that all physick generally lies twenty-four hours in the intestines, before it begins to work off; and that the tract of bowels it has to pass through, is about thirty yards, which lay horizontally. If mercurial physick is given, care should be taken that it be well prepared, and warm clothing and great circumspection are then required. All purges should be given in the morning; but the horse should have a warm mess or two the day before, in order to relax his bowels; and if he has a mess in the morning, before the ball is given, it will be so much the better---and, about three hours after taking the ball, he should have another mess given him, of scalded bran or shorts. Early the next morning give him another mess---and let his

water be warm, with a handful of bran or shorts squeezed in it; but if he refuses warm water, he must be indulged to have it cold. He should be properly clothed, and rode gently about; and this should be done two or three times in the day, unless he purges violently, then once or twice will be sufficient—at night give him a feed of dry oats. But, should the physic continue to operate too long, give him the following drink: take half a pint of brandy, one ounce of liquid laudanum, and one ounce of aniseeds, finely powdered, to be put in one pint of good ale. If he refuses all kinds of food, of an ordinary nature, let him be tried with two quarts of wheat: this I have tried with good effect. By this means I once saved the life of a nobleman's horse in England, that had been over-purged by his coachman, and had not eaten one mouthful for three days. I shall omit giving a variety of receipts for purging balls, and only give one that I have proved to answer all the purposes to which it was intended as a common physick, and which I have continued to administer for thirty years past. And when the rules that I have laid down were attended to, in regard to giving the messes and water, not five balls, out of one

hundred, have failed to purge the horse sufficiently.

To make what is commonly called a Coarse Physick, or Three Balls for a Horse.

Take four ounces of succotrine aloes, two ounces of fresh jalap, two ounces of powdered ginger, two ounces of cream of tartar. and add thirty drops of oil of aniseed, with as much buckthorn syrrop, or molasses as will form it into a paste—divide, and let each ball weigh three ounces and a half.—When only one ball is wanted, take only the third part of all the above named ingredients.

Observe, that when the horse is to undergo a coarse physic, or take three balls, that six or eight days interval of time, should be given between each dose, or it will injure what is generally called the mucus, or lining of the guts.

When a horse loses his appetite for some days, after purging, it will be necessary to give a warm stomach drink, made of an infusion of chamomile flowers, aniseeds and saffron, and half an ounce of asafœtida. This infusion may be made in one quart of ale, with a

small quantity of honey, in order to make it palatable.

When balls are given, they should be of an oval shape, and not exceed the size of a pullet's egg; and, when the dose is large, it should be divided into two, and they should be dipt in oil, to make them slip down the easier.

As I have given my experience, in regard to purging the horse, I will now proceed in regard to clysters, with a few remarks and cautions.

Let it be observed, that before the administering of emollient clysters, in costive disorders, a small hand, well oiled, should be passed up the fundament, in order to bring away the hardened dung, that would be an obstacle to the clyster's passage. Authors have differed with regard to the apparatus to give the clysters with: some have preferred a pipe and bladder, to the syringe; but I have for many years used the syringe. It should be observed not to give more than two quarts of a clyster at one time, as an overcharge will cause it to return too quick; but it should be often repeated, and more particularly when a quick passage is wanted.

To prepare an Opening Clyster.

Take two quarts of water, and stir into it a handful of wheat flour or oatmeal, let it be boiled, then add half a pint of molasses, half a pint of neat's foot oil, and a handful of common salt.

For a Restraining Clyster.

Take of oak bark two ounces, boil it in two quarts of water, till one is nearly consumed, pour off, and dissolve in it four ounces of discordium, to which add one ounce of liquid laudanum, and a pint of port wine.

CHAPTER III.

Of Colds.

THE source of the generality of fevers, coughs, and many other disorders, arise from taking cold, both in men and horses. When this is the case, the pores and outlets of the skin, which, in a state of health, is constantly breathing out a fine fluid, like steam arising from hot water; but when the horse has taken cold, these steams and perspirable matter are deprived of a free passage through them, and are hindered from going off in their usual course, and, in consequence, are recoiling on the blood and overflow the vessels, and affect the head, glands, or kernels of the neck and throat, the lungs, and other principal parts.

To enumerate all the causes of colds, would be both endless and useless. The usual, are, riding horses or driving of them till they are hot, and letting them stand in the cold air; and by not being carefully rubbed down when they come in hot, off long journeys.

The signs of a horse having a cold, are, a cough, heaviness and dullness, in proportion to the severity of it, and he rattles in his breathing—his flanks work, and he will loath his meat, and refuse his water—his mouth will be slimy—his ears and feet will be cold; in this case there is danger of a fever, and the pulse should be consulted. In small horses the pulse is generally from 50 to 55, but in large horses, from 45 to 50. Two pulse veins are to be found, one on the inside of the jaw bone, the other on the inside of the fore leg, between the point of the shoulder and the knee joint. If the disorder should increase, bleed him two quarts; and if his lungs are affected, repeat the bleeding the next day. If the horse be costive, give him a mild purging ball or drink. The balls that I have recommended for a purge, may be dissolved in warm water or ale.

Particular notice should be taken to see that the horse waters or stales freely—if not, his yard should be examined. This should be done, by the operator oiling his hand before it is introduced into the sheath; but the yard should not be strained down, which is often practised, as both the yard and sheath can be cleaned without stretching down the

yard. In performing this operation, I have found hard substances round the point of the yard, like stones, about the size of an Indian corn ; and at other times I have found a cap over the point of the yard, of a substance similar to a skin or isinglass, but both these obstructions are easily removed without straining down the yard, or the internal part of the sheath. All horses' yards should be examined every three or four months. I have attributed those stones that I have described, to the horses drinking the hard pump water in this city, as the stones appear to be of the same consistency as the fur on the inside of our tea kettles. I have known it to be the case, through the neglect of examining the yard in time, that the horse's water has been stopped for a great length of time—that the bladder has burst, and the horse has died. After I have removed these obstructions, I have given the following diuretick ball.

Take one ounce of nitre, finely powdered, one ounce of Juniper berries, half an ounce of white rosin, with as much Venice turpentine as would make it into a ball. This I have proved to be effectual, as it will generally pass through, by urine, in three or four hours.

Should the cold continue, give the following ball, from Dr. Bracken :

Take aniseed, and greater cardamomum and caraway seeds, finely powdered, of each one ounce ; flour of brimstone, two ounces ; turmeric, in fine powder, one ounce and a half ; saffron, two drachms ; Spanish juice dissolved in water, two ounces ; liquorice powder, one ounce and a half ; oil of aniseed, half an ounce ; wheat flour sufficient to make it into a stiff paste—beating all the ingredients well, in a mortar. These balls consist of warm, open ingredients ; and given in small quantities, about the size of a pullet's egg, will encourage a free perspiration ; but in case of a fever, should be cautiously continued. This simple method, with good nursing and warm messes, and gentle exercise every day, will hasten recovery. The manger should be kept clean, by filling it with clean straw. His feeds should be given in small quantities ; his hay well shook, and sprinkled with water.

CHAPTER IV.

On Fevers.

THE symptoms which denote a fever, are the following: The horse is restless, his flanks work quick, his eyes are red and inflamed, his tongue parched and dry—his breath is hot, and smells strong; his appetite is lost and he nibbles his hay, and is frequently smelling to the ground—his whole body is hotter than ordinary, and he dungs often, and little at a time—his urine is high coloured—he appears to crave water, but drinks little: his pulse beats full, and hard to fifty strokes or more, in a minute.

The first thing necessary to be done, is to bleed two or three quarts, if the horse is strong and in good condition; then give him a pint of the following drink, four times a day.

Take nitre, one ounce; of balm, sage, and chamomile flowers, each, a handful; liquorice root, sliced, half an ounce: infuse in three pints of boiling water—strain off, and add to it the juice of two or three limes,

and sweeten with honey or molasses—The chief article to be depended on, is the nitre. In a high fever I have given as much as half a pound of nitre per day, with good effect.

Should the horse be costive, give the following clyster :

Take two full hands of marshmallows, and one of chamomile flowers; fennel seed, an ounce—boil in three quarts of water to two—strain off—add four ounces of molasses, and a pint of linseed or neat's foot oil.

His diet should be as recommended before, for colds : to consist of warm messes, given in small quantities—should he refuse warm food or water, he should be indulged with cold. A small portion of picked hay should be put into his rack at a time, as his breath will taint all manner of food. Moderate exercise, fresh air, and a clean stable, will have a tendency to restore the horse to health.

CHAPTER V.

Of the Pleurisy, and Inflammation of the Lungs.

THIS is a disorder that horses are much subject to in this country. I have frequently found, by examining the carcasses of dead horses, different kinds of inflammations on the pleura, or membrane that lines the chest internally. The whole substance of the lungs were black, and full of a gangrened water ; and, in short, inflammations in every bowel. The blood vessels were so overloaded, that the blood has burst out of the smaller vessels, and gushed out as from a fountain, filling all the cavities of the body. At other times I have found large clots of blood resembling liver, adhering or sticking to the sides of the body. A pleurisy, then, is generally termed an inflammation of the lungs. In this disorder a horse shews great uneasiness ; shifts about from place to place. In the beginning he often strives to lie down, but starts up immediately, and frequently turns his head towards the affected side ; and this

has caused many to mistake the pleurisy for the gripes. The cure of this disorder depends in a great measure on plentiful bleeding. If the horse is strong, three or four quarts of blood should be immediately taken; and, if the symptoms do not abate, the bleeding should be repeated. I have taken away as much as eight or ten quarts in twenty-four hours. But the disorder may, in a great measure, be discovered by the blood, which appears black and thick, nearly like molasses. A blistering ointment should be rubbed all over his brisket, upon the foremost ribs. The diet and medicine should be both cooling, relaxing, and diluting—warm messes, and plenty of water or gruel.

The following balls should be given thrice a day :

Take of spermaceti and nitre, one ounce; oil of aniseed, thirty drops; with honey enough to make a ball.

A purging clyster should likewise be given.

Take senna, two ounces; fennel seed and bayberries, of each, one ounce: boil in five pints of water, to two quarts—pour off the clear, and add four ounces of purging salts, half a pint of molasses, and half a pint of linseed oil. If the horse should be costive,

give a purging ball ; and he should be gradually exercised in the open air. I have found a rowel, placed between the fore legs, to be of great service.

CHAPTER VI.

Of a Cough, and Asthma.

I HAVE seen old practitioners more perplexed to remove a settled cough, than many other complaints; which, perhaps, has been owing to their want of attention to the different symptoms, which distinguish one cough from another: therefore it was impossible for them to find out the true method of cure.

If a horse's cough is of long standing, attended with the loss of appetite, and wasting of flesh, it denotes a consumption, and that the lungs are full of knotty, hard substances, called tubercles, which are commonly discovered on dissection.

The following signs denote when the cough proceeds from phlegm, and slimy matter, that stop up the vessels of the lungs: the horse's flanks have a quick motion, but not with his nostrils open, like in a fever, or that is broken winded: his cough is at times dry

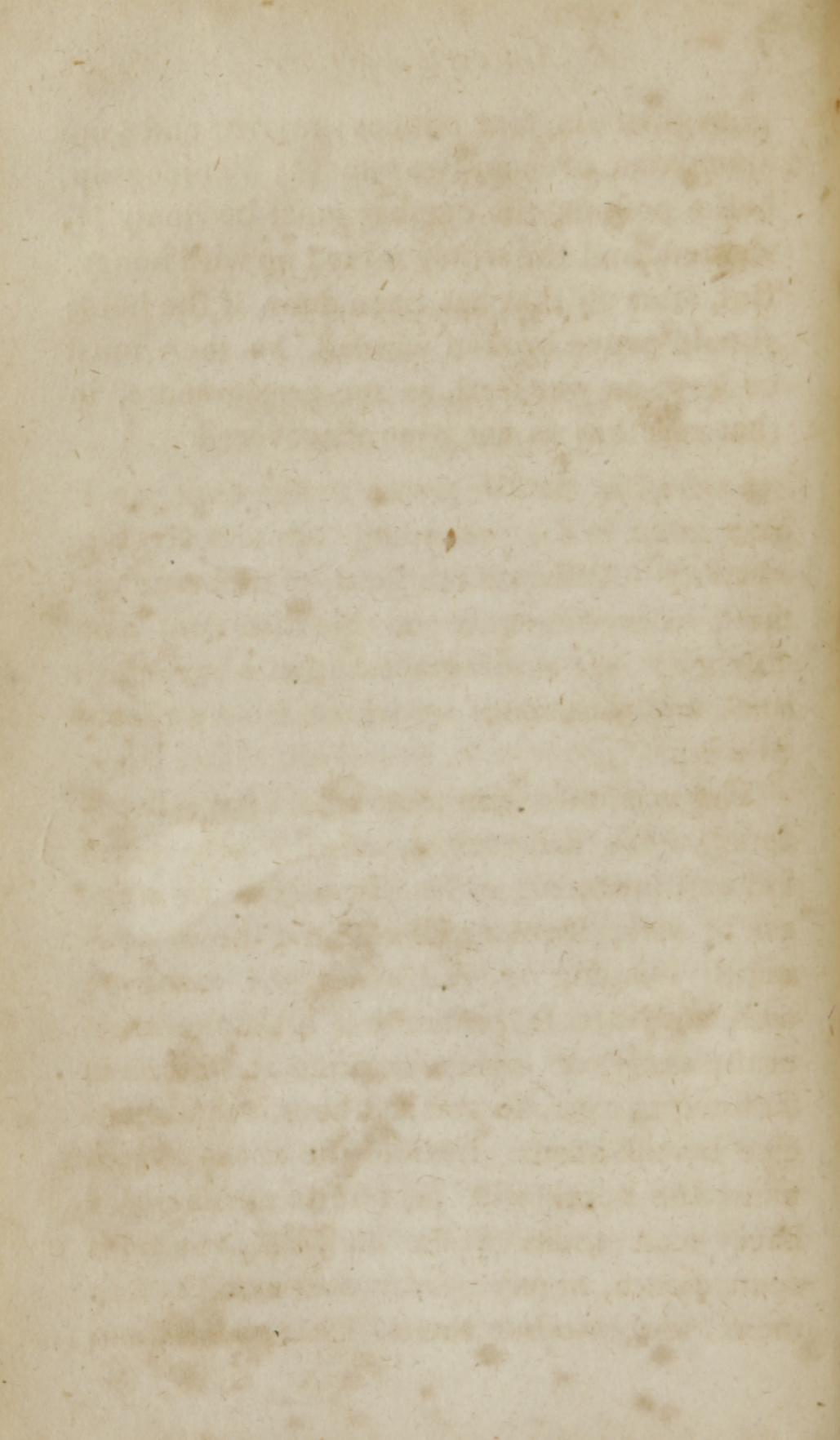
and husky, and sometimes moist : he rattles in the throat, and at times throws out of his nose and mouth, a quantity of white phlegm, especially after drinking or exercise—which discharge gives great relief.

Asthmatic cases are to be distinguished in their symptoms, from pursiness, and thick windedness ; and is occasioned by too full, or foul feeding, and want of proper exercise.

As soon as a horse is discovered to have a cough, he should be moderately bled, and have a purging ball ; which will generally give relief. But, should the cough continue for a week or ten days after bleeding and purging, give him two drachms of calomel, mixed up with an ounce of diapente, for two nights, and the next morning give him a purging ball : keep him well clothed and littered, and fed with warm messes. Once, in eight or ten days, a purge may be repeated, with one mercurial ball given over night ; the mercurial ball may be mixed up with wheat flour and honey. Should the cough continue, and the horse be valuable, the following balls should be continued to be given, every day, for two or three weeks or longer, to be of real service.

Take of cinabar of antimony, half a pound ;

gum guiacum, four ounces ; myrrh, and gum ammoniac, of each, two ounces ; Venice soap, half a pound : the cinabar must be finely levigated, and the whole mixed up with honey. But, after all that has been done, if the horse should prove broken winded, he then must be kept on wet feed, as no certain cure, in that case has as yet been discovered.



CHAPTER VII.

Of an Apoplexy, or Staggers.

I SHALL in the present chapter omit, as I have done in the preceding chapters, to give a variety of different opinions, of different authors, as to the cause of this disorder; and only go to shew the practice that I have pursued, and the means by which I have effected a cure.

The previous symptoms that I have discovered, are a drowsiness, with watery eyes, full and inflamed, and a disposition to stagger or reel; feebleness, and the head constantly hanging or resting on the manger; with but little fever, and but little alteration in the dung, or urine: at times the horse is inclined to rear up and fall back, when handled by the head. Besides the above symptoms, the horse will be frantic at times. I have seen them when let loose, run with open mouth, at any person that stood before them; and at other times, I have seen them

run direct against a wall or fence: they having, apparently, lost their sight. This is what is generally termed the blind, or mad staggers. I recollect, a few years past, to have been called by a respectable Dutchman in this city, to see his horse, that had the mad staggers. He said to me, Mr. Carver, mine horse is bewitched—I suspect the person that has done it—I some very bad neighbours. I laughed at the ignorance of the man, and his belief in ancient superstition! For my own part, I have long since discarded from my mind, witches, hobgoblins, and ghosts of all kinds! having swept them away from my brains, with the besom of thought! I drove the old lady, the witch, out of my employer's horse—but the poor animal lost the sight of one eye. This I did not attribute to my friend's old witch, but to the malignity of the disorder.

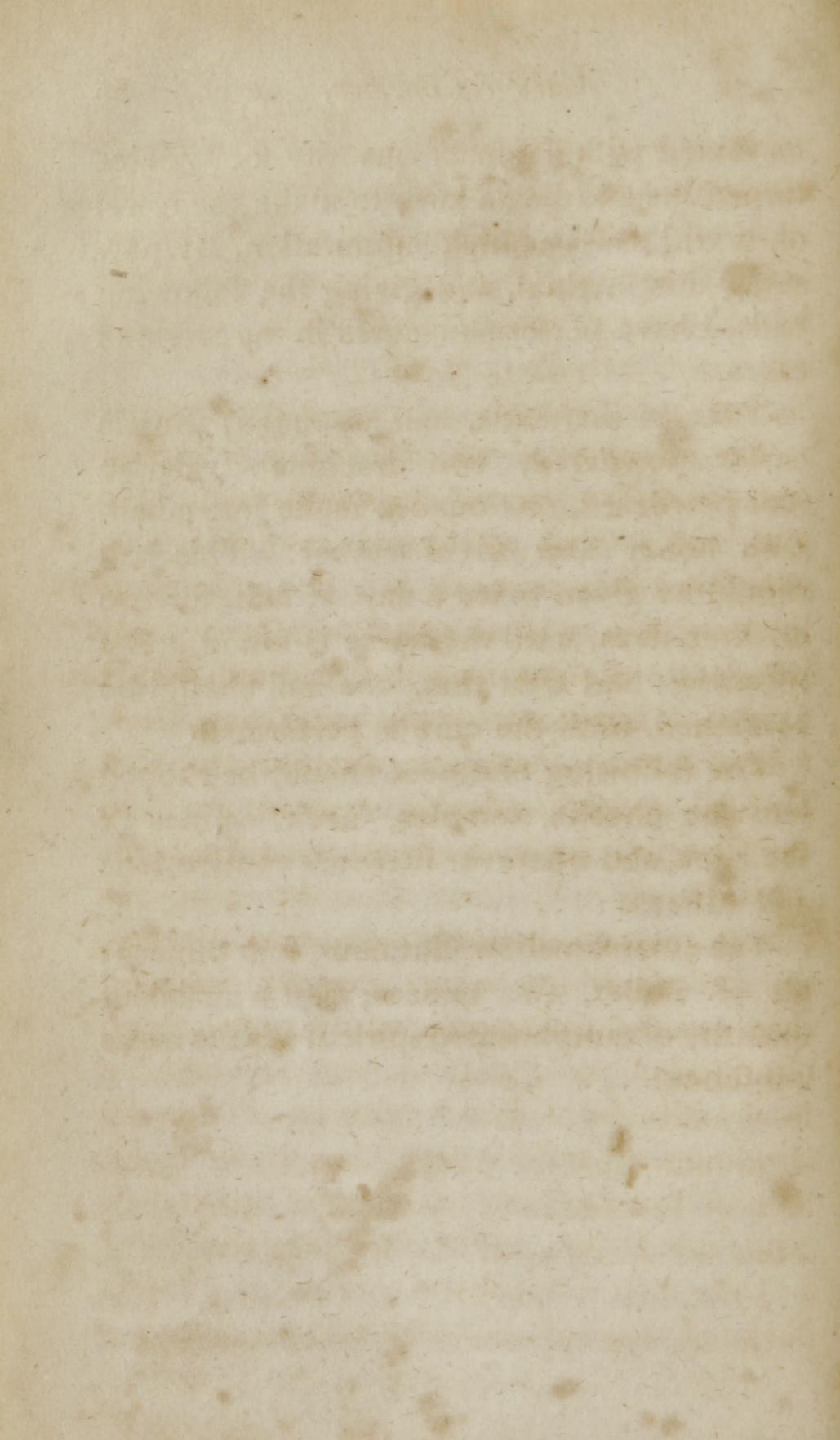
When it is discovered that a horse has the staggers, the first thing that should be done is to empty the vessels, by purging and bleeding. If the horse is strong, four or five quarts of blood should be taken; and two or three rowels should be introduced, to cause a plentiful discharge. Opening clysters should be given. If a small portion of Spanish flies,

be mixed with a small quantity of Venice turpentine and hog's lard, to make the rowel of, it will cause a quick suppuration. By pursuing this method, and giving the following balls, I have performed cures in the worst of cases.

Take of *asafœtida*, half an ounce ; Russia castor powdered, two drachms ; valerian root powdered, one ounce : make into a ball, with honey and oil of amber. This ball should be given twice a day, at first, for two or three days, until the horse is found to be mending ; and after that, one ball should be continued, until the cure is performed.

The following ointment should be rubbed into the cheeks, temples, neck, spines of the back, and wherever there are contractions and stiffness :

Take marshmallow ointment, four ounces : oil of amber, two ounces, and a sufficient quantity of camphorated spirit of wine to make a liniment.



CHAPTER VIII.

Of the Strangles.

THE strangles is a distemper to which colts and young horses are very subject. It begins with a swelling between the jaw bones, which at times, extends to the muscles of the tongue, and is attended with great heat, pain, and inflammation: so that, till matter is formed, it is difficult for the horse to swallow. I have known horses, in this country, that have been eight or nine years old, to have this disorder, which I never saw in England. This disease is critical. But the most approved method, is, to assist nature in bringing the swellings to maturity, by keeping the jaws and throat constantly moist, with ointment of marshmallows, and covering the head and neck with a warm hood: but all swellings in glandular parts, suppurate slowly. The following poultice should be applied twice a day, hot, to the throat:

Take half a peck of turnips, and half a peck of onions—boil them until they are

quite soft ; and white lily root, half a pound ; and add half a pound of ointment of marshmallows. By this method, the swellings on the inside of the jaw bones will break ; or it will cause a discharge from the nostrils. I have known the throat so affected, that the horse could not eat a mouthful for several days. In this case I have given him, twice a day, a cordial drink to support his system ; and have, every two hours, gargled his throat with vinegar and honey : and, by doing this, the ulcer has broke, and a powerful discharge has followed ; without which, the horse must have died. Great care should be taken that the horse be not costive ; and, to that end, a purging drink should be given, and two quarts of blood should be taken, from the jugular or neck vein. But should a costiveness continue, relaxative clysters should be administered : warm messes should be given, as soon as the horse can eat, in which a small portion of nitre should be put.—Should the running at the nose continue too long, which will greatly weaken the horse give him, every day, an ounce of Jesuits' bark, or a strong decoction of guiacum shavings.

If a hardness remain, after the sores are healed up, anoint with mercurial ointment.

CHAPTER IX.

Of the Diseases of the Eyes.

THE disorders of the eyes arise from different causes : such as colds, bruises, and inflammation of the blood. Some authors have supposed it to be hereditary. But, from whatever cause it may originate, in the first place the horse should be physicked and bled, in order to cool his blood. All internal applications, before this, will only increase the inflammation : such as blowing into the eye burnt alum, white vitrol, powdered sugar, &c. Should the eye be swelled, attended with a running, it should be sponged with cold spring water and vinegar ; or the following wash :

Take of white vitrol, half an ounce ; sugar of lead, two drachms : dissolve in a pint of spring water. Let the eye be bathed with this wash three or four times a day.

When the inflammation has been very great I have found that a rowel, placed between the forebrows, is of great service. Likewise bleeding in the large vein under the eye

will at times give great relief. If, after the heat is abated, and the swelling gone down, there should remain a film on the globe, or any internal part of the eye, there should be a little white vitrol, finely powdered, and sugar candy blown into the eye, which will take off the film. During the time, the horse should be fed on messes, and an ounce of nitre put in his feed, once a day. I have seen horses that have had a speck on the eye occasioned by a stroke from the lash of a whip, which I have completely removed, by touching the speck with luna caustic. But this should not be done every day, but once in two days, for fear of inflaming the eye; and, at the same time, the eye should be bathed with the aforementioned wash. I have seen practitioners attempt to cure moon blindness and cataracts, but I never saw one of them succeed. They are complaints that I never attempted, through my thirty years practice. But considered it like attempting to cure the glanders. And, whenever I have been applied to for that purpose, I have recommended the owner immediately to give the horse a leaden ball through his heart or brains; and I always looked on it as folly for an author even to write on it, or prescribe any cure.

CHAPTER. X.

Of the Farcin, or Farcy.

THIS is also a distemper to which horses are much subject to in this country ; and which perhaps has called forth as much, or more of my practice, than any other disorder, and in which I have been as much successful in curing ; as I do not recollect but one horse to have died under my care, with this distemper. The said horse was taken care of by a negro, who did not follow my directions, in regard of exercise and diet, and the horse was a few miles in the country. The practitioner, in this particular, labours under a great disadvantage ; as proper regimen, exercise, and good nursing, are very essential in performing a cure. The practitioner also has other evils to encounter, as he is seldom applied to until a variety of nostrums have been given the horse, which he has to encounter and counteract, as well as the disease. Therefore let his knowledge of the anatomy or œconomy of the horse, be what

it may, he gets but little applause. These observations I know to be correct. Besides it is expected that he be almost possessed of supernatural powers, so as to raise the dead to life—or perform an instantaneous cure. And his employer is not acquainted with the danger to which he is exposed, at the time he is practising on this powerful animal. Neither is he acquainted with the quantity of medicine that the horse requires, or the expense of those medicines. I have given balls that have cost me one dollar, before it was put down the horses throat. Therefore, on account of the high price of drugs, and for fear of offence being given in regard of charge. I have been obliged to substitute medicine of a cheap quality, and to omit those that would have had a far better effect: for gentlemen in this country do not pay that respect to a valuable horse, that the gentlemen in England do. I beg pardon of my readers for thus digressing from the subject; but they were ideas that struck my mind at the time, and a man cannot help his thoughts. But to the point, as regards the farcy; on which I mean to be as explicit, or plain and concise as possible. Different authors have given their different

opinions, in regard to the origin of the farcy. Some having viewed it as a distemper of the blood vessels, while others have considered it as a local one, by which the constitution is not tainted—the poison being arrested or seated, only in the glands. Be this as it may in the beginning of the disease, it will at length, however, insinuate itself into the circulation of the blood, and poison the whole mass. There are, therefore, two kinds of farcy—the one called the button, and the other the water farcy. The button farcy at first, makes its appearance in small round buds, like grapes or berries, that spring out over the veins, and all parts of the body from the head almost down to the hoofs. In the beginning they are hard, but soon turn into soft blisters; and when broke, discharge an oily or bloody ichor, and turn into very foul ulcers, that yield a great and offensive discharge. I have seen them constantly continue to drip from all parts of the body on the floor of the stall in which the horse has stood, like the dripping of meat that was roasting before a fire: in this case the cure is difficult—but in which I have performed perfect cure. But at times this kind of farcy will turn to seated glanders; when this is

the case, the horse should be dispatched as quick as possible, for fear of the contagion spreading : besides, no other horse should be permitted to stand in the same stable with a horse in this situation.

I now proceed to describe what is called the water farcy : it is a species of one and the same distemper, but makes its appearance in a different way or form. I believe this disorder to be what is generally called the yellow water, by farmers and others in the interior parts of the country ; and by which they loose a great number of horses, for want of knowing a remedy to perform a cure.—The water farcy begins generally with large swellings in different parts of the body ; such as the cheeks, neck, and hind legs, and at times the fore legs also—with two large swellings that run along both sides of the belly, from the flank to the fore legs, which swellings are generally as large as a man's arm, and are full of yellow water : the sheath is also greatly swelled—and at times there will be a running at the nostrils—These symptoms will be attended with a high fever and a costiveness.

Both kinds of this distemper being of an inflammatory nature, and particularly affect-

ing the blood vessels, must of course require large bleeding; and more so, if the horse should be fat and full of blood—this I have always found to check the farcy: but if the horse is low in flesh, the loss of too much blood proves injurious. Care should be taken to examine his yard and sheath immediately; and that a passage be obtained as quick as possible, both by dung and urine; and one or more rowels are always necessary. Give one of the purging balls, as recommended in chapter the second; and likewise give, in a day or two, the diuretick balls, as recommended in chapter the third. Should the distemper prove obstinate, and be found not to give way to these means, give a drachm of corrosive sublimate, night and morning, two or three times, in a ball made of wheat flour and honey; observing, at the same time, to give the horse, now and then, an ounce of nitre—that is, refined saltpetre, in his messes. I have many times observed the good effect by giving the corrosive sublimate, as it would alter the colour of the matter that discharged from the rowels, in twelve hours, from a yellow hue to that as black as a coal; and by these means, and proper exercise in open air, I always effected a cure. But it should be

observed not to give the sublimate too often, as it will salivate the horse, or cause his mouth to be sore. After the cure is performed, it would be well to give a purging ball, and take a small quantity of blood, in order to prevent a return of the distemper.

CHAPTER XI.

Of the Yellows, or Jaundice.

HORSES are frequently subject to this disorder; which is easily discovered by a dusky yellowness of the eyes—the inside of the mouth and lips—the tongue, and the bars of the roof of the mouth also look yellow; the horse is dull and feeble, and refuses food, the fever is slow—but both the yellowness and fever will increase, provided no remedy be applied to check it. The dung is generally hard and dry, of a pale colour: his urine is of a dark dirty brown colour: and when it has stood some time on a pavement, or the floor of the stall in which he stands, looks red like blood.—He stales with difficulty; and if the disorder is not quickly checked, the horse will grow frantic: but if proper means are taken, there is but little doubt of a cure. The following directions should be observed: First bleed plentifully; and, as horses are apt to be costive with this disorder, the next

morning give a purging ball, as before recommended ; but add to it two drachms of saffron ; his feed should be messes—and he should have gentle exercise in open air. The following balls, which are opening, may be given in a few days after the physick has done working :

Take of Dethop's mineral, half an ounce ; millepedes, half an ounce ; and Castile soap, one ounce. Give one of these balls every day, for four or five days ; and, should the horse be full of flesh, it will be proper to put in a rowel.

CHAPTER XII.

Of the Colick or Gripes.

THIS disorder has, perhaps, perplexed the farrier or practitioner more than many other complaints; as the internal parts, or bowels of the horse, cannot be seen, and he has not, like Balam's ass, been endowed with the faculty of speech; and I presume never will, as nature's laws are like their great Author, immutable. The best authors have described the gripes into three different species—the flatulent or windy—the bilious or inflammatory—and the dry gripes; each of which must be known by their different symptoms. The flatulent or windy cholic is thus known: The horse is often lying down, and suddenly rising again with a spring, and strikes his belly with his hind feet: stamps with his fore feet: refuses food; stretches out his limbs, as if dying; his ears and feet are alternately hot and cold; he falls into profuse sweats, and then into cold damps: and often tries to stale, but cannot. This proceeds

from a stoppage of urine, by a load of dung pressing on the neck of the bladder, which should be removed, with a hand dipt in oil, which will make way for the confined wind to discharge itself, by easing the neck of the bladder. The following ball should be given as quick as possible.

Take Venice turpentine, and juniper berries pounded, of each one ounce ; nitre, one ounce ; oil of juniper, one drachm ; salt of tartar, two drachms : make into a ball, with honey or molasses : wash down with a horn or two of warm gruel.

I have given the following drink, and have found it effectual :

Take one ounce of nitre : one ounce of juniper berries powdered ; one ounce of anniseeds ; half a gill of spirits of turpentine and half a gill of liquid laudanum : mix in three half pints of warm ale, and sweeten with molasses : at the same time give warm opening clysters. I have seen practitioners bleed in the mouth for this disorder, which seems to be of little or no use—the neck vein being more eligible. If, in an hour or two, the horse neither stales, dungs, or breaks wind, give another ball, or drink—walk or trot him about gently, but not to jade him.

The next species of cholic is termed the billious, or inflammatory and is attended with most of the preceding symptoms—But a high fever soon comes on, with a panting and dryness of the mouth; the horse continues to throw out a little hot dung, which appears blackish, or of a red colour, and is of a fœtid smell, this denotes an approaching mortification. In this case the horse should be immediately bled, as much as three or four quarts; and it should be repeated in three or four hours if the symptoms do not abate; an emolient clyster should be given, with two ounces of nitre dissolved in it, two or three times a day. The following cooling drink should be given every two or three hours, till several stools are produced; afterwards to be only given night and morning:

Take of senna, three ounces; salt of tartar, half an ounce; infuse in a quart of boiling water: in an hour or two add four ounces of glauber salts, with two ounces of honey. If the symptoms do not abate, the only thing to be depended on is a strong decoction of Jesuit's bark, given to the quantity of a pint every three hours, with half a pint of port wine.

If the horse is not of much value, give the following alterative ball:

Take of diapente, one ounce ; diascordium, half an ounce—make into a ball, with two drachms of myrrh, and two drachms of oil of amber : give it two or three times a day.

The last to be described is the dry gripes ; which arises from costiveness ; and is to be discovered by the horse's frequent and fruitless motion to dung, and the quick motion of his tail ; the hardness and blackness of the dung, and the high colour of his urine—and his great uneasiness. In this case the strait gut should be emptied, by a hand dipt in oil ; and an oily opening clyster, and a purge, should be given as quick as possible. The diet should be warm messes—warm water ; and four ounces of gum Arabic should be dissolved in a quart of water—a little of which should be given every time the horse drinks.

CHAPTER XIII.

Of Worms and Bots.

It appears by examining the laws of nature, that the whole is one eternal round of living principle ; and strictly speaking there is no such thing as death throughout the whole system, but that a constant change from one state of beings, to that of another state of beings, is constantly going on throughout the whole eternal round of nature, as every part of animated existence is subservient to other parts. The various tribes of animals, fishes and insects constantly prey or live on each other, and we in turn prey on them ; in fact, whether living or dead, man becomes food for various living beings of different kinds. While we continue as moving machines on this our earth, we may be said to be worlds for the habitation of numerous living beings, as all our blood and vital parts are filled with them : let man but study this grand work of nature in only a small proportion, and contemplate, and med-

itate on it, and it will raise his heart and mind with thankfulness, wonder and gratitude and give him the most exalted ideas of his Creator.

It would be both needless and useless to insert all the nostrums that have been recommended to destroy worms and bots, that reside in the stomach of the horse; and likewise to give the opinions of different authors as to their origin, and the manner by which they are introduced into the stomach. It is sufficient then to know that there are three kinds of worms found in horses; the most mischievous are called bots—They are of a reddish colour, and seldom exceed three quarters of an inch in length; at one extremity they have two small hooks, by which they attach themselves to the maw, or the insensible coat of the stomach, and then they do not appear to cause any great uneasiness; but when they attach themselves to the sensible part, they do great injury, by keeping up a constant irritation, and occasioning emaciation, a rough standing coat, hide bound, and a cough, and often destroy the horse. In opening horses after they have been dead, I have found as many bots as would half fill the crown of a hat, and have

known them to live a fortnight after the horse had been dead. Bots are very tenacious of life ; on this account it is almost impossible to drive them from their hold—It appears that all strong medicines, such as mercurials, only serve to make them stick faster ; as they work themselves into the maw, like bees into a honeycomb. To attempt, therefore, the destruction of bots, is probably useless : but La Fosse, a French author, highly recommends soot ; and powdered savine has been known to cause them to evacuate. But they appear to be fond of any thing sweet : I therefore have given to horses that have been troubled with them, one pint of sweet milk and half a pint of molasses for three mornings running ; and the next morning given a purging ball, to which I have added a drachm of calomel—and in some cases with good effect.

The next worm that I shall describe is very slender, of a blackish colour, and seldom exceeds two inches in length ; but they are never found in the stomach—the largest parts of the canal is the place of their residence.

The third kind of worm is of a whitish colour, being from six to eight inches in length, and are generally found in the lower

parts of the intestines : both of these kind of worms are common to horses in this country. They appear to consume a great quantity of chyle, or the nutritious part of the food that the horse eats, so that he is always poor and lean, and at times hide bound. But they are easy to get rid of, by giving two or three purging balls, with a drachm of calomel in each ball ; always observing to wait eight or ten days, between giving each dose. Any observer may be satisfied of worms in the intestines, by raising the horses tail, and he will discover a whitish or straw coloured powder, sticking below the anus or fundament.

CHAPTER XIV.

Of Wounds in general.

ALL fresh wounds made by cutting instruments, should, in the first place, be brought together as much as possible, either by sewing or bandage ; but not so as to prevent a supuration, or a discharge of matter. But, provided the wounded part will neither admit of sewing nor binding, and the blood should flow in a copious manner, the first thing, in this case, to be attended to, is to stop the blood ; and this I have effected by applying a quantity of lint, or soft flax, dipt in a tincture made in the following manner, (which tincture ought to be always ready at hand, for the practitioner)—

Take half a pint of spirits of wine ; half a pint of brandy ; and one ounce of succotorine aloes, finely powdered ; mix them together in a bottle. If the wound should be in such a part as not to admit of a bandage, so as to bind on the lint or flax, thus dipt in the tincture, it must be continued to be held on by

the hand until there is an eschar formed; otherwise it will elude the expectation, and frequently cause alarm with fresh bleeding. By the application of this tincture, in the manner above described, I have never failed to stop the flow of blood, occasioned by the worst of wounds.

I recollect that, a few years ago, a horse belonging to Mr. Charles Ludlow, of this city, had the boom or shaft of a cartman's cart drove through his sheath, which came out at the hind part of his thigh; the wound was so large that a hand could be passed through it, and the blood gushed out, as from the spout of a pump; but by holding on the flax to the wound, for the space of four hours, dipt in the tincture, an eschar was formed. The next morning I proceeded to inject the wound with warm tincture of myrrh, which quickly brought on a suppuration, or a plentiful discharge of thick white matter; anointing, at the same time, the swollen parts, with the London ointment of marshmallows—and frequently giving the horse cordial balls of the following description: One ounce of aniseeds, and one ounce of carraway; one ounce of nitre, finely powdered—mixed up with liquid laudanum. By these balls the horse was kept

from starving; and every time I gave him water, an ounce of nitre, powdered, was mixed with it.—In one month the cure was completed, and scarcely a scar to be seen on the outer part of the thigh. I have never known the forenamed tincture to fail in stopping of blood, either on man or horse, when closely applied.

A friend and countryman of mine, who resides about twelve miles from N. York, was one day going up on a hay stack; and there was a large, old fashioned hay cutter, that fell down, by the shake of the ladder, right across the instep of his foot—and so far severed the foot, that the fore part of it dropt down, so that it formed a square. The whole family was greatly alarmed—expecting the man quickly to bleed to death.—But on recollecting that there was some of my tincture in the house, it was immediately applied; the foot bound up; and the blood stopped. The next day a man was sent to town for more of the tincture; and by continuing to apply it, and anointing the swelling with the ointment of marshmallows, the cure was completed, without being attended with any lameness.

By the following mixture I have likewise stopped profuse bleeding:

Take one ounce of spirits of turpentine, and one ounce of oil of vitriol—mix them together in a bottle ; leaving out the cork until the inflammation has subsided, or it will burst the bottle. But the former mixture is preferable, as it will both stop the blood and cure the wound.

All deep wounds should be injected with tincture of myrrh, to bring on a speedy discharge ; and the injector should have a long tube, in order that the tincture may be applied to the bottom of the wound. And no wound should be so closed at the mouth, or front, as to prevent a free discharge.

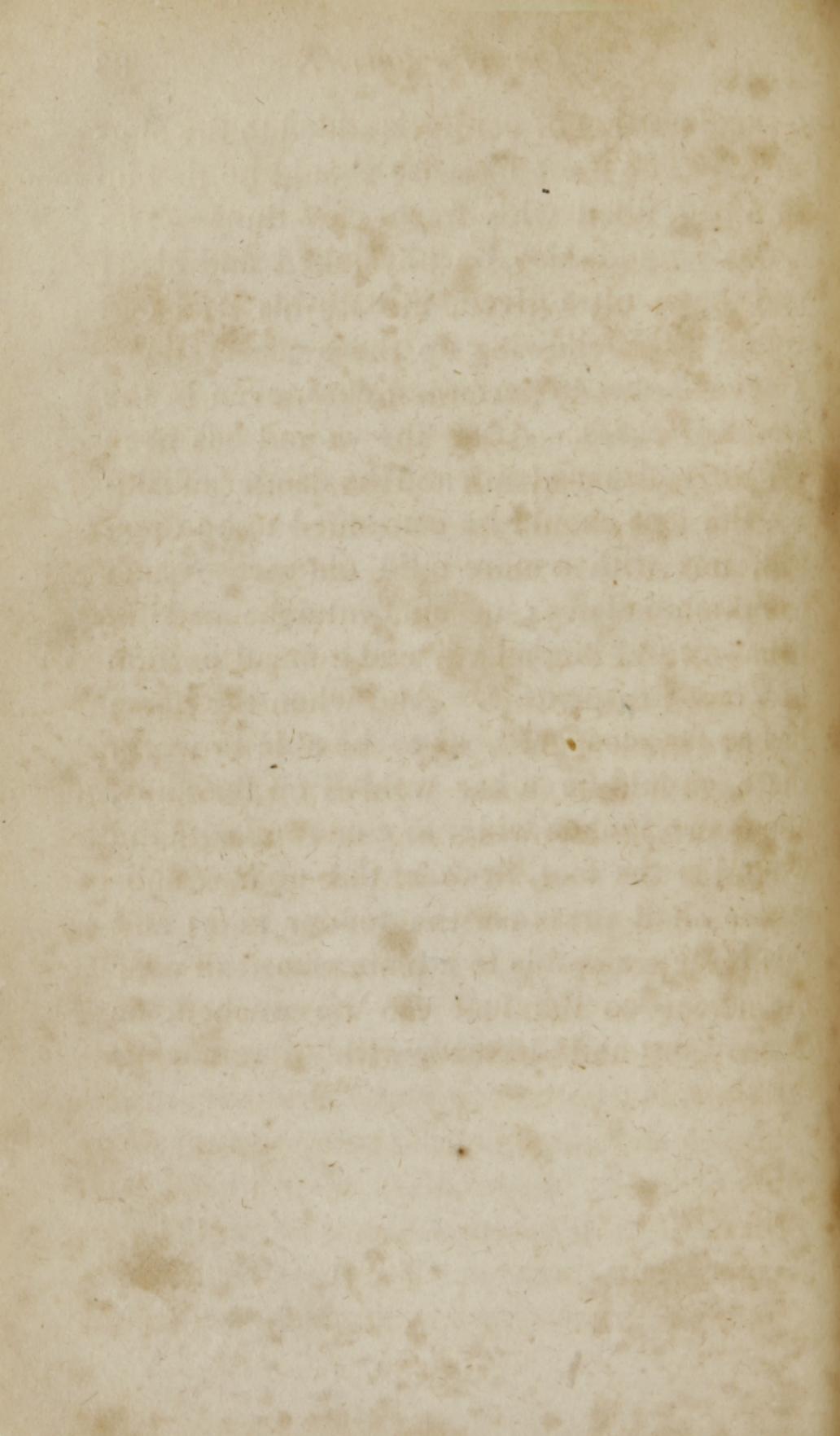
Some time past I was called on by a gentleman, to attend a horse a few miles in the country, that had had a shaft of a chair run into one of his shoulders. An ignorant blacksmith, of this city, had previously attended the horse, and filled up the wound with salt ; and so closed the wound, that no suppuration could take place. I directly found, that both an inflammation and mortification had taken place, in consequence of this treatment : I therefore pronounced that the horse would die in twelve hours, and he did so.

Of Wounds in the feet.

WOUNDS in the feet arise from different causes : such as cuts by hard substances—as glass, stones, and pricks from nails, by shoeing, or by taking up nails by travelling ; and when a nail is taken up, at, or near the point of the frog, it is oftentimes attended with difficulty to cure, as it often penetrates the joint of the coffin bone. As soon as it is discovered that a nail has thus entered the foot, the first thing to be done is to remove the nail ; afterwards the top of the hole should be enlarged, by a knife or razing iron, so as to admit of medicine going to the bottom of the wound. But the ridiculous custom, as practised by smiths in general, should never be adopted ; which is to pour into the hole spirits of turpentine—oil of vitriol—or burn the wound with a hot iron, as either of these will harden the top of the wound, by forming a hard crust, which will prevent a suppuration, and bring an inflammation into the foot. After the wound is thus opened, the hollow in the bottom of the foot should be stopped up, with equal parts of Venice turpentine,

tar, and hog's lard ; the stopping being confined in with splints put across the foot, under the shoe ; and the horse should be suffered to stand still for twelve hours, at least. After this the foot should be examined again, to see whether an inflammation has taken place or not ; if an inflammation should have taken place, and the wound be found not to discharge or suppurate, there should be some tincture of myrrh poured hot into the hole, and the foot stopped as before. But after all this precaution has been taken, if there should still remain a violent heat in the foot, and the horse appears to be in great pain, the sole of the foot should be pared away, round the wound, with a butteris, and the hole more opened ; but not entirely to take off the sole, which is both a cruel and barbarous practice, and mostly causes the hoof to come entirely off. After the wound is thus opened, as before described, there should be a little tincture of myrrh poured boiling hot into it, and a small piece of corrosive sublimate pushed down to the bottom of the wound, with a probe made of whale bone—as that will not break, so as to leave any part of it in the foot. After this has been done, the foot should be stopped with the aforementioned ointment ; and

a small portion of verdigris added to the ointment—The foot likewise should be tied up in a bag, filled with fresh cow dung—The horse should also be physicked and bled; and have nitre given, in both his feed and water. By following up these observations, I never failed to perform a cure, even in the worst of cases. After the wound has been properly cleansed out, and the danger subsided, the foot should be continued to be dressed, but with a more mild ointment—such as marshmallows; or an ointment made of beeswax and hog's lard, and a small portion of Venice turpentine. And when the horse has so far recovered, as to be able to work, there should be a bar welded on the shoe, about two inches wide, to come opposite the wound in the foot, in order that no hard substance shall press on the tender part; and this is far preferable to a plate placed all over the shoe—as the foot can be washed, or cleaned out and dressed, without removing the shoe.



CHAPTER XV.

Of the Locked Jaw.

THIS is a disorder, that has hitherto baffled the art of the physician, and also the power of medicine to cure, either on man or beast : although it must be acknowledged, that there have been instances of cures being performed—but perhaps, more by chance than any other cause. In the course of my practice, I have had a great number of horses under my care, that have had, what is generally called the stag evil, or lock jaw—but performed a cure on two only : and I believe, that nineteen out of twenty, that are seized with this complaint, die. I recollect to have kept a very fine horse alive fourteen days with this disorder on him, merely by giving him clysters, and pouring cordial drinks down his nostrils ; but he died, after all the pains that had been taken. As for my part, I have consulted a great many authors on the subject, and tried a variety of inventions of my

own—being determined, if possible, to find out a perfect cure : I have bled, till the horse has almost dropt by the loss of blood ; and have thrown them into the most profuse perspiration ; plunged them in the river : and even electrified them—but to no good effect. By the last two operations, the jaw appeared for a short time to drop—but immediately closed as fast as ever. The celebrated Mr. Gibson, has in my opinion, given the best and most lively description of the lock-jaw of any author that has written on the subject, which I quote in his own words—who says, “As soon as the horse is seized, his head is raised, with his nose towards the rack ; his ears pricked up, and his tail cocked, looking with eagerness, as an hungry horse, when hay is put down to him—or like a high spirited horse when he is put upon his mettle ; insomuch, that those who are strangers to such things, when they see a horse stand in this manner, will scarce believe any thing of consequence ails him, but they are soon convinced, when they see other symptoms come on apace ; and that his neck grows stiff, cramped and almost immoveable : and if a horse lives a few days, several knots will arise on the tendinous parts thereof : and all

the muscles, both before and behind, will be so much pulled and cramped, and so stretch that he looks as if he was nailed to the pavement, with his legs stiff and straddling ; his skin is drawn so tight, on all parts of his body, that it is almost impossible to move it ; and, if trial be made to make him walk, he is ready to fall at every step, unless he be carefully supported : his eyes are so fixed with the inaction of his muscles, as gives him a deadness in his looks ; he snorts and sneezes often ; pants continually, with shortness of breath ; and this symptom increases continually, till he drops down dead, which generally happens in a few days, unless some sudden and very effectual turn can be given to the distemper." This I know to be as correct a description as can be given. But I have wondered to see almost all the authors that I have read on the subject, and they are not a few, recommend giving to horses, in this situation, balls of various prescriptions. I would ask those gentlemen, how a single ball is to be given, when not so much as a shilling piece can be put between his teeth ; and his jaw cannot be pried open, even with an iron bar.

In the cases wherein I have succeeded,

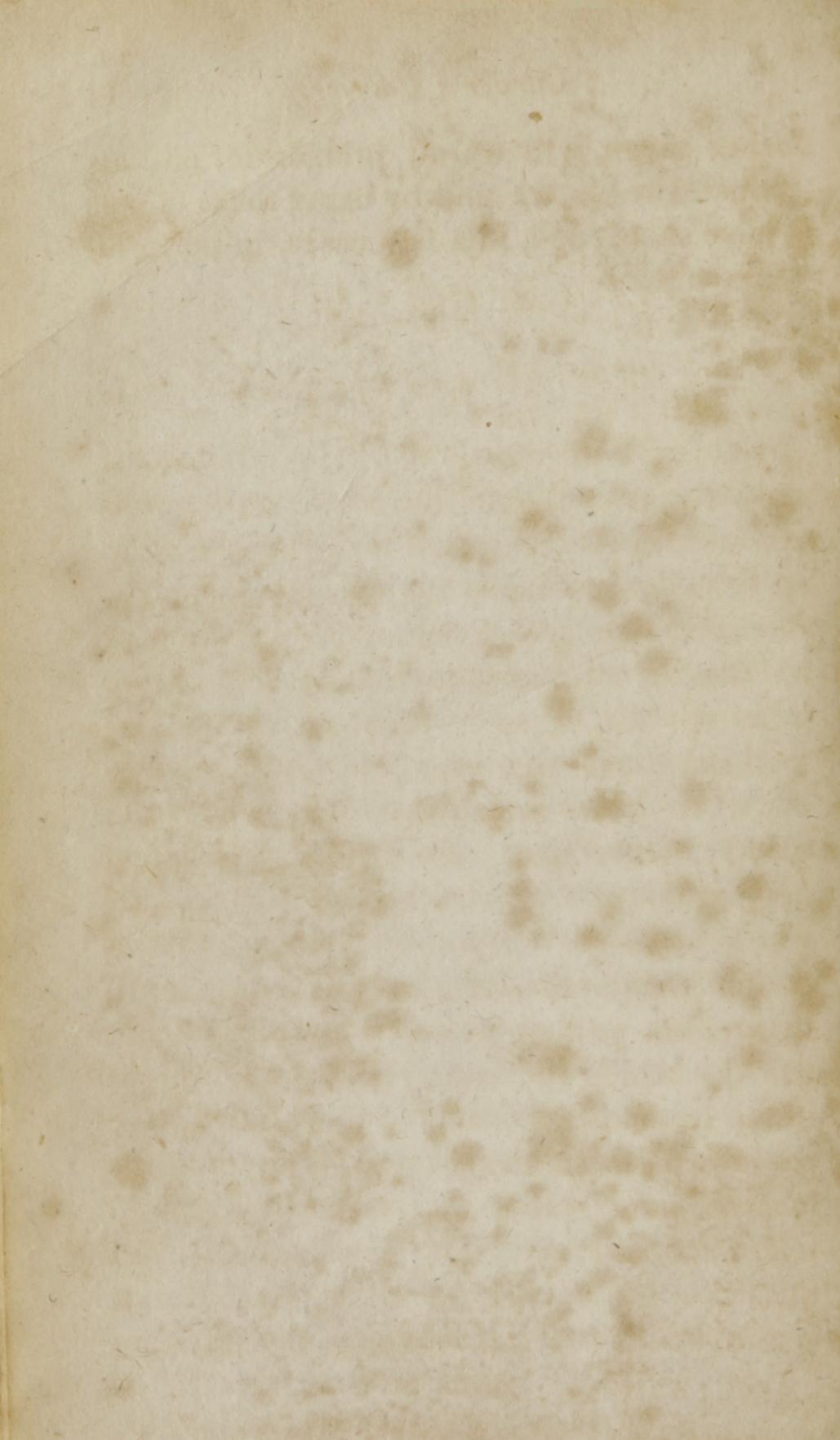
the following remedies were applied—First to bleed plentifully, and anoint the jaws and head with ointment of marshmallows—and holding a large hot iron bar to the neck and jaws, to force in the ointment; afterwards I have rubbed in strong blistering ointment—from the withers, to the tail; and also applied a blister plaster, beginning at the withers, and continuing the whole length of the spine, to the tail; and instead of attempting to give a ball, I have poured the following drink down the nostrils: composed of—

Half an ounce of assafœtida; Russia castor three drachms; valerian root, powdered, one ounce; oil of amber, one ounce—put into a pint of warm ale, sweetened with honey. Two or three of these drinks should be given in a day, with warm gruel: but it requires the assistance of two or three men to give it.

The following clyster should be given once a day:

Take rue, pennyroyal, and chamomile flowers, of each, a handful; and asafœtida, one ounce—boil in three quarts of water, to two—strain off, and add half a pint of neat's foot oil—The horse must likewise be supported by nourishing clysters, made of milk pottage which must be given to the quantity of three or four quarts a day. These medicines

being given, will warm, invigorate, and attenuate the blood : and by using these means I have succeeded, in a few cases, in performing a cure.



CHAPTER XVI.

Of Strains in various parts.

IT is to be observed that in all strains, the muscular or tendinous fibres are over stretched; like a piece of catgut that is overdrawn, so as to destroy its springiness or elasticity; therefore it is easy to see, that by soaking or bathing the affected part in oil, must of course be erroneous, as this will serve more to extend the fibres, that are already over stretched. But I have seen instances where the muscle or fibre has been shrunk, occasioned by a stroke or a kick on the leg of the horse, which has caused him to stand altogether on the toe of the foot, for a length of time, until the muscle or fibre has so much shrunk up, that the heel of the foot could not be brought to the ground. In cases of this kind, I have continued to soak the affected part with neat's foot oil, and rolled up the leg in a flannel roller, until the fibre has been relaxed, and the horse has been perfectly cured. But it is a difficult task to convince the illiterate

and unthinking, of the absurdity of applying restringents: or to persuade those that are owners of valuable horses, not to let them be tampered with, by those who have never thought or studied for their own benefit, and much less for the horse; for common observation proves, that two thirds of the human race think but very little—neither can they think. When it is clearly proved that a horse is lame in the shoulder, he should be rowelled a little below the point of the shoulder, and likewise be bled and physicked.—When a horse's shoulder is overstrained, he does not put out that leg as the other, but, to prevent pain, sets the sound foot, firmly on the ground, to save the other, even though he be turned short on the lame side, which motion tries him more than any other. When trotted in hand, instead of putting his leg forward in a right line, he forms a circle with the lame leg; and, when he stands in the stable, that leg is put forward before the other. If the shoulder is much swelled, it should be fomented, by woolen cloths dipt in a strong decoction of wormwood, tansy, and chamomile flowers—to which may be added, half a pint of spirits of wine.

Strains of the back sinews are very com-

mon, and are easy to be discovered by the swelling, which extends, at times, from the back side of the knee, down to the pastern joint. These strains likewise, in the first instance, should be fomented—and afterwards treated in the following manner, and the oils here prescribed applied ;

Take of the best vinegar, one quart ; spirits of turpentine, half a gill ; bole ammoniac, one ounce ; common salt, a teacup full—mix in a bottle—shake up—and rub in well with the hand ; place a flannel roller round the leg, and draw it moderately tight : the roller should be about two yards long, and four or five inches wide.

Or take the following receipt for strain oil, which can be recommended, and will recommend itself.

Take of spirits of wine, two ounces ; camphire, half an ounce ; linseed oil, half a pint ; vinegar, one pint.

When a horse is lame in the stifle, he always treads on the toe, and cannot set the heel to the ground ; if a large swelling ensues, foment it well with the aforementioned decoction, till it disperses, and then bathe the part with either of the above medicines.

A lameness in the whirlbone and hip, is

to be discovered by the horse dragging his leg after him, and dropping backward on his heel when he trots. If the muscles of the hip, only, are injured, the cure is easy; but when the ligaments of the joint are affected, the cure is difficult. In either case, at first the parts should be bathed or fomented: should neither of these succeed, a strong blister should be applied over the hip or whirlbone, and the horse be turned out to pasture, at least for three months, as rest and time only can restore the injured parts to their proper tone; and this must be observed in all kind of strains. The following blister should be applied:

Take of marshmallow ointment, four ounces; Venice turpentine, two ounces; tar, two ounces; mustard, two ounces; Spanish flies, powdered, two drachms; oil of origanum, two drachms. The blister may be kept on, by applying pitch, or any thing of a sticking nature, round the edge of the plaster.

CHAPTER XVII.

Of Bone and Blood Spavin.

It would be altogether needless to enter into the cause of this disorder. Let it suffice then, that I describe both the bone and blood spavin : and the method that I have pursued, whereby cures have been effected

That which is generally termed a bone spavin, is a hard bony excrescence, or hard swelling, growing on the inside of the hock of the horse's hind leg. A spavin that begins on the lower part of the hock, is not so dangerous or difficult to cure, as when it puts out higher—between the two round processes of the leg bone : And a spavin near the edge is not so hard to cure as when it is more inward, towards the middle, as it does not so much affect the bending of the hock joint For my own part, I am convinced that it is impossible to cure the bone spavin, if it has been of long standing. Some years past, a gentleman that owned a valuable horse, that

had got the bone spavin, persuaded me to attempt to take it off: I therefore fixed the horse in stocks, and laid open the part; and by the use of knives and chissels, took off all the hard substance from the bone; and afterwards applied caustic, and powerful digestive ointment. The wound at length was cured, and the horse turned out to pasture for some months; but after all that had been done, the horse continued lame—owing, I presume, to a defect in the joint. I have many times since been applied to, for to cure the bone spavin, but declined the attempt. But on hearing of a Mr. Clements, a farrier in this city, who, it is said, is in possession of a diploma from the Veterinary College of London, and that he could cure the bone spavin, I advised those who applied to me, to take their horses to him: although I confess, that I did not place any more confidence in the talents of Mr. Clements, on account of his diploma, or his knowledge of the dead languages—as neither of these can give experience. During the course of my life, I have conversed with many college-bred gentlemen, who in my opinion, were colleg'd idiots—as the schools had taught them science, and the Greek and Latin, before they

had taught them common sense. But my opinion was, that as nature has diversified her gifts, that Mr. Clements might have discovered something new, that might perform a cure ; but, by seeing several of the horses after he had operated on them, I found that he had exactly pursued the former methods that myself and old practitioners have pursued for a number of years past, and that the horses still remained lame. If I myself am in possession of any diploma, it is a grant from the college of nature, and the credentials are, experience, reason, and common sense. But to return to the spavin—as soon as it is discovered that there is a swelling on the horse's hock, and the appearance of a bone spavin is coming on, it should be immediately fired, and a strong blister applied to the part, which should be repeated two or three times, leaving a space of two or three days between each application—And the horse must be permitted to rest, or, if it is convenient, he should be turned out to pasture for two or three months—and this will perform a cure. Every time the blisters are taken off, the part should be anointed with elder or marshmallow ointment.

A blood spavin, is a swelling and diluta-

tion of the vain that runs along the inside of the hock of the hind leg, which will rise and fall like a cushion, by the pressure of the finger. But this is easily cured, by repeated blisters, and resting the horse. The blistering ointment that I have applied for the purpose, is the following :

Take of marshmallow ointment, three ounces ; Venice turpentine, two ounces ; Spanish flies, a drachm and a half ; sublimate one drachm ; and oil of origanum, two drachms.

The hair should be cut off as close as possible before the blister is applied—this should be done in the morning, and the horse's head tied up to the rack all day, so as to prevent his getting off the blister. Care must be taken to bind the blister fast on, with a broad tape or list. After the blister has done running, and the scabs peel off, it should be repeated a second time ; and if required, a third, time, in the same manner. These applications will, generally, perform a cure.

CHAPTER XVIII.

Of the Pole Evil and Fistula.

It is my intention to treat of these two diseases under one head, or chapter, as they appear to be of a similar nature, and require almost the same treatment. The pole evil is an abscess near the pole of the horse, formed in the sinuses, between the pole bone and the uppermost vertebræ, or what is commonly called the whiteleather of the neck. It often proceeds from blows, bruises, or some external violence. It should, in the first place, be attempted to be dispersed, by bathing the part with hot vinegar or train oil: but if an oozing, or matter of a hot, ichory kind, should make its way through the skin, the best way is to poultice, with any kind of a strong drawing poultice. But should the swelling have been of long standing, and it has become a foul ulcer, and the matter flows in great quantities, resembling melted glue, and is of an oily consistence, it will then require to be opened with a knife; and the

depth of the cavities should be discovered, by the finger or a probe—and should there be found a quantity of mortified or rotten flesh, it should be taken out : and this I have often found, when the swelling has been neglected for a length of time. Care should be taken not to cut away or injure the tendinous ligament, that runs along the neck under the mane. When the matter is on both sides, an opening must be made on each side, and the ligament, remain undivided. This being done, and the horse fixed fast in a pair of stocks, the following scald or mixture should be applied, boiling hot, to the cavities, after they have been well washed out with a sponge dipt in vinegar :

Take of train oil, half a pint ; honey, two ounces ; spirits of wine, four ounces ; sublimate and white vitriol, of each, two drachms ; verdigris, half an ounce ; oil of turpentine, two ounces ; mix together in a bottle—then put a sufficient quantity into a ladle with a spout. Care must be taken that it does not take fire, while making it hot. It will be well to close the wound with one or two stitches, after the scald has been poured into the abscess.

This should remain untouched for several

days, and, if a good matter appears, it will do well without any farther dressing; but if the matter flows in abundance, and of a thin consistence, the scalding must be repeated, until the matter lessens and thickens, and the cure is performed. I have several times succeeded with only scalding once.

A Fistula

Is a sore disease—a hollow, winding ulcer, and frequently arises on the withers of a horse; and is occasioned by bruises, or pinches of the saddle; and in the first place should be treated with repellers. The tumour should be bathed three or four times a day with hot vinegar; or an ounce of the oil of vitriol may be put to a quart of vinegar. But when these swellings are critical, the repelling medicine must be avoided; and assist in bringing the swelling to matter, by means of suppurating poultices. The tumours should never be opened before they are ripe—if they are, the sore will be spungy, and discharge a bloody ichor. But if the fistula has been of long standing, and appears to be a foul ulcer, it must then be opened: and if both sides of the wither or swelled, of course they must

both be opened. Care should be taken to enlarge the openings, by paring away the lips downwards, so that the dressings may be applied easily : and care must be taken to avoid the ligament which runs along the neck, to the shoulders or withers : the openings should decline downwards, so that the medicines are sure to go to the bottom of the ulcer. The following scalding mixture should be applied :

Take of mutton suet, one pound ; tar and train oil, of each, half a pint ; white vitriol and corrosive sublimate, of each, one ounce. The tar and suet should be melted over a slow fire ; and the sublimate and vitriol should be finely powdered, and stirred into the ladle, with the tar and suet, after it is taken off the fire.

The dressing should remain untouched for ten days ; and should the running be stopped, it should only be bathed with train oil ; but should the discharge continue, the scalding must be repeated.

CHAPTER XIX.

On Shoeing.

THE shoeing of a horse is an operation of far greater importance than is generally imagined : as the expectations of the owners of fine horses are often blasted, owing to the badness of their feet ; which is frequently occasioned by being sadly shod. This mechanical art being solely committed to smiths who, generally speaking, are altogether unacquainted with the anatomical structure of the foot of the horse, and consequently cannot judge correctly the manner in which the shoe ought to be placed on the foot, in order to cause the horse to travel sound. I am well aware, that what I shall here advance will meet with opposition, from the ignorant and prejudiced shoers of horses ; and it is a notorious fact, that three fourths of them are as ignorant of the nature and structure of the foot, as the horse is of them. But I shall appeal to the understanding and

judgment of the experienced few, both in this city and elsewhere, for the justness of the statement that I have given ; and I mean to be as plain and explicit as possible ; as it must be considered, that the preservation of the foot of the horse is a most essential point : and that the owners of them should be aware, "into whose hands they commit them to be shod. A most pernicious custom is practised in this city, by many pretended shoers, which is to make presents to gentlemen's coachmen, grooms, or negroes, in order to obtain horses to shoe : and some of them have gone so far, as to pay them two shillings per horse, for every horse that they brought to their shops. And during the time that I continued shoeing horses, I have had coachmen come to me, and inform me that they were going to drive for such and such gentlemen, and asked what I would give them, provided they continued the horses to be shod by me ; my reply was, that I should give nothing ; and asked them if the gentlemen did not pay them wages— They then told me, that there was no call to put new shoes on the horses, every time they were shod, but only to remove them, and charge them as new. By my not complying

with these demands, many horses were removed that I had shod for years. But it was plain to me, that gentleman had by this custom been imposed on ; and some of them had discovered the fraud, and told me that they believed there were more horses shod for bribes and grog, than by experienced workmen ; and when they discovered the fraud, they immediately ordered the horses back to my shop. I think it proper to make these remarks or facts known, in order that gentlemen may not be imposed on ; and that their horses may not be removed by their servants, out of the hands of experienced workmen, into the hands of those that know but little of the important art of shoeing. I shall, in the first place, proceed to give an anatomical description of the foot of the horse, as far as it is requisite to be known by those that undertake to shoe them.

The external covering of the foot is called the hoof ; it is of a horny substance, without sense or feeling, and serves as a box or covering for the foot, to defend the blood vessels, nerves, tendons, &c. from external injuries, and support the weight of the body of the horse. The external parts of the hoof may be divided into four parts :

1st, the crust or wall of the hoof ; 2d, the sole ; 3d, the frog or heels ; 4th, the bars or binders. First, the circular part, into which the nails are drove when the horse is shod, is called the crust, or wall of the foot : it is a tough, hard substance, and thick or strong at the front or toe, but thinner towards the heels ; and more so in the fore feet than in the hind ones, as it often happens that the crust or wall of the hind feet, is strongest or thickest at the heels. Second, The sole fills up the inner and under part of the crust, and is composed of scaly layers, which, when grown too luxuriant, become dry, and fall off in scales ; but when too much pared away with the butteris, the internal parts of the foot are exposed to bruises, from stones and other hard substances. And I have known at times, the outer sole of the foot to become so hard, by the horse's continuing to stand in the stable, or traveling on hot sandy roads that it has bound tight on the internal part of the foot, so as to cause lameness, but by stopping the foot with tar and grease, or even with fresh cow-dung, the sole has been relaxed, and in a few days the horse has travelled sound. Third, The frog is of a soft, spongy substance, shaped like a dart, and reaches

from the extremity of the heel, to the middle of the sole ; in the middle of the frog is a cleft, or opening, by which the heels have a small degree of contraction, and expansion, every time the horse sets his foot on the ground. At times the frog is affected by a disease called the running thrush, which will frequently destroy almost the whole of it : when this is the case, the heels have lost their support, and the horse will go lame. The only thing to be done, is to place a bar shoe on their foot, which will prevent the heels from contracting and expanding, and guard the decayed part from stones, or other hard substances. After the shoe is placed on the foot, there should be a little of the tincture, as recommended in chapter XIV. poured into the affected frog, two or three times a day : at the same time it will be well to bleed and physic the horse and afterwards to give him one or two diuretic balls. The frog composes a great part of the heel of the horse : but the extremities of the crust, on each side of the frog, are called the heels, and are distinguished by the names of outside and inside. 4th, What are called the bars, or binders of the foot, are hard pieces of the hoof, growing on each

side of the frog, which serve in a measure to extend and guard the heels: and these like the frog, should never be too much cut away—as nature has placed them as a covering, to defend the internal parts, and bones of the foot.

The bones of the foot are distinguished by the following names: the coffin bone—the shuttle bone—and the coronary bone: these bones are all in contact with each other, and require the frog and the binders to be strong, to prevent them from being injured by hard substances. It is requisite that all shoeing smiths should be acquainted with the external and internal parts of a horse's foot: if this was the case, they would not cut down the heels, or pare away the sole and frog, as they generally do. I would recommend to them the plan that I set for my apprentice boys—which was, to cut off the foot of a dead horse, and fix it in a vice, and continue to pare it away by shavings, with a butteris, until the whole structure of the foot is discovered. By this plan, and giving proper directions as to paring the foot and fitting the shoe, the young men have become accomplished workmen.

I shall now proceed to describe, as clear as language can convey my ideas, the form of a

shoe, and the manner in which it should be fitted, before it is nailed on the foot. A shoe then, for the fore foot of a horse, should be made thinner on the inside rim, than on the outside, in order to clear the sole of the foot, and to let the bearing rest entirely on the crust, or wall of the foot. By the shoe being made in this form, it will not require to be set so concave, or hollow, as if the shoe was made in all places of a thickness; besides, the surface of the shoe will be nearly flat, so that when the foot comes to the ground, it will be more even and stedfast. But to describe the weight of a shoe, is impossible—it must be left to the judgment of the shoer; but it must be so proportioned, as to completely bear the weight of the horse, without yielding or spreading out: and it should be observed, not to let the web of the shoe be too narrow at the heels, which is an error that almost all the smiths in this country are guilty of, as many of their shoes are not more than half an inch wide at each point of the heel, whereas they should be never less than one inch, and more for large horses, as it is the heels that want covering or guarding, and not the toe of the foot; for it is almost impossible to make the horse go lame at the toe,

without driving a nail into the quick—but at times it is attended with difficulty, to make the horse go sound at the heels of the fore feet: the heels of the shoe should neither be too long or too short—if they extend too far beyond the heels, they act as a lever; and if too short, they sink into the heels, and produce corns. Many horses' feet may be said to resemble a wedge, that is, their heels are low or thin, whilst the toe is deep or thick; there being a far greater distance from the coronet, or setting on of the foot, to the point or front of the bottom of the toe, than there is from the coronet, or bottom of the heel; and when the foot is thus formed, the horse is said to be low heeled.—When this is the case, great care should be taken not to pare away the frogs, binders or heels; but pare down the toe, and shorten it as much as it will admit of—leaving a sufficient quantity of the crust, or wall, to contain the nails: but the nails should never be placed too far back towards the heels of the shoe. From the first or second heel nail holes, or what is called (of the shoe) the quarters, it should be strong and wide, as it is the heels which want protecting or guarding, and not the toe of the foot: and the heels of the shoe should be

placed over the edge of the anvil, and set off with the hammer, about an inch from the point of the heels, in order that they may not rest on the point of the heels of the foot; so that when the shoe is nailed on, there may be a space between the heels of the feet, and the shoes, nearly sufficient to contain the thickness of a dollar—and some feet will require more, as, by the horse's travelling, the heels of shoes will naturally sink down to the heels of the feet. By following this plan I could always make the horse travel sound; and in a few months the heels would expand and grow up—and the weight of the horse would be taken off the heels, and thrown on the toes; or, what is called the centre of gravity, would fall on a point that can receive no injury; and care should be taken to let the heels of the shoe stand full, and not curved in, as it is too often done. It is a mistaken idea of many smiths, who suppose that a horse will cut at the heels, provided the heels of his shoe extend beyond the crust of the foot: but a horse, to cut at the heels, must have his feet in the position that a lady has her's, whilst her feet are placed in the stocks in a dancing school, with her toes turned outwards; but not one horse in a hundred travels in this form. When a horse cuts

with his heels, he strikes his legs a little below the knee joint, and is said to trot high—and this is called a speedy cut : but almost all horses that interfere, or cut, strike their legs about the pastern joint—and then they strike with what is generally called the quarter, or side of the foot ; in this case, the inside of the shoe should be brought strait, and fitted a little within the crust, or wall of the foot : and at times, the nails should be left out at the quarters, and be placed round the toes : and some horses require the inside of the shoe to be raised higher than the outside, with what is called a feather edged shoe. But it is impossible to prevent some horses from cutting—nature having formed them narrow in the chest, and at the buttocks ; and at times they get weary, and are not able to carry their feet in a strait line.—Many smiths commit an error, by making what is called the inside quarter of the shoe, weaker than the outside, whereas it should be stronger ; as the inside of the foot and heel are generally the weakest, and consequently require more support and cover. And a shoe should never be fullered too fine, or near the outside edge or rim, as this will have a tendency to leave the wall, or crust of the foot thin. Likewise, the foot should never be

rasped above the clinches, as nature has formed the outside crust tough and hard, and the inside of the hoof soft and flexible, the rasping away the outside crust of the hoof, may be compared to cutting away the outside bark of a tree: and there are but very few people but know that the inner bark is soft and tender.

As to shoeing the hind feet, it is not, in general, attended with so much difficulty as shoeing the fore ones; but should the horse inrerfere or cut, the same precaution must be taken, as I have recommended for the fore feet. Care should be taken that the clinches of the nails are well let into the hoof, and more particularly on the inside of the hoof; for should the clinches raise, or project out beyond the hoof, it will cause the horse to cut.

There is one omission that I have observed in almost all the shoeing smiths in this country, which is, that they do not what is practised in England, that is to redraw the clinches of the nails, which is to place the pinchers under the nails the second time, and drive them up tight with the hammer, and rivet them down again: by this method the clinches will never raise, but continue

close in the hoof, so that the horse will not cut his legs with the clinches. But if this practice is not pursued, by the horse's stamping or setting his foot on the ground, the nails will be drove farther into the holes of the shoe, and the clinches will of course raise. I appeal to the understanding of the experienced few, shoeing smiths, for the justness of these remarks, and likewise for fitting and placing the shoes on the feet, and more particularly on the fore ones, which require by far the greater skill, as there is much more weight borne on the-fore feet than on the hind ones: as it must be observed, that the weight of the horse's head and neck, and also the rider, are principally thrown on the fore legs or feet; and this is what causes corns in the fore feet, and not in the hind ones: this also is the cause why corns are frequently found in the heels of horses' fore feet, and not in the hind ones.—When it is discovered that there are corns, they should be razed off with a drawing knife, and a little oil of vitriol poured on them; or an equal portion of spirits of turpentine and oil of vitriol mixed together in a bottle, applied for a few days: By doing this, and not letting the heels of the shoes bear on them, they will get well.

CHAPTER XX.

Of Founder.

THIS is found to be a destructive disease, and is generally brought on by the inattention or neglect of the owner or rider of the horse, by letting him cool too fast, after coming off a hard journey, or violent exercise and by letting him stand with his feet in a cold damp place : and at other times horses have been foundered, by letting them eat corn or oats, or drink cold water, before they had properly got cool, after they had been at hard labour.—This disease is often supposed to be an affectation of the loins or chest and farriers have applied medicines to this effect ; whereas the principal seat of the disease is in the feet, and has often terminated in the death of the horse. The feet will be found to be violent hot, and the animal will draw his hind feet as close as possible towards his fore ones, which will cause some persons to suppose that he is strained in the loins : but when the hind feet are most affect-

ed the fore feet will be placed under the belly, as far as possible, in order to bear the weight of carcass, but this is not often the case. The disease generally comes on very rapidly, and appears in a few hours, after hard riding and permitting the horse to stand in the snow; or may take place in consequence of putting the horse into a hot stable, the vessels of the feet not being able to bear the sudden change, and of course will bring on an inflammation; and I have, as above stated, seen it brought on, by giving cold water before the horse had got cool.

This disease is easily discovered, by the inability of the animal to move, and by the position of his legs—the whole of them being affected: The horse will lay down and be unable to rise, and at times the fetlocks will swell, and there will be a violent fever in the feet, and the pain will be intense; the coffin bone of the foot will be thrown out of its natural position; the crust will fall in; and there will be rings and circles formed round the hoofs: it sometimes happens that the horny sole loses its concavity, and becomes convex—or what is generally called pummiced: this is frequently the case in a severe founder.

When a horse is found to be foundered the shoes should be taken off immediately—and the feet should be well pared down at the toe, so as to draw blood, with a razing iron; and he should likewise be bled in the jugular vein of the neck—and his feet should be put into bags of fresh cow dung, or any cooling poultice—and the following medicines should be given twice a day:

Take of cream of tartar and nitre, of each one ounce; tartarised antimony, one drachm: make into a ball, with wheat flower and molasses. If costive, give a purging ball and clyster.

CHAPTER XXI.

Of Splents.

THESE are hard substances that grow on the shank bone, and are of different shapes and sizes : young horses are more subject to them than old ones—in young horses they often disappear and wear off ; very few horses put out splents after they are seven or eight years old. A splent that arises in the middle of the shank bone, is not so dangerous as those which arise on the back part of this bone : when they grow large, and press against the back sinew, they always cause lameness or stiffness, by rubbing against it ; but the others, except they are situated near the joints, seldom cause lameness. As to splents, I judge it best not to meddle with them, unless they are of such a size as to disfigure the horse, or cause him to go lame. When a splent first makes its appearance, it should be bathed with vinegar, to which may be added a small piece of camphire, and this will often put a stop to their growth.

A variety of remedies are prescribed for this disorder : Some have recommended, to rub the splent with a round stick, or a hammer handle, until it is almost raw, and then to touch it with oil of origanum : others have laid on a pitch plaster, with a little sublimate but I have always succeeded, by firing, and blistering with the blister that is recommended in the chapter on the blood spavin : the blister should be repeated two or three times observing to wait three or four days between each application : during this time, the splent should be anointed with the ointment of marshmallows.

CHAPTER XXII.

Of a Curb and Ring Bone.

WHAT is generally called a curb, is a hard bony substance, situated a little below the back part of the hock of the hind leg; and at times, when it has been neglected, will cause a stiffness, and the horse will, at first starting, go lame: and when the bone is affected, it proves that the callous or hard substance is fixed fast to the bone of the leg.—When this is the case, the most sure way to perform a cure, is to fire with a thin iron, drawing some straight lines, about a half an inch apart, and then cross-bar them; but this operation should be performed by a person of judgment—and the horse should be confined in a pair of stocks. After the firing is thus judiciously performed, the blister that is recommended in the chapter on the spavin, should be applied, and repeated three times, and there need be no doubt of a cure being performed.

Ring Bone.

This is a swelling that grows on the pastern bone, and runs round the coronet of the foot, and appears like a ring, from which it derives its name—and it generally produces lameness ; a cure is generally performed by firing and blistering. I once saw a cure of a ring worm effected, by flaying off the skin round the worm, and then placing a thin piece of copper around on the top of the worm, bringing the skin over the copper, and binding the copper fast to the affected part—by this method verdegris was produced, and the worm finally eaten off : the copper was taken off every two or three days and wiped clean and replaced again. But by whatever means the cure is attempted or performed, it will require that the horse rests for six months—and he should be turned to pasture, if the season of the year will permit.

CHAPTER XXIII.

Of the Grease.

THE grease may be considered as a disorder of the vessels, as well as the blood. Swellings in the legs of horses may be accounted for, from a partial stagnation of the blood and juices in the finer vessels, where the circulation is most languid—and when there is a want of proper exercise, and a proper muscular compression on the vessels to push forward the returning blood, and propel the inert and half stagnated fluids through their vessels: the blood in such cases cannot so easily ascend as descend as a greater quantity is brought by the arteries, than can be returned by the veins. Considering the grease in this point of view it may be looked on as a local disorder, and is often an attendant of some distemper—such as the farcy, yellows, or dropsy: and should the horse be afflicted with either of these disorders, they must be first cured, before the grease can be removed; but proper

care should be taken to cut off the hair close round the legs and fetlock joints, and to keep them properly clean.

When it is first discovered that a horse's heels swell in the stable, and go down on his being exercised, care should be taken to wash them clean, every time he comes in, with Castile soap suds, chamber lye, or vinegar and water, which, with good rubbing, will bring down the swelling; this method of treatment will often remove the complaint. But should the legs continue to swell, they should be bathed two or three times a day, with good old vinegar—and a bandage of linen or flannel should be bound round the legs, about the width of three or four fingers—and if rags dipped in the vinegar are placed under the bandage for a few days they will be of great service: by this method the bandage will support the vessels of the legs, till they have recovered their proper tone. When I have found it difficult to remove the swelling of the legs, which often happens, I have had a pair of stockings made, of strong canvas or leather, and laced them tight around the legs—and washed the legs two or three times a day with the following wash:

Rectified spirits of wine, four ounces—
dissolve in it half an ounce of camphire
and add one quart of the best vinegar.

This complaint is looked on as trifling,
but those who are unacquainted with the
disorder ; but I have many times found it
difficult to conquer ; and was I to go through
the whole of the practice that I have pur-
sued in its order, it would tire the patience
of the reader, and probably be of little use
to him. I therefore shall conclude, by rec-
ommending the following diuretick balls, to
be givin one every morning, for three or four
weeks successively :

Take of yellow rosin, four ounces : salt of
tartar, and sal prunella, of each, two ounces ;
Venice soap, half a pound ; oil of juniper,
half an ounce—make into balls of two ounces
weight.

CHAPTER XXIV.

Of Scratches.

THE disorder that is commonly called scratches, and is found in the heels of horses, has much affinity with the grease, and is often a concomitant of the same distemper. When a horse is found to have cracks or scratches in his heels, the best method in the first place to be pursued, is to apply poultices made of turnips and linseeds, with a little common turpentine and hog's lard, to bring on a discharge: this being done, and a suppuration brought on for a short time, the cracks may then be dried up, with the wash that is recommended in the preceding chapter. It is best after this to keep the heels supple, and softened with currier's dubbing, or neat's foot oil: this will soften, or prevent the skin from cracking, in the same manner that it preserves leather. When the sores are deep, and prove obstinate, use the following ointment—for no foundation for a cure can be laid, until the wounds are cleansed at the bottom:

Venice turpentine, four ounces; quick-silver, one ounce—incorporated well together, by rubbing it some time; add to it sheep's suet, and honey, of each, two ounces.

If the heels are anointed with mercurial ointment, after the wounds are thoroughly cleansed, this will often make a final cure. Great care should be taken to wash the legs clean with soap suds, after the horse has come in from a journey. During this treatment, the horse should have two or three diuretick balls given him in a week.

CHAPTER XXV.

Of Sand cracks and Quittors.

THAT which is called a sand crack, is a little cleft, or crack of the hoof, and generally makes its appearance on the inside of the fore feet of horses, and runs in a straight line from the coronet downwards, and penetrates through the horny part of the hoof. At times it proves troublesome to cure ; but if it passes through the ligament that unites the hoof with the coronet, is often found to breed a quittor, or false quarter, which is hard to cure ; but when the crack penetrates only through the hoof, it should be rasped down at the edges, and the crack should be drawn open with a razing iron, and the sand which is collected, should all be taken out. The operator having proceeded thus far, he should then draw a stroke across the crack with a hot firing iron, as near as possible to the coronet : afterwards it should be dressed with thick pledgets of cotton, spread with wound or basilicon ointment. The dress-

ing should remain on two or three days : by this time the pain will have left the foot. When the dressing is removed, a little precipitate should be applied to the crack, and the foot dressed with a mild ointment, such as elder or marshmallows. The dressing should be bound on with list. When entirely taken off, the foot should be immersed three or four times a day in cold water, and fresh cow dung should be applied to the bottom of the foot.

A quittor is an ulcer, formed between the hair and hoof, and on the inside of the quarter of the foot. It often arises from the horses striking the part affected, with the heel of the other foot or shoe ; or as it is generally expressed, the horse has corked himself ; and the gravel will work its way into the wound and lodge about the coronet. If it is taken in time, it may be cured with cleansing, dressing and bathing the coronet with spirits of wine, two or three times a day ; but if it has been of long standing, and the matter has formed a lodgment, and become a foul ulcer, the firing iron, or the knife must be applied. I have performed cures both by the knife and the firing iron. With a round pointed iron, about a quarter of an inch thick

I have burnt a hole through the swelling, beginning towards the heel and pushing it forward to the toe of the foot, as far as the swelling continued. After the hole had been made, I have rolled up a quarter of an ounce of corrosive sublimate in a piece of writing paper, and made it about as long as the hole, and as large as a goose quill, and afterwards applied the strong wound ointment, composed of Venice turpentine, rosin, verdigris, and hog's lard. The dressing must be made secure, and remain on three or four days. When taken off, it must be dressed again with the wound ointment, and if the core does not come out, the sublimate must be applied again. By this method I have brought out cores as large as my thumb and this has made a complete green wound. When this has been affected, the wound has been dressed with the tincture recommended in a former chapter, and the ointment of marshmallows. The horse must be thrown down to perform the operation. I have also used the knife, but prefer the firing iron in bad cases; but in both operations it requires time for nature to do her part. The owner of the horse must not expect him to work in less time than two months, and if

possible he should be turned out to pasture, or the foot treated in the stable as recommended before with cow dung and cold water.

CHAPTER XXVI.

Of Relax, and Scouring.

It is evident, that at times horses are subject to different kinds of loosnesses or scouring. I shall not therefore trouble the reader with a tedious description of the complaint; but content myself with as brief a description as possible. A lax, or scouring in horses, is a frequent discharge of thin watery mucus, phlegmy, frothy, fat, black matter, by the fundament, and mostly with excrements; but sometimes without: at times it is attended with gripings of the guts. This complaint at times is thought to be brought on by giving the horse unwholesome food, such as musty hay, stale shorts, or damaged oats. From whatever causes the complaint might originate, the stomach requires to be strengthened; therefore, a cordial drink should be given as soon as possible. Give the following drink:

Take of anniseed and carraway seed, of each one ounce; juniper berries, two ounces;

bruise the seeds and berries, and boil them in three half pints of good ale ; add one ounce of liquid laudanum, one gill of brandy, and half a pint of molasses : this drink may be repeated every three hours, if necessary.

CHAPTER XXVII.

Of the disorders of the Kidneys and Bladder.

THE signs of the kidneys of a horse being affected, or hurt, are weakness of the back, and loins, with a difficulty of staleing. He will lose his appetite; his eyes will appear dead and heavy; the urine will be thick and foul; and will at times appear bloody. If an attempt is made to put him backwards in a straight line, he will be in great pain, which can be observed as soon as he is put to trial. Bleeding plentifully is the principal remedy to prevent inflammation, and particularly if a fever attends, with a difficulty of staleing. A rowel should be put into his belly, which I have found to be of great service. If the horse be of great value, a great deal of caution and care is necessary, in order to preserve his life. Give the following drink, which I am confident, by repeated trials, will be found to be the best ever administered.

Take one pint best castor oil, two ounces of liquid laudanum, two ounces of sweet

spirits of nitre, and half a gill of spirits of turpentine.

A stimulating diuretick ball :

Take of juniper berries powdered, one ounce ; half an ounce of camphire; sal prunello, six drachms; nitre, one ounce; make into a ball with honey or molasses.

The loins of the horse should be fomented three or four times a day, with a strong decoction of herbs, such as wormwood, tansy, or pennyroyal. A large piece of flannel should be dipped in the fomentation, after it has been boiled, and laid on the loins, as hot as the horse can bear it without scalding. After the drink, or the ball has been given, the horse should be made to drink plenty of water with gum arabic dissolved in it. Give the following stimulating glister :

Take juniper and bayberries, of each a handful ; powdered nitre, one ounce ; jalap, one ounce ; boil into a decoction, add a pint of linseed oil.

CHAPTER XXVIII.

Of Alterative Medicines.

WHAT is meant by alteratives, are those medicines that have no immediate sensible operation, but gradually gain upon the constitution of all animals, and change the state of the blood, and juices of the body from a state of distemperature, to that of health. They correct the blood and juices of the whole system, and accelerate the motion of the blood; and are often more beneficial than purging medicines. Nitre ranks first among the alteratives; sulphur and crude antimony are the next in repute. I shall therefore take upon me to recommend nitre, from the opportunity that I have had in the course of my practice, to witness its powerful and beneficial effects. Nitre or purified salt-petre has been long held in high estimation by those who were acquainted with its virtues. I have depended more on nitre, in all inflammatory disorders, than any other medicine; it has an extensive power in allaying fevers, taken in

proper quantities; is excellent in cases of surfeit, hide bound, grease heels, and it will greatly assist in curing the farcy, and many other distempers to which horses are subject. It has a great advantage over other medicines, its operation is chiefly by urine. It neither requires confinement or clothing. The horse can be moderately worked through the whole course. There has been many trials made in the London hospitals of nitre, and it was found to correct the acrimony of the juices of the human body, and has been the means of causing old ulcers, and sore legs, to heal up. One of the most eminent physical writers speaks of it in the highest terms of praise. Lord Bacon held it in such high estimation, that he believed it would prolong life. As a proof of its efficacious powers, those who are in the practice of what is called curing or salting down beef and pork, are certain that it will resist putrefaction. If it will thus preserve the flesh of dead animals, why not the blood and flesh of living ones? That the powers of it may be proved, by those that bleed horses, let them make a solution of it and mix with the blood that is drawn from a horse, and they will find that it will prevent the blood from coadulation, and change its colour from a dark or black, to a

beautiful florid and will preserve it for a considerable length of time.

If I am not mistaken in the name of the author, Mulpighius, informs us that he injected it into the blood vessels of a dog, where it immediately mixed with the blood without any detriment to the animal ; but it caused a more copious discharge of urine. It has been known to destroy worms in the stomach of different animals. I am persuaded that nitre is one of the best and safest alteratives that has been discovered.

The quantity of nitre that should be given, is two ounces at one time. It should be finely powdered, and given in the morning for five or six days running. In cases of high fevers, I have given as much as half a pound a day : and often given the horse two or three horns full of molasses, mixt with powdered ginger, to make it sit easy on the stomach.

To mix alterative powders for a horse : Take half a pound flour of brimstone, half a pound of powdered nitre, two ounces of crude antimony ; mix them well together, and give the horse two ounces a day for one week ; then rest a few days and repeat. The powders may be given in his feed, and should be given plentifully to a horse that has been foundered.

CHAPTER XXIX.

Of Consumption.

A consumption is a defect or disease on the horse's lungs. The liver becomes putrified, and the lights will be found to be full of black spots, about the size of half a dollar. The symptoms of consumption are as follows:—The eyes look dull, the ears and feet are generally hot, he coughs strongly, at times; sneezes much, and frequently groans; his flanks will have a quick motion; he gleans often at the nose, and discharges a yellow curdled matter, and loses his appetite. At times he will eat grain, but refuses hay. The grain will cause him to feel hot.

Bleeding is one of the principle things to be depended on to effect a cure, which should be often repeated, by taking about one quart at a time. Mercurial purges should also be given. Half an ounce of calomel, mixed with a physical ball; and the following alterative powders should be given at intervals of time.

Take cinnabar of antimony, one pound; powder fine one pound of nitre, add the same quantity of gum guaiacum; give an ounce of these powders three times a day in the horse's feed.

The horse should be turned out to pasture in the spring of the year. The salt marshes are to be preferred, and more to be depended on than medicines, as the grass will cause great alterations in the blood and juices, and he will receive the benefit of the fresh open air, and gentle exercise. But, if after all that has been tried, the horse relapses, and a yellow curdled matter continues to run from the nose, and he gets emaciated, and sweats profusely, and the cough continues with a rattling, there can be little or no hopes of his recovery. In order to save expense, it would be best to dispatch him, as an incurable patient.

CHAPTER XXX.

Of Scratches, Rat tails, &c.

HORSES, at times, are subject to a complaint called the scratches ; that is, their heels are swelled, and full of cracks in the fetlock joint, which at times will cause them to go lame. Great care and attention are requisite to perform a cure in this disease. The scratches have some affinity to the grease, and are very often nearly the same complaints. When either of these are found to have taken place, the treatment should be similar. In the first place, the heels should be poulticed with linseed, turnips, onions, and wheat shorts, or bran, boiled together until all becomes a pulp : then add as much hog's lard as will keep the ingredients soft, when applied. The poultice should be kept on a few days, in order to relax the parts, and make the heels supple. Care should be taken to keep the heels clean, by washing them with warm water and soap. If carrier's dubbing is applied, which is made of

oil and tallow, it will keep the skin from cracking, and preserve it as it does leather. When they prove obstinate, and the sores are deep, they must be laid open, in order to lay a foundation for a cure by going to the bottom, or what is called making a green wound; afterwards, dress with the following ointment:

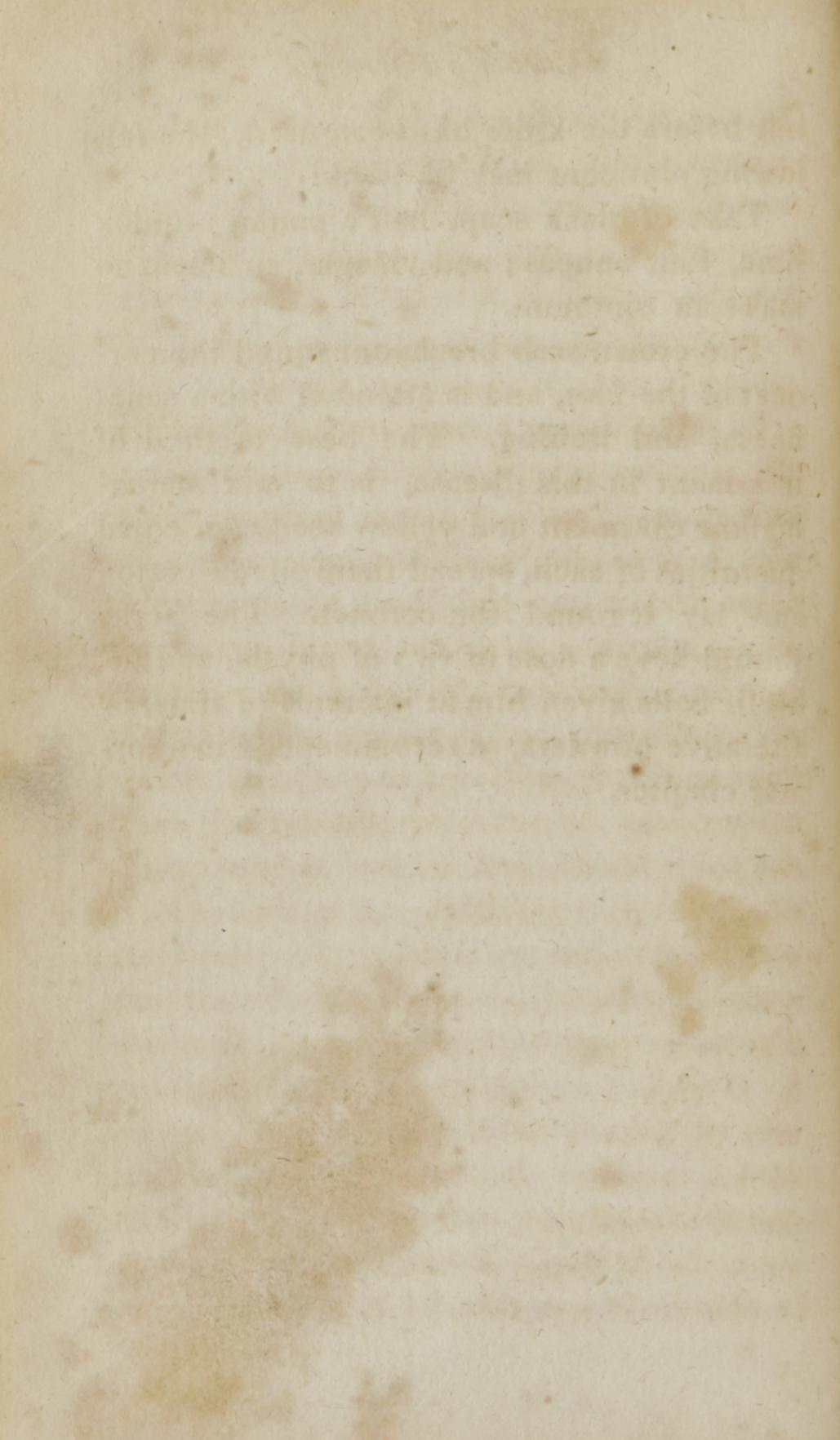
Take of Venice turpentine, four ounces; quick silver, one ounce; incorporate together, by rubbing some time, then add honey and mutton suet, of each two ounces, with half an ounce of verdigris, finely powdered: anoint with this twice a day, and if the horse is full or fleshy, bleed and purge. If the blood is in a bad state, give the alterative powder, as recommended in the chapter on alteratives.

Rat tails are excrescences, which rise from the pasture to the middle of the shank, and they derive the name from the resemblance they bear to a rat's tail. Some are moist and others are dry. The former should be treated with drying ointment, and washes; such as mercurial ointment: but if the hardness does not yield to those medicines, it should be pared off with a knife, dressed with tar, turpentine, and honey; to which may be added verdigris, or white vitriol:

but before the knife has been used, the following ointment may be tried :

Take of black soap, half a pound ; quick lime, four ounces ; and vinegar, sufficient to make an ointment.

The crown scab breaks out round the coronet of the foot, and is attended with a scurfiness, and itching. The best method of treatment in this disease, is to mix marsh-mallow ointment and yellow basilicon, equal quantities of each, spread them on raw cotton and lay it round the coronet. The horse should have a dose or two of physic, and diuretic balls given him at intervals of time, or alterative powders, as recommended in a former chapter.



CHAPTER XXXI.

On the Blood and Pulse of the Horse.

IN this chapter I mean to be very particular, as it is one of the most essential principles in the veterinary art, or farriery; and by which the practitioner in most cases ought to be guided, especially in all kinds of fevers. The heart may be said to be the great reservoir, or fountain of life and blood in all animals; therefore a knowledge of the circulation or the rapidity of the blood's motion, through the heart and arteries, is an essential point for the practitioner to be acquainted with. By a knowledge of this science, he will be brought to admire the power and wisdom of the all-wise creator of the universe. The heart may, with propriety, be compared to a large lake, which sends out its waters into thousands of rivers and small streams. In this manner the heart propels, or forces the blood through thousands of arteries and veins, in all living animals. It is wonderful to observe the rapid motion of the blood, and

the force with which the heart and arteries labour to propel it round the whole organized system. The most accurate calculation that has been made, is, that it beats about forty strokes in a minute, so that in proportion, as the number is increased, the fever is rising. When it increases to above fifty, we may conclude the fever is very high. This calculation is easily made by placing the fingers on any part of the arteries; those that run up on each side of the neck are generally to be seen beating and likewise felt, a little above the chest. There is also one runs up on the inside of each fore leg; and one on the inside of each jaw bone. A strict attention to the pulse is very important to the practitioner, as there are times when a horse should not be bled, although he is found to be unwell. This must be determined by the pulse alone: an old experienced practitioner's judgment is guided by it, therefore he makes as accurate observations and calculations as possible.

There are diseases to which horses are subject, that will not admit of bleeding. I recollect a case some years past, to which myself and Mr. William Carver, of Chatham street, was called; he was a countryman of

mine, from England, and one of the best farriers that ever came to this country. There are many others who profess to have a thorough knowledge in veterinary surgery; overstocked with diplomas of which they boast, like coxcombs with their fine coats, and a little knowledge of the latin language; but I never saw them perform cures equal to this good old friend of mine. He was a man of sound judgment, and long experience. We went hand in hand in all difficult cases. I hope the reader will pardon this digression.

The case alluded to was of a very fine horse, belonging to a gentleman in New York. The animal was taken sick, and his disease appeared to be a very complicated one. The pulse was low and languid. My friend was for letting blood; but I differed in opinion, and said, that if the horse was bled, he would live but a short time. I however yielded to his judgment. He bled him, and the horse died in about half an hour afterwards.

I have mentioned this case in order to put gentlemen and others on their guard against letting stable keepers, ostlers, coachmen, and grooms, bleed their horses, as they are generally ignorant of the motion of the

blood. So valuable an animal, therefore, should not be tampered with by those who know nothing of his economy. It was my opinion whilst writing this chapter that I could not too much enforce the necessity of the study of this important branch of farriery, as the physicians' judgment is generally directed by it : for when a horse has been bled prior to his attending, he cannot form that correct judgment, because he had not an opportunity to examine the quantity and the state of the blood. Very accurate observations can be made with regard to the motion of the blood, and the hardness of the artery from its difficult vibrations. This is the only sure guide to distinguish an inflammatory fever with dense sily blood, from an irregular depressed one, and how often bleeding should be repeated in fevers, and other disorders. Many a fine noble horse, has fallen a sacrifice to the ignorance of those who have bled and doctored them ; when a knowledge of this important branch of farriery might have saved and restored them to perfect health and soundness.

CHAPTER XXXII.

Of the Running Thrush and Canker.

THE Thrush is an imposthume that gathers in the frogs of horses feet, and at times becomes ulcerous, and discharges a foul stinking humour. It often totally destroys the whole frog, and causes it to decay, or rot off; and will frequently cause the horse to limp so much as to make it necessary to put bar shoes upon him to guard the frogs and heels.

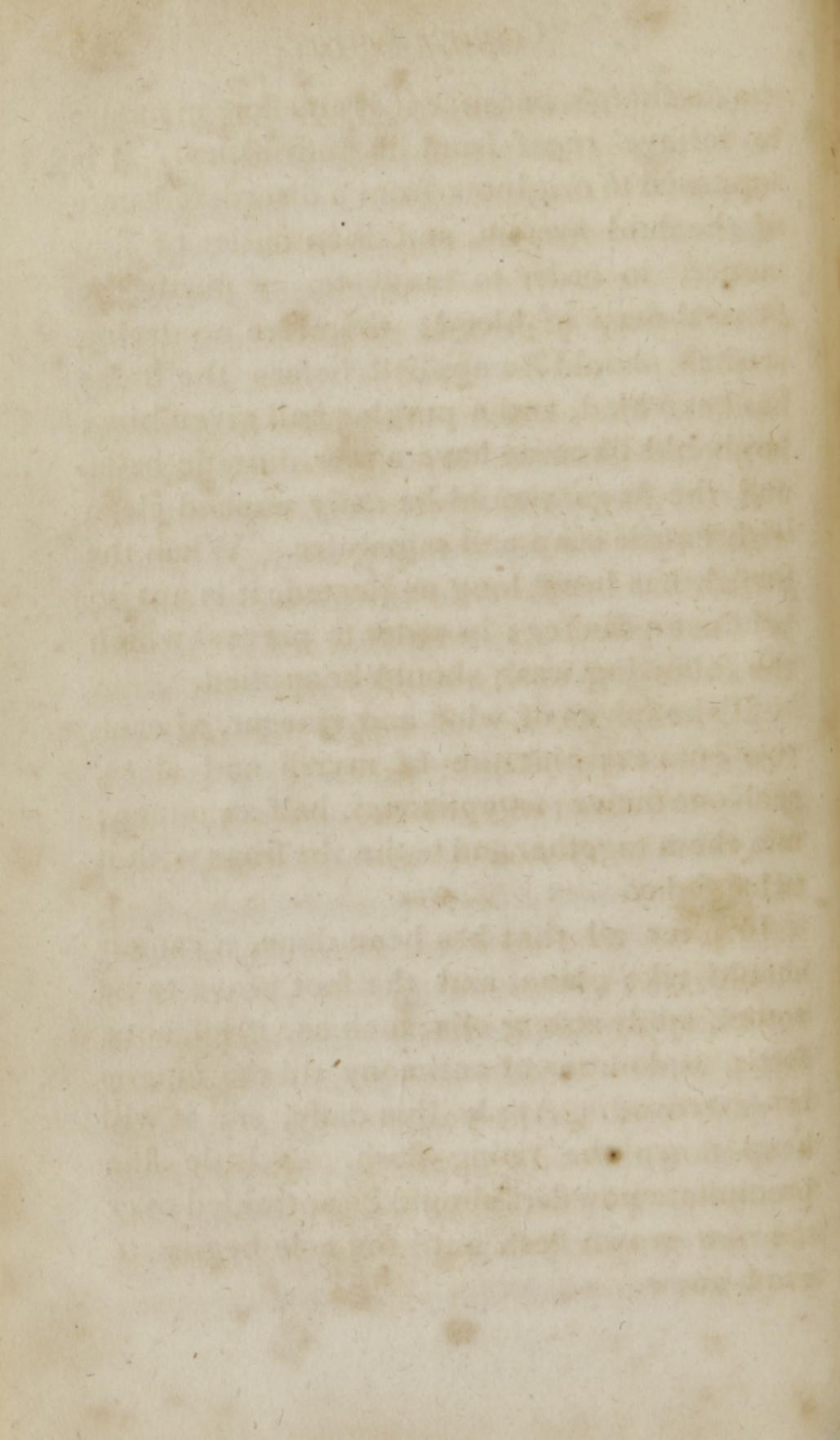
I recollect some time past, that a Mr. Clements, who is said to be in possession of a diploma from the Veterinary college, London, observed in one of the courts of justice in this city, (New York) that a horse never went lame with the thrush in the frogs of his feet; and that a horse was never known to die with the bots. So much for theory and a diploma. If Mr. Clements had been in the practice of shoeing horses for thirty years and like myself, had shod many thousands of horses, he would have known that a great

number of horses limp in traveling, on account of the thrushes in the feet; and that they frequently die with the bots. A great many theoretical authors like Mr: Clements has recommended bar shoes to be put on the feet, for the thrushes in the frogs, and say that the bar which covers the heel of the foot should rest on the frog. Reason and common sense ought to teach us that this theory is impracticable; for how can the bar of a shoe rest on the frog, when the whole of the frog is destroyed, or rotted away with the disease. The least pressure with the finger on the decayed part, will be painful to the horse and cause him to flinch. I write upon the principles of long experience, and not on the vision of theories and diplomas. The object I have in view, is to prevent the owners and lovers of horses from being imposed upon, and as they generally are, and not for my own emolument or agrandizement. As to horses dying with the bots, almost every superannuated old woman knows that the bots destroy numbers of fine horses. But to return to the subject of the horses feet: when a horse is discovered to have a violent running thrush in his feet, no attempt should be made to put an immediate stop to

the discharge, because it is an effort in nature to relieve itself from its infirmities. It is supposed to originate from a disordered state of the fluid system, and is an outlet of foul matter, in order to renovate, or purify the general mass of blood; therefore no drying washes should be applied before the horse has been bled, and a purging ball given him; he should likewise have a few diuretic balls, and the frogs should be daily washed clean with castile soap and rain water. When the thrush has been long neglected, it is apt to produce a canker; in order to prevent which the following wash should be applied.

Take spirits of wine and vinegar, of each two ounces; tincture of myrrh and aloes, each one ounce; ægyptiacum, half an ounce; mix them together and bathe the frogs with it twice a day.

If, after all that has been done, a canker should take place, and the foot prove to be rotten, apply strong oils, such as vitriol, aqua fortis, and butter of antimony till the fungus is destroyed. Apply this daily, and it will keep down the rising flesh. A little fine precipitate powders should be sprinkled over the new grown flesh until the sole begins to grow anew.



CHAPTER XXXIII.

Of the diseases of the Feet.

THE feet of horses are subject to a variety of diseases, such as hoof bound, narrow heels, and corns. Many of these complaints are brought on by bad shoeing; but there are others which are natural, and often incurable. It may naturally be supposed that no person can be more capable of forming a correct and proper judgment of the horses foot, than an old and experienced shoeing smith; and there are a few such characters in this city, and but few. The greater part of them have never made the anatomy of the foot their study. They are generally employed as journeymen, and like birds of passage, are here to-day and gone to-morrow. Talk to them of the internal structure of the foot, of the coffin, and coronet bones, and you will find them entirely ignorant, and know no more about the matter than the horse knows about them.

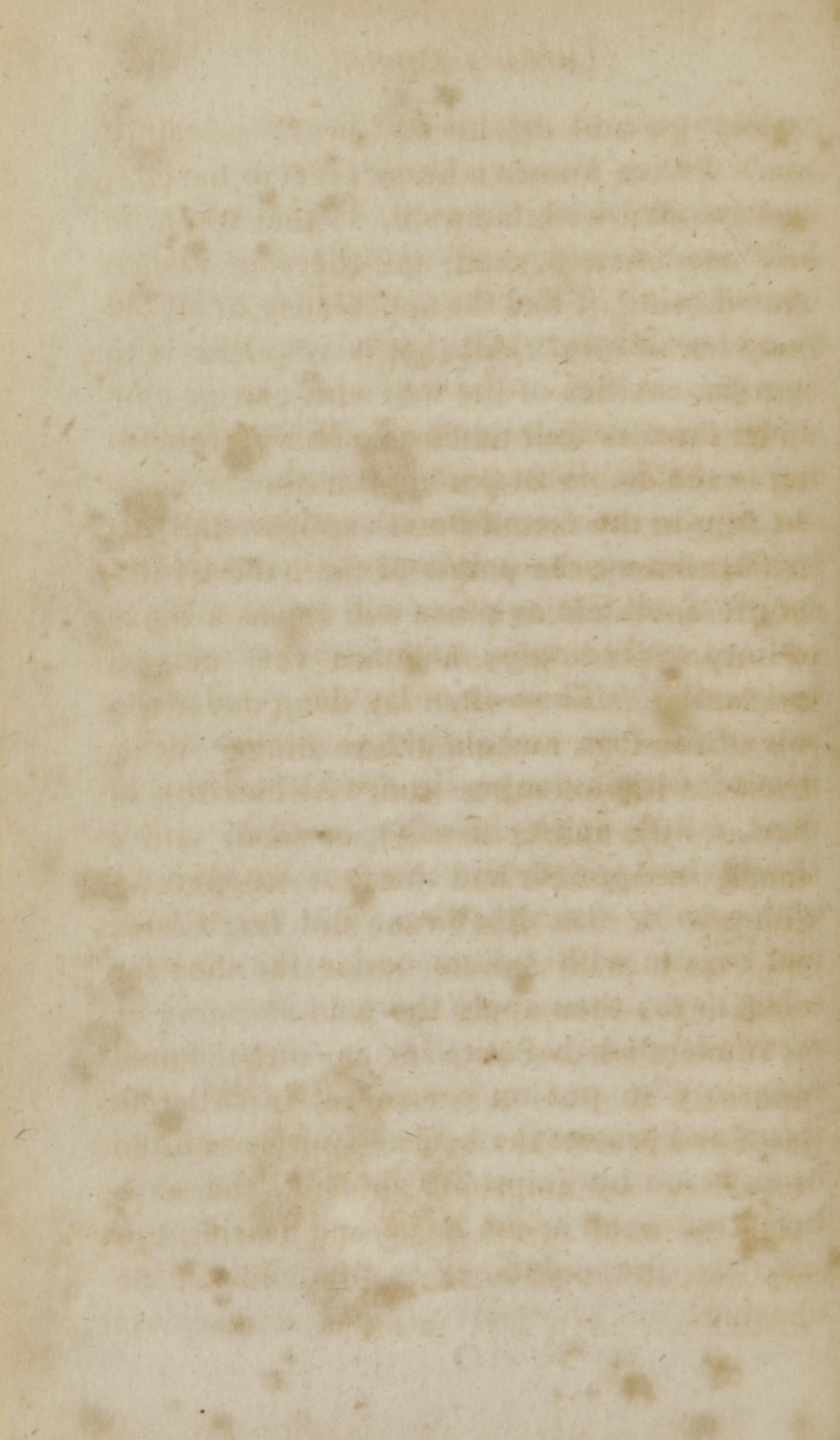
A horse may be said to be hoof bound when his foot is contracted; that is, too small

in proportion to his body. The heels are narrow, and drawn almost together. The horny soal will be found to be exceeding hard and dry. When this is the case, the hoofs should be opened with the butteriss and drawing knife ; but the points of the heels should not be cut away. What is called the outer soal of the foot, will often become bound, and so constructed, that it will press on the inner and fleshy soal, and cause lameness. When this is the case, the foot should be stopped with cow dung, or a poultice made of bran and hog's lard, and bound on the foot. It has been my opinion for many years, that oiling the horse's feet is an erroneous practice and ought not to be pursued, as it has a tendency to stop the perspiration, or circulation of the blood that is constantly moving through the whole foot. The oil will likewise cause the dust to adhere to the foot, and stick to it like glue or paste, consequently the pores must be closed. All that should be done is to follow up nature as near as possible, and apply remedies similar to those the feet would partake of if the horse was out at pasture.

We never saw a tub of oil placed out in a field for a horse to go and plunge his feet into ; but supposing this to be the case, is it reasonable to suppose that he would delib-

erately go and dip his feet in it? certainly not. I have known a horse's feet to be constantly oiled with lamp oil, so that when he had been newly shod, and the foot rasped after shoeing, it had the appearance of an old rusty bar of iron. All that is requisite is to stop the cavities of the feet with clay or cow dung, three or four times a week when standing in the stable in perfect health.

Corns in the feet of horses are generally to be found near the points of the heels of the fore feet, which at times will cause a horse to limp exceedingly; and are very painful and tender. They often lay deep under the sole of the foot, and should be drawn out or opened with a razing iron. When this is done, a little spirits of salts, or oil of vitriol should be applied, and the foot stopped up with tow or flax dipt in tar and hog's lard, and kept in with splints under the shoe for a few days; then apply the cold stopping as recommended before. It is often found necessary to put on bar shoes, in order to guard and protect the heels. Corns are often brought on by improper shoeing, the shoe being too weak at the heels, and bearing too hard on the points. See the chapter on shoeing.



CHAPTER XXXIV.

Of Colds.

HORSES, as well as human beings, are subject to colds. When a horse has taken a cold he frequently coughs and appears dull and heavy, more or less, according to the severity of the cold. His eyes are at times moist and watery. The kernels about the ears, and under the jaws swell, and the nose gleans, together with a rattling in breathing. When the cold is violent, he will be feverish; his flanks work quick, loathe his food, and at times, water. When these symptoms are attended with a slimy mouth, ears and feet cold, and great inward soreness, they are evident symptoms of a bad fever.

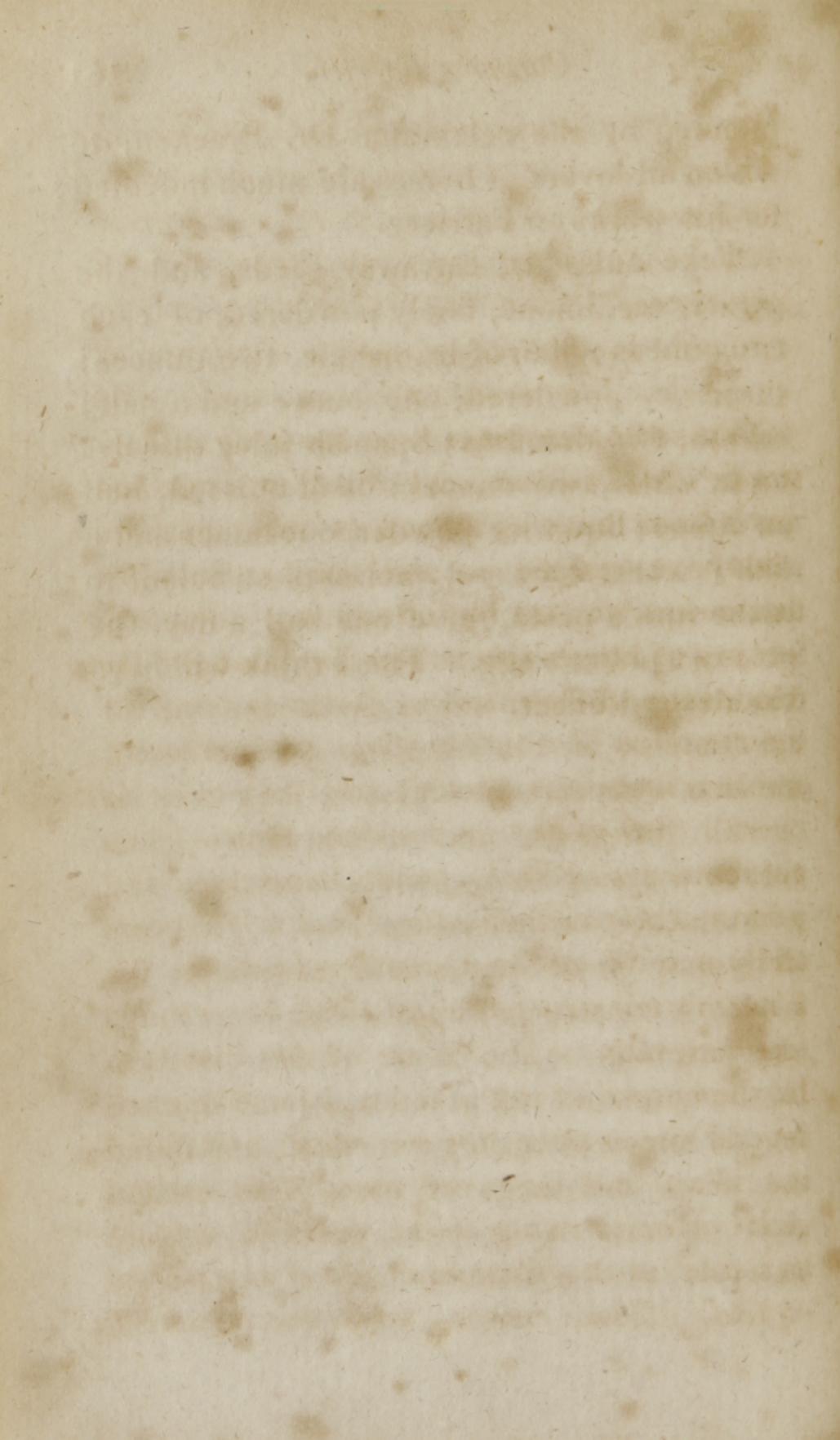
When a horse is in perfect health, the pores and outlets of his skin are constantly breathing out a fine fluid steam, like that from hot water, or smoke from a fire; but when he is in the state as before described, the pores are closed or locked up; the perspirable matter has not a free passage, and are pre-

vented from going off; they recoil on the blood, vitiating its quality, and overflowing the vessels; affects the head glands, or kernels of the neck and throat, and other principal parts of the constitution. But if the horse coughs strong, snorts after it, loses but little of his appetite, pricks up his ears, moves freely in the stall, dungs and stales freely, and his coat does not stare, there is little or no danger to be apprehended; he will require no medicines. If he is strong, take about three quarts of blood from him, and give him warm messes of shorts; add an ounce of nitre to his drink two or three times a day. If the disorder should increase, the horse feel hot, and refuse his feed, take again two quarts more of blood, and give the following drink:

Infuse three ounces of aniseeds with two drachms of saffron, in three half pints of water: add to it four ounces of honey, to which put four spoonsful of sweet oil. This drink should be given every night. If the horse be costive, his body should be kept open with emolient clysters, or cream of tartar dissolved in his drink, and taken in quantities of three or four ounces a day: or, take the following excellent cordial ball, as recom-

mended by the celebrated Dr. Bracken, to whom all lovers of horses are much indebted for his works on Farriery.

Take aniseeds, carraway seeds, and the greater cardimons, finely powdered, of each two ounces ; flour of brimstone, two ounces ; turmeric, powdered, one ounce and a half ; saffron, two drachms ; Spanish juice dissolved in water, two ounces ; oil of aniseed, half an ounce ; liquorice powder, one ounce and a half ; wheat flour and molasses sufficient to make into a paste, give one ball a day, the size of a pullet's egg. This I think will have the desired effect.



CHAPTER XXXV.

Of a Broken Wind.

THIS disorder seems to be little understood. Mr. Gibson, who had obtained as much knowledge of horses, as most authors who have treated on the subject, thought that it was caused by injudicious, or hasty feeding of horses when they are young. By this means, the growth of the lungs, and all the contents of the chest are so increased, and in a few years become so enlarged as to overfill the chest, and consequently leave not room enough to expand themselves and perform their ordinary functions. This certainly may be deemed sound reasoning; for a narrow constructed chest, with large lungs may naturally be the cause of this disorder. In the course of my practice, I have opened several horses after they were dead, and found the heart and lungs of more than natural size. Horses rising eight years of age are as liable to this distemper as at any period of life. The reason why this disorder

becomes more apparent at this age, is because the horse comes to his strength and maturity. At six years he commonly finishes his growth in height, and lets down his belly, and all his parts are grown to their full extent ; so that the pressure on the lungs and midriff are more increased.

The disproportion of the lungs have been observed to be almost twice their natural size, but perfectly secured, and without any ulceration or defect in the windpipe, or glands : It therefore appears that the enormous size of the lungs and the space they occupy, by preventing the free action of the midriff, is the cause of this disorder ; and as the lungs are thus enlarged, they must of course lose a great deal of their spring and tone.

When we consider a broken wind in this point of view, it must be said to rank among the incurable diseases of horses ; and all the boasted pretensions to cure are vain and without foundation ; and can amount to nothing more than palliating the symptoms, and mitigating their violence, so as to render the horse as useful as possible under this afflicting malady. It is generally the case, before a broken wind appears, that the horse has a dry, obstinate cough, without the ap-

pearance of sickness or the least symptoms of his having lost his appetite ; but on the contrary, he craves food, and will eat foul litter, and drink a great deal of water.

When this is discovered to be the case he should immediately be bled to the quantity of three quarts, and a strong purging ball should be given him, and repeated two or three times. By this method, I believe the disease may be prevented : at least my experience has proved it to my satisfaction.

I wish to recommend the following balls for the purpose : Take gum ammoniacum, galbanum, and assafœtida, of each two ounces ; squills, four ounces ; cinnabar of antimony, six ounces ; saffron, half an ounce ; make into balls with honey, and give the quantity of a pullet's egg every morning.

Broken winded horses should have their hay and oats sprinkled with chamber lie, or fair water : and I have seen them greatly relieved by being constantly fed on potatoes. Garlick is likewise found to be of great assistance to the wind. They should be carefully fed and moderately exercised.

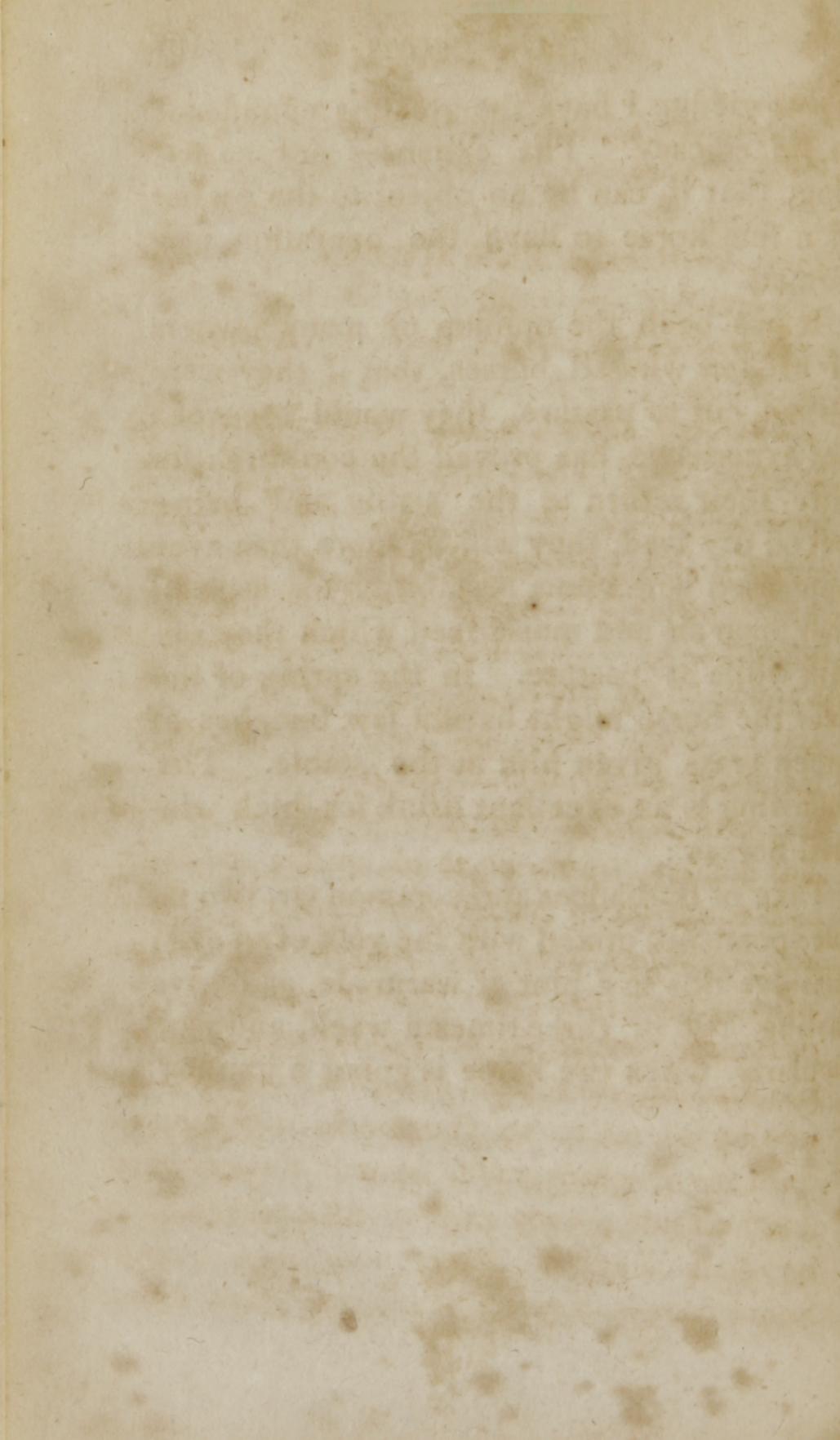
I recollect when I was a young man, to have seen a singular experiment performed on a mare, belonging to a gentleman who

held her in high estimation. She was one of the most beautiful creatures in creation but was exceedingly broken winded. It was the opinion of an old experienced farrier, that if the wind or air could be brought off the lungs by any other conveyance than by the nostrils or mouth, it would give relief to the animal. Accordingly there was a leaden pipe constructed of about twelve or sixteen inches in length, very thin, and about a half an inch in diameter ; at one end of which it was turned over a little, so as to form a foot, with small holes pinched round so as to admit a needle. When every thing was prepared and ready for the operation the mare was thrown down, and the old doctor made an incision just above the fundament, so as to miss the gut called the rectum through which the excrements pass from the body. The leaden pipe was then introduced, over the gut, and sewed in with a strong double silk thread. This had the desired affect: the air rushed back through the pipe, and the animal could not be perceived to be broken winded. I saw the mare several years after, and she bore every appearance of a sound horse. I should like to try the experiment myself, for I must

acknowledge I have the greatest confidence in its efficacy. The expenses are so trifling, that it can be no object to the owner of a fine horse to have the operation performed.

It has been the opinion of many owners of broken winded horses, that if they were turned out to pasture, they would recover : but experience has proved the contrary ; for after their return to the stable and being put on dry feed, they will be more than ever oppressed with short breathing, for want of that open air and moist feed which they obtain while at pasture. In the spring of the year the horse might have a few bunches of green grass given him in the stable. The following is an excellent drink for thick winded horses :

Take of Barbadoes and common tar, two table spoonsful, mixed with the yolk of an egg ; dissolve this in a pint of warm ale, and give fasting two or three times a week, and particularly when the horse is going a journey.



CHAPTER XXXVI.

Of Surfeits, Hide-bound, and Mange.

THIS is a disorder that horses are subject to in all countries, when they are kept in a domesticated state : it arises from different causes, and is often brought on by some old complaint that has not been properly attended to and cured. A horse may be known to be Surfeited when his coat stares and he looks rusty and dirty, although care may have been taken to keep him clean :— the skin will be found to be full of scales and dander, which lie thick among the hair, and come on in succession until they form little bunches over the body and limbs as large as peas ; at other times there will be a moisture, attended with great heat and inflammation, and will cause so violent an itching as to make the horse rub himself until he becomes raw ; he will have a very unwholesome look, and it will cause him to be dull, sluggish lazy, and hide bound. Some horses appear lean, and have flying

pains that will cause lameness, similar to that occasioned by the rheumatism, with a species of the scurvey; when a horse is afflicted with this disorder he should be bled two or three quarts, after which give the following ball:

Take of sucotrine aloes one ounce; gum guaiacum, half an ounce: diaphoretic antimony, two drachms; myrrh, two drachms, and make them into a ball with molasses. This ball should be repeated once a week or at farthest every ten days, for some time; during the intervals give the alterative powders, as recommended in the chapter on alteratives.

When a horse is discovered to have the Mange, his skin is tawney, thick and full of wrinkles about the mane, the loins and the tail; and the little hair that remains, stands almost straight up. The ears and eyebrows are often quite naked: and when the limbs, are attacked, it causes them to have the same appearance, and they will feel hot and inflamed. This distemper is contagious and is frequently caught by infection.

I have known men who have taken care of horses with the mange to have caught the itch from them. This disorder is often con-

tracted by poverty, and low feeding. When this is the case, the horse must be better fed, in order to mend the blood, and the following ointments rubbed every day into the parts affected.

Take powdered brimstone, train oil, and tar, equal quantities, to which may be added ginger, or white hellebor : or, take quicksilver and oil of vitriol, of each one ounce ; hog's lard, one pound ; sulphur of brimstone, four ounces. At the time the horse is rubbed, he should have two or three ounces of sulphur of brimstone given him in a day.

When a horse in labouring under this disease, by taking a microscope and looking at him through it, you may discover a number of small live insects in the pustules.

The following piece was published in this city (New York) in the public newspapers in July 1818. I have thought proper to give it a place in this work for the benefit of the public, as this may probably be the last time they may hear from me on the subject of that most excellent and noble animal the horse ; wishing that my fellow beings called *man*, may perform their duty through life as well as the beautiful creature I have just mentioned, and long admired, and endea-

voured to relieve when in distress, and to protest against the brutality of the worst of all animals, *Man*.

It is a well known fact, that many coachmen and grooms, who have the charge or care of horses committed to them, are continually administering pernicious drugs, or medicines, or, what is called *spiceing* horses, which has a tendency to inflame the blood and ultimately destroy the constitution of the horse. This treatment will cause them, for a time, to grow fat, make them high spirited, and the coat to look fine, but it often happens, that the servants who have given these medicines quit their places, and their successors omit to continue them, the consequence is—the horse falls off, loses his appetite, and nothing can restore him to his former state of health. He will appear like a person that has been in the habit of drinking ardent spirits.

When a veterinary surgeon is called on to attend a horse in this situation, it baffles all his experience to find out the horse's disorder and the person who administered these medicines takes care to conceal from the farrier the cause of the complaint. A large portion of these drugs have lately been found con-

cealed in the stable of a gentleman of this city. Many of the hackney masters have suffered greatly by this practice ; and Mr. Yates, Maidenlane, in particular, who gives me the liberty of using his name. The late Lord Pembroke, who was the admirer and lover of the horse, and who studied the constitution and economy of that noble animal, remarked, that "any gentleman who permitted his groom to give his horses any thing but gruel and mashes, would soon find himself on foot." It is transportation, in England, for any man to administer spice to a horse belonging to another person.

It has been my intention for some time past, to write something on this subject, that the owners of horses might not be thus imposed upon. The public and my fellow citizens at large, may rely with confidence that I have stated truths. Facts are stubborn things.

Great care and caution should be observed by those who purchase horses from the hands of persons called dealers, or horse-jockeys.

If gentlemen will take the trouble to go into their stables at the time their horses are feeding, they may discover by smelling their

breath or the mangers, whether they are spiced or not.

I have introduced into this work, the advice of Dr. Bracken, to the purchasers of horses, believing that few men have had a better knowledge than him of the make or formation of the horse. Here the reader will find a description of the age of the horse, by his teeth, together with references to the plate for further information on the subject.

It is acknowledged by experienced shoeing smiths in this city (and there are but few) that the chapter on shoeing is perfectly correct, and the best that can be given on the subject, and will stand the test of the strictest scrutiny of any college bred gentleman.

I perfectly agree with my friend Mr. James Carver, veterinary surgeon, from the Farrier's college at London, that the smiths called horse shoers, are generally ignorant of their business, in consequence of which they ruin many thousands of fine horses in shoeing them. They are so tenacious of their own opinions, and so perverse, through ignorance that they will not be taught. Since I have given up the business of horse shoeing, I have frequently, at the solicitation of gentlemen, gone to smith's shops and shod their

horses, in order that they might travel sound. In many instances of this kind I have endeavoured to instruct smiths in the principles of shoeing; and this I have made as plain and as clear as their understandings would permit, or reason define; but the next time they attempted to shoe, they could not follow the plan—they would still cut down the heels, frogs, and bars of the feet, against which I have so much protested.

Attempts have been made to establish a Veterinary College in the United States, but all to no purpose. An institution of this kind could not fail to be of the utmost utility and importance, in cultivating that valuable science, veterinary surgery; but at this time, it appears to me impracticable. Mr. Carver, some time since attempted to effect the establishment of one in N. York, but failed in the accomplishment of his object; I presume his son recollects the circumstances and the futility of his efforts.

I have perused, with considerable interest, Mr. James Carver's work on Farriery, and am clearly of opinion that his doctrines are sound. He reasons like a man of experience and sound judgment. I should like to hold a correspondence with him. His father and

myself were as intimate as brothers, and I regret the loss of his friendship and associations.

In this edition as in the former one, I presume it will be found that I have used every endeavour to simplify my doctrines, and render them plain and comprehensive to the most ordinary capacities. If I have committed any orthographical or grammatical errors, or erred in any shape on the principles of the veterinary art, or farriery; I shall ever be ready to retract those errors, and return my sincere acknowledgements to those who may point them out to me.

CHAPTER XXXVII.

Diseases of the Mouth and Tongue.

THE present contagious disorder, that prevails among horses in Pennsylvania, and different parts of the United States, originates from an inflammation of the lungs and throat, attended with a violent fever, difficulty of breathing and loss of appetite ; the head and throat greatly swelled, the jaws stiffened, and the tongue swelled, and looking like that of a person having the yellow fever or the small pox, the pulse will beat fifty strokes a minute instead of forty, as it should do in a state of good health. I believe the cause of this mortal disease originates from the feed that horses eat, and not from the air, as some physicians have imagined : there is an herb or weed that grows in the fields with the grass, called John's-wort, that is possessed of a great quantity of mercurial properties ; I have seen horses after they had eat it in the fields or in their hay, almost salivated with it ; their tongues have been greatly swollen,

and large quantities of slime, and water has continued to run from their mouths for hours after they had partook of it.

As soon as the horse is found to be attacked with this disorder, no time should be lost in attempting to give relief, to effect which, four quarts of blood should be taken from the jugular vein of the neck, and one quart more the next day; if the blood is found to look black as on the first time of bleeding, two quarts may be taken: in half an hour after the horse has been bled the first time, give him half a pint of the best castor oil, and half a pint of sweet oil, two ounces of balsam of capivi, two ounces of sweet spirits of nitre, mixed together in a bottle; if the mixture cannot be put down the throat, it must be poured down the nostrils, the horse's head being raised up; and sweet oil should be rubbed in all over the head and throat—to make a gargle for the mouth and throat, take half a pint of sweet oil, one pint of the best vinegar, quarter of a pound of honey, one ounce of alum finely powdered, simmer them together over a slow fire, then make a kind of a mop, of a sponge put on a stick, and apply the mixture to the mouth and tongue, letting it go down the throat as much

as possible ; this should be done every hour. In six hours after the foregoing drink has been given, give the purging ball, as described in chapter II. of this work, with the addition of two ~~drachms~~ of corrosive sublimate powdered and mixed with the ball—if the mouth is closed, dissolve the ball in a pint of warm ale and give it as a drink ; repeated clysters should be administered every hour, two quarts at a time, composed of sweet or linseed oil, molasses and warm water ; three or four rowels should be introduced, dipped in ointment made of Venice turpentine, hog's lard, and a small portion of Spanish flies, to bring on a quick suppuration or discharge ; at the same time, give the horse warm gruel every hour.

The following remedy has proved very successful in cases where the attack has not been very severe :—give the horse one pint of sweet oil and one pint of castor oil mixed together, if it cannot be given down the throat, owing to its being too much swollen it must be poured down the nostrils, raising the head for that purpose, and warm clysters should be given every hour made of sweet oil, molasses, soft soap, and warm water ; a large handful of squa root should

be boiled in four quarts of water, until it is reduced to three quarts, and then put in the manger boiling hot, and the horse compelled to hold his head over it; blood should not be taken unless the pulse beats fifty strokes a minute. A wash for the mouth should be immediately made, composed of a pint of sweet oil, a pint of strong vinegar, half a pound of honey, two ounces of alum, and two ounces of powdered nitre, and simmered over a slow fire until they incorporate, when a swab should be dipped in the mixture and applied every hour to the mouth and throat.

Sweet oil is one of the best antidotes against all kinds of poison, and poisonous insects; I saved the life of a woman a short time past, by pouring a gill of sweet oil down her throat after she had taken a portion of oil of vitriol, mistaking it for sweet spirits of nitre. The owner of a fine horse lately gave him a pint of spirits of turpentine, for the belly-ache, as he supposed, (one half gill is enough for a horse, mixed with other ingredients) I poured a pint of sweet oil down the horse's throat, and he soon got well : if a wasp or hornet is touched with a feather dipt in sweet oil, they will immediately turn black and die; there is no doubt but it would destroy all kinds of

poisonous reptils,—I presume it would be the best remedy to apply to a wound occasioned by the bite of a mad dog. I have shewn the effects of this sovereign remedy in a few instances, and could enumerate many more that have come within my knowledge.

Q

CHAPTER XXXVIII.

Nicking, Docking, and Cropping.

THESE are surgical operations, and require both care and judgment in the performance. Nicking is performed, by cutting asunder the sinews that are on each side of the bottom of the horse's tail, in three or four places, leaving a space of about two or three inches between each cut : but it should be observed, not to make the first cut too nigh the fundament, as there is most danger after the nicking has been performed, and the blood stopped for eight or ten hours. The wounds should be dressed with drawing ointment, such as basilicon, &c. in order to bring on a discharge or suppuration, of good thick white matter ; but all horses should be physicked and bled before nicking, to bring their blood into a good state. It is not attended with much difficulty to nick a horse, but it is often attended with trouble to cure him. The operator should always have the horse under his own immediate care, and not suffer

any one to meddle with the tail—as many horses have died by the operation, although they have been committed to the most experienced surgeons and farriers. When the tail is put to the pulleys, the weights should not be too heavy—and the tail should be let down about twice a day, and examined, to see if it discharges properly; and, at the same time, it should be washed with cold water, or sugar of lead water. The horse should be kept on low diet, and exercised once a day, and have nitre given him in his messes or water.

Docking, is taking off part of a horse's tail; which at times is performed, by laying the tail on a block of wood, and striking it off with a chissel—or by placing an axe, on a block, and laying the tail on the edge of the axe, and striking the tail with a mallet—but this must both bruise and cut the tail at the same time: but the best instrument for the purpose is somewhat like a pair of shears, with long handles, only the rivet is at one end, and the knife falls into a groove. When the amputation is performed, the tail should be well held up, before the burning iron is applied, which at times will cause the horse to carry a good, or high tail, so that he

will not require nicking: it will be best to keep the tail washed, a few days after docking, with cold water. If it should be found difficult to stop the blood, although the tail has been seared with the hot iron, with a little powdered rosin melted on with the burning iron, there may be strong twine thread tied round tight, about an inch from the end, but this must be taken off in a few hours, or it will cause the tail to swell, and be inflamed.

Cropping, is best performed with a pair of irons, called cropping irons, as they will best cause the ears to represent nature. Young practitioners who have cropped horses, have been alarmed to observe the outside skin of the ear drop away from the gristle, and likewise by the flowing of blood; but nature has constituted the blood as a balsam, so that nothing should be applied after the ears are taken off, and the skin will return to its proper place, without any further trouble.

Notwithstanding I have given the preceding advice, it has ever been my wish to preserve the horse from the cruelty and barbarity of man. The docking and nicking of horses is a cruel practice, and ought to be

abandoned by the whole race of mankind. The scriptures tell us that "a righteous man regardeth the life of his beast; but the tender mercies of the wicked are cruel."—Proverbs xii. v. 10. Every human being, possessed of a feeling heart and magnanimous mind, must confess that both the docking and nicking of horses is cruel;—but that creature called man, attempts thus to mend the works of his almighty wise Creator, and in the execution of which, he frequently spoils and disfigures them. What is more beautiful to the view, than to behold a fine horse with an elegant long tail, and flowing mane waving in the sports of the wind, and exhibiting itself in a perfect state of nature? Besides, our Creator has given them to the horse for defence, as well as beauty. If the poor animal was endowed with the power of speech, he would say to his cruel oppressors, "why deprive me of the faculties with which nature has gifted me;—I could serve you better with than without them; and by taking them from me, you pay but little regard to my life and feelings! O, cruel master!"

At times there is great danger in both these operations;—many fine horses have died in consequence of them, setting aside

the extreme pain the poor animal must endure.

In the course of my practice I had one fine horse that died by nicking, although every care and attention was paid to effect his recovery ; and I have known many others to die that had been nicked by able and experienced farriers.

Two years ago, a gentleman placed under my care a horse that had been docked by a blacksmith who had permitted the wound close up without a suppuration being brought on. This consequently produced a violent fever ; his muscles became stiffened, and it was with the utmost difficulty that he was preserved from lock jaw. This was done by bleeding, purging, clystering, and fomenting his loins with strong decoctions of herbs, together with blisters and alterative powders. At length, after much pains and trouble, the horse recovered sufficiently to be turned out to pasture, and was finally restored to perfect health.

About twenty years ago, William Constable, esqr. arrived in this country, and brought over with him several fine English horses. He was much of a gentleman, and the poor man's friend ; a lover and judge of

horses. I attended several of his horses under different complaints ; he always appeared perfectly satisfied, and would insist on paying me more than I demanded. He once told me that he owned as fine a horse as ever was mounted ; and in hunting, he would carry him over the highest five bar gate, with ease ; but he thought the horse did not carry so good a tail as he wished ; he therefore had him nicked, and when the horse got well, he could scarcely carry him over two bars. Thus said he, I have spoiled a fine horse, and no wonder, for it weakened him in the loins.—So much for nicking his horse.

A clergyman, a few miles from the town I was born in, took his horse to a blacksmith to have him docked, and held the horse by the twitch while the animal was undergoing the operation. Just at this time an old miller came in, and said, “ why sir, has not the Almighty made the horse good enough for you, that you must alter him.” The person was struck with astonishment and made no reply, and well he might.

The French and Russians never cut, dock, nick, or crop their horses ; for they say they will have none but whole horses.

This conduct redounds much to their honour and humanity.

The reader must observe that I have made these remarks contrary to my pecuniary interest ; but I always, from my childhood, loved and admired a horse, and if I can prevent only one owner of a horse from performing this brutal practice on the animal, my wishes, in some measure, will be gratified.

APPENDIX.



ADVICE TO PURCHASERS OF HORSES.

[BY DR. BRACKEN.]

Nothing is more true than the common observation, that in the art of horsemanship, the most difficult part is that of giving proper directions for the purchasing a horse free of fault and blemish. The deceptions in this branch of traffic being looked on in a less fraudulent light than they seem to deserve, and of consequence are more frequently practised. It shall therefore be my business in the following brief remarks, to shew, in the best manner I am able, the imperfections, which, from either nature or mischance, every horse is liable to.

In the Stable.] See the horse you are about to purchase in the stable, without any person being in the stall with him; and if he has any complaint in his legs he will soon show

it, by altering the situation of them, taking up one and setting down the other; and this denotes his being foundered or overworked.

On ordering him out, let no one be the last in the stable but yourself; you should also, if possible, be the first in, lest the owner, or some of his quick emissaries, take an opportunity to fig him; a practice common among dealers, in order to make the tail shew as if carried very high, when, in reality, the day after, he will in appearance be five pounds worse.

The Eyes.] This is the proper time to examine his eyes, which may be done in a dark stable with a candle, or rather in the day-time when he is led from the stall; cause the man who leads him to stop at the stable door just as his head peeps out, and all his body is still within. If the white of the eye appears reddish at the bottom, or of a colour like a withered leaf, I would not advise you to purchase him. A moon-eyed horse is known by his weeping, and keeping his eyes almost shut at the beginning of the distemper: as the moon changes, he gradually recovers his sight, and in a fortnight or three weeks sees as well as before he had the disorder. Dealers, when they have such a

horse to sell, at the time of his weeping, always tell you that he has got a bit of straw or hay in his eye, or that he has received some blow: they also take care to wipe away the humour, to prevent its being seen; but a man should trust only himself in buying of horses, and above all be very exact in examining the eyes: in this he must have regard to time and place where he makes the examination. Bad eyes may appear good in winter, when snow is upon the ground; and often good ones appear bad, according to the position of the horse. Never examine a horse's eyes by the side of a white wall, where the dealers always choose to shew one that is moon-eyed.

The moon-eyed horse has always one eye bigger than the other, and above his lids you may generally discover wrinkles or circles.

If you observe a fleshy excrescence that proceeds from the corner of the eye, and covers a part of the pupil, and is in shape almost like the beard of an oyster, though seemingly a matter of no great consequence, yet it is what I call a witlow in the eye, and if suffered to grow, it draws away a part of the nourishment of the eye, and sometimes

occasions a total privation of sight. On the contrary, if the eyes are round, big, black and shining; if the black of the eye fill the pit, or outward circumference, so that in moving very little of the white appeareth, they are signs of goodness and mettle. The eye which in general is esteemed the best, is that which is neither small nor large; but be sure to observe that the crystalline be thoroughly transparent, for without that, no kind of eye can be said to be good.

Countenance.] After having carefully satisfied yourself as to his eyes, let him be brought out, and have him stand naked before you; then take a strict view of his countenance, particularly with regard to the cheerfulness of it, this being an excellent glass to observe his goodness and best perfections. Be careful you are not deceived by the marks in his face, as frequently a goodlooking star is made of cat's skin. If his ears be small, sharp, short, pricked, and moving; or if they are long, but yet well set on, and well carried, it is a mark of goodness; if they are thick, laved, or lolling, wide set, and unomoving, they are signs of dullness and of an evil nature.

A lean forehead, swelling outward, the mark

or feather in his face set high, with a white star or ratch of an indifferent size and even placed, or a white snip on the nose or lip, they are all marks of beauty and goodness : on the contrary, a fat, cloudy, or frowning countenance, the mark in his face standing low, as under his eyes, if his star or ratch stand away, and instead of a snip his nose be raw and unhairly, or his face generally bald, they are signs of deformity.

Strangles.] Handle his cheeks, or chaps, and if you find the bones lean and thin, the space wide between them, the thropple or windpipe as big as you can gripe, and the void place without knots or kernels, and the jaws so great that the neck seemeth to couch within them, they are all signs of great wind, courage, soundness of head and body ; on the contrary, if the chaps are fat and thick, the space between them closed up with gross substance, and the thropple little they are signs of short wind and much inward foulness. Should the void place be full of knots and kernels, beware of the strangles or glanders, the former of which may be easily discovered by a swelling between the two nether jaw-bones, which discharges a white matter. This disorder

usually appears at about three, four or five years old; there is no young horse but what is subject to it, either perfectly or imperfectly: there is also a disorder which is called the bastard strangles, which appear sometimes like, and sometimes different from the true strangles. The bastard strangles are what prove the horse has not thrown off his true strangles, but that some foul humours are still left behind; this disorder may come at four, five, six or even seven years of age. A continual langour at work, and seemingly perpetually weary, without any visible ailment, is a certain sign that he is not clear of this disorder, which sometimes will affect the foot, the leg, the ham, the haunch, the shoulder, the breast or the eye, and without care in this latter case, may corrupt the pupil of the eye, as the small pox does in men.

Morfoundering] There is also another disorder, much like the strangles, which is called Morfoundering, and appears by a running at the nose; but the swelling under the jaws is less.

Glanders.] The glanders are discovered by a running at the nose, either on the one side or the other: Feel if he has any flat

glands fastened to the nether jaw, which give him pain when you press them ; and remember that a running at one nostril is worse than at both.

Vives.] When the jaws are strait so that the neck swelleth above them, it is a sign of short wind ; but if the swelling be long, and close by his chaps, like a whetstone, then be sure he has the vives, which is a distemper most frequent in high mountainous countries, especially to horses that are not used to the crudities produced in the stomach by the spring and fountain waters that rise in hilly grounds ; standing waters, or those of very little current, are the least dangerous, and seldom cause the vives ; but very deep wells are bad.

Nostrils.] If his nostrils be open, dry, wide, and large, so as upon any straining the inward redness is discovered ; if his muzzle be small, his mouth deep, and his lips equally meeting, they are signs of health and wind : but should his nostrils be strait, his wind is then little. Should you find the muzzle to be gross, his spirit will be dull.

If his mouth be shallow, he will never carry the bit well ; and if his upper will not reach

his under lip, old age and infirmity mark his or carrion.

Age.] Respecting the age of a horse that is fit for work, he should have forty teeth : twenty-four grinders, which teach us nothing ; and sixteen others, which have their names, and discover his age. As mares usually have no tusks, their teeth are only thirty six. A colt is foaled without teeth ; in a few days he puts out four, which are called pincers, or nippers ; soon after appear the four separators, next to the pincers : it is sometimes three or four months before the next, called corner teeth, push forth. These twelve colt's teeth, in the front of the mouth, continue without alteration, till the colt is two years, or two years and a half old, which makes it difficult, without great care, to avoid being imposed on during that interval, if the seller finds it is his interest to make the colt pass for either younger or older than he really is ; the only rule you have then to judge by is his coat, and the hairs of his main and tail. A colt of one year has a supple, rough coat, resembling that of a water spaniel, and the hair of his main and tail feels like flax, and hangs like a rope untwisted ; whereas a colt of two years has a flat coat, and strait hairs, like a grown horse.

At about two years and a half old, sometimes sooner, sometimes later, according as he has been fed, a horse begins to change his teeth. The pincers, which come the first, are also the first that fall; so that at three years he has four horse's, and eight colt's teeth, which are easily known apart the former being larger, flatter, and yellower than the other, and streaked from the end quite into the gums.

These four horse pincers have, in the middle of their extremities, a black hole, very deep; whereas those of the colt are round and white. When the horse is coming four years old, he loses his four separators, or middle teeth, and puts forth four others, which follow the same rule as the pincers. He has now eight horse's teeth and four colt's. At five years old he sheds the four corner, which are his last colt's teeth, and is called a horse.

During this year also, his four tusks (which are chiefly peculiar to horses) come behind the others; the lower ones often four months before the upper; but whatever may be vulgarly thought, a horse that has the two lower tusks, if he has not the upper may be judged to be under five years old, unless the other teeth show the contrary;

for some horses that live to be very old, never have any upper tusks at all. The two lower tusks are one of the most certain rules that a horse is coming five years old, notwithstanding his colt's teeth may not be all gone.

Jockies and breeders, in order to make their colts seem five years old when they are but four, pull out their last colt's teeth ; but if all the colt's teeth are gone, and no tusk appear, you may be certain this trick has been played ; another artifice they use, is to beat the bars every day with a wooden mallet, in the place where the tusks are to appear, in order to make them seem hard, as if the tusks were just ready to cut.

When a horse is coming six years old, the two lower pincers fill up, and instead of the holes above-mentioned, show only a black spot. Betwixt six and seven the two middle teeth fill up in the same manner ; and between seven and eight the corner teeth do the like ; after which it is said to be impossible to know certainly the age of a horse, he having no longer any mark in the mouth.

You can indeed only have recourse to the tusks, and the situation of the teeth, of which I shall now speak.

For the tusks you must with your finger feel the inside of them from the point quite to the gum. If the tusk be pointed flat, and has two little channels within side, you may be certain the horse is not old, and at the utmost only coming ten. Between eleven and twelve the two channels are reduced to one, which after twelve is quite gone and the tusks are as round within as they are without ; you have no guide then but the situation of the teeth. The longest teeth are not always a sign of the greatest age, but their hanging over and pushing forward, as their meeting perpendicularly, is a certain token of youth.

Many persons whilst they see certain little holes in the middle of the teeth, imagine that such horses are but in their seventh year, without regard to the situation the teeth take as they grow old.

When horses are young their teeth meet perpendicularly, but grow longer and push forward with age ; besides, the mouth of a young horse is very fleshy within the palate and his lips are firm and hard : on the contrary, the inside of an old horse's mouth, is lean both above and below, and seems to have only the skin upon the bones. The

lips are soft and easy to turn up with the hand.

All horses are marked in the same manner, but some naturally, and others artificially. The natural mark is called Begne; and some ignorant persons imagine such horses are marked all their lives, because for many years they find a little hole, or a kind of void in the middle of the separators and corner teeth. But when the tusks are grown round, as well within as without and the teeth point forward, there is room to conjecture, in proportion as they advance from year to year, what the horse's age may be without regarding, the cavity above mentioned.

The artificial manner is made use of by dealers and jockies, who mark their horses after the age of being known, to make them appear only six or seven years old. They do it in this manner: They throw down the horse to have him more at command, and with a steel graver, like what is used for ivory, hollow the middle teeth a little, and the corner ones somewhat more; then fill the holes with a little rosin, pitch, sulphur, or some grains of wheat, which they burn in with a bit of hot wire, made in proportion

to the hole. This operation they repeat from time to time till they give the whole a lasting black, in imitation of nature ; but in spite of all they can do, the hot iron makes a little yellowish circle round these holes, like what it would leave upon ivory ; they have therefore another trick to prevent detection ; which is, to make the horse foam from time to time, after having rubbed his mouth, lips and gums with salt, and the crumb of bread dried and powdered with salt. This foam hides the circle made by the iron.

Another thing they cannot do, is to counterfeit young tusks, it being out of their power to make those two crannies above mentioned, which are given by nature. With files they may make them sharper or flatter ; but when they take away the shining natural enamel ; so that one may always know by these tusks, horses that are past seven, till they come to twelve or thirteen. As the defects of the mouth may destroy a horse without any distemper, I shall here just describe the barbs, the lampas, gigs upon the lips, and gag-teeth.

Barbs] For the barbs look under his tongue and see if he has not two fleshy excrescences

on the under palate, like little bladders. It seems to be a mere trifle ; but these however will hinder a horse from drinking as usual ; and if he does not drink freely, he eats the less, and languishes from day to day, perhaps without any one's taking notice of it.

Lampas.] The lampas is known by opening the horse's mouth and looking at his upper palate, to see if the flesh comes down below the inner teeth. This gives him pain in eating his oats, and even his hay, when it is too harsh, though he can very well manage bran, grass or kind hay.

Gigs upon the lips.] When you have looked into the horses mouth, without finding either of the two disorders above, turn up his lips both upper and under, and perhaps you may find several small elevations, like little white blisters, which make the inside of the lip uneven. This defect may be felt with the finger, and is what hinders horses from eating as usual ; and this is what is called gigs upon the lips.

Gag teeth] Gag teeth are a defect that rarely happens to young horses ; and are to be discovered by putting the colt's foot into the mouth, and looking at the large grinders which, in this case, appear unequal, and in

eating catch hold of the inside of the cheeks causing great pain, and making them refuse their food.

His breast.] From his head look down to his breast, and see that it be broad, out swelling and adorned with many features; for this shows strength. The little or small breast shows weakness; as a horse with a narrow one is apt to stumble.

The Articor or Anticow.] Put your hand between his fore legs, and feel if he has a swelling there from the sheath quite up between the fore legs: such a swelling is called the Articor, or Anticow, and is mortal to horses if they are not soon relieved. It proceeds from different causes viz. the remains of an old distemper which was never perfectly cured, or after which the horse was too soon put to labour, from too much heat, contracted in the stable, by being kept up a long time without airing, or from having lost too large a quantity of blood in what part soever the vein was opened. When you touch a swelling of this kind, the impressions of the fingers remain for some time as if you had made them in a bit of puff paste, filling up again by degrees, as the paste would rise. This swelling contains

bloody water, that insinuates between the flesh and the skin, and proves that all the blood in the veins is corrupted.

His Thighs and Legs.] From thence look down his elbow to his knee, and see that the fore thighs be rush grown, well horned within, sinewed, fleshy, and out-swelling; those being signs of strength, as the contrary of weakness. If his knees bear a proportion to each other, be lean, sinewy, and close knit they are good; but if one is bigger or rounder than the other, the horse has received mischief; if they are gross, he is gouty; and if he has scars, or the hair be broken, beware of a stumbling jade, and perpetual faller.

Splents.] From his knees look down his legs to his pasterns, and if you find them clean, lean, flat, sinewy, and the inward bought of his knee without seams, or hair broken, it shews a good shape and soundness; but if on the inside of the leg you find hard knots, they are splents, of which there are three sorts. The simple splent, which appears within the leg under the knee, remote from the great nerve and the joint of the knee, ought not to hinder a man from buying a good horse, for it gives him no pain, is

only disagreeable to the sight, and goes away in time of itself. All the three sorts of splents are known by the same rule; for whenever you see a tumour upon the flat of the leg, whether within or without, if it be under the knee, and appears hard to the touch, it is a splent; and when it is situated as above described, it signifies nothing; but when it comes upon the joint of the knee, without any interval, it loses the name of splent, and may be called a fusee: it then, as one may easily concieve, makes the leg of a horse stiff, and hinders him from bending his knee; consequently it obliges him to stumble, and even fall, and after a violent exercise makes him lame. Rest alone cures the lameness, but not the fusee.

The third kind of splent, whether within or without, is when you feel it between the nerve and the bone, and sometimes even at the end of the nerve; this is called a nervous splent, and is the worst of all the kinds; besides that, the horse is never here so firm footed, but that he limps at every little degree of labour. The French reject every horse that has a splent, very often without knowing how to distinguish them; and one that has only a simple splent, is as bad in

their eyes as one that has the other sort ; but a simple splent always goes away of itself by the time a horse is eight or nine years old.

Osselets.] There are also three kinds of osselets, which are of the same nature as splents, and some persons take them for the same thing ; but there is this difference, however between them, that splents come near the knees, and osselets near the fetlocks. Their seat is indifferently within or without the leg.

The first is the simple osselet, which does not grow near the joint of the fetlock or the nerve.

This need not hinder a man from buying a horse, because it puts him to no inconvenience and very often goes away of itself without a remedy. The second is that which descends into the fetlock, and hinders the motion of that joint : this occasions a horse to stumble and fall, and with a very little work to become lame. The third has its seat between the bone and the nerve ; and sometimes upon the nerve ; it so much incommodes a horse, that he cannot stand firm, but limps on every little occasion.

Windgalls.] There are also three kinds of windgalls, which appear to the eye much like

osselets, but are not however, just in the same places ; nor do they feel like them ; for osselets are hard ; but windgalls give way to the touch. Some horses are more liable to these than others, and that for several reasons. Some proceed from old worn-out sires, and others by being worked too young. A simple windgall is a little tumour, between the skin and the flesh, round the fetlocks. When it appears at a good distance from the large nerve, it does not lame the horse ; and if he has but age on his side, that is, be under ten years old at most, he will be nearly as useful as before, provided the work you put him to be not of the most laborious kind ; however, a horse is much better without than with even this sort of simple windgall, which consists of thin skins, full of red liquid, and soft to the touch. The nervous windgall answers the same description, only, as the simple one comes upon the fetlock, or a little above it, upon the leg bone, in the very place of osselets ; nervous ones come behind the fetlock, upon the great nerve which makes them of worse consequence, for they never fail to lame a horse after much fatigue. These windgalls may happen upon any of the legs ; but some of them are more dangerous than

others, in porportion as they press the nerve, and are capable of laming the horse ; and take notice, by the way, that windgalls are more troublesome in summer than in winter, especially in very hot weather, when the pores are all open. The third is the bloated windgall, and is of the worst sort, when they come over the hind part of the fetlock, between the bone and the large nerve, and make the horse so lame at every little thing he does, that he can scarce set his foot on the ground. They appear on both sides of the leg, without as well as within ; and when you touch them with your hand, or finger, they feel like a pig's or cow's bladder full of wind. If under his knees there are scabs on the inside, it is the speedy or swift cut, and in that case he will but ill endure gallopping ; if above the pasterns on the inside you find scabs, it shows interfering ; but if the scabs be generally over his legs, it is either occasioned by foul keeping, or a spice of the mange.

Pastern.] Take care that the pastern joint be clear and well knit together, and that the pastern be strong, short, and upright ; for if the first be big, or swelled, beware or sinew strains ; if the other be long, weak of

bending, the limbs will be hardly able to carry the body without tiring

Hoofs.] The hoofs should be black, smooth and tough, rather long than round ; deep, hollow, and full sounding ; for white hoofs are tender, and carry a shoe ill ; and a brittle hoof will carry no shoe at all : A flat hoof, that is pumiced, shows foundering ; and a hoof empty and hollow sounding, shows a decayed inward part, by reason of some wound or dry founder. If the hair lie smooth and close about the crown of the hoof, and the flesh flat and even, then all is perfect ; but should the hair be there rough, the skin scabbed, and the flesh rising, you may then be apprehensive of a ring bone, a crown scab, or a quitter bone.

Circled Feet.] Circled feet are very easy to be known : they are when you see little excressences round the hoof, which inclose the foot, and appear like so many small circles. Dealers who have such horses, never fail to rasp round the hoofs, in order to make them smooth ; and to conceal the rasping when they are to show them for sale, they black the hoofs all over ; for without that one may easily perceive what has been done ; and seeing the mark of the rasp is a proof

that the horse is subject to this accident. As to the cause, it proceeds from the remains of an old distemper, or from having been foundered, and the disease been cured without care being taken of the feet, whereupon the circulation of the blood not being regularly made, especially round the crown between the hair and the horn, the part loses its nourishment, and contracts or enlarges itself in proportion as the horse is worked. If these circles were only on the surface, the jockies' method of rasping them down would then be good for nothing; but they form themselves also within the feet, as well as without, and consequently press on the sensible part, and make a horse limp with ever so little labour. One may justly compare a horse in this situation, to a man that has corns on his feet, and yet is obliged to walk a long way on shoes that are too tight and stubborn. A horse therefore is worth a great deal less on this account.

[*Bow-legged.*] After having well examined the feet, stand about three paces from his shoulders and look carefully that he is not bowlegged, which proceeds from two different causes; first from nature, when a horse has been got by a worn-out stallion; and

secondly, from his having been worked too young ; neither in the one case nor the other is the horse of much value, because he can never be surefooted ; it is also a disagreeable sight, if his knees point forwards, and his legs turn in under him, so that the knees come much further out than the feet. This is what is called a bow-legged horse and such a one ought to be rejected for any service whatsoever, as he never can stand firm on his legs ; and how handsome soever he may otherwise be, he should on no account be used for a stallion, because all his progeny will have the same deformity.

Head.] Then stand by his side and take particular notice that his head be well set on for if thick set, be assured it will cause him to toss up his nose for want of wind, which causes a horse to carry his head disagreeably high, and occasions a ticklish mouth.

Neck.] His neck should be small at the setting on of his head, growing deeper to the shoulders, with a high, strong and thin mane ; long, soft, and somewhat curling ; those being beautiful characters ; on the contrary, a head ill set on is a great deformity.

Pole-evil.] To have a large bigness or swelling in the nape of the neck, shows the

pole-evil. To have a short thick neck like a bull, to have it falling in the withers to have a low, weak, thick, or falling crest, shows want of strength and mettle.

The Mane.] Much hair on the mane shows dulness, as too thin shows fury ; and to have none, or shed, shows the worm in it, the itch, or manginess.

The Shoulders.] In showing a horse, a dealer or jockey will generally place him with his four feet on a higher ground than his hind ones, in order that the shoulder may appear further in his back, and make him higher in sight than he really is ; but be sure to cause him to be led on level ground and see that his shoulders lie well into his back ; for an upright shouldered horse carries his weight too forward, which is disagreeable and unsafe to the rider. Have his fore legs stand even, and you will then have it in your power to judge of his shoulders. If you do not observe this, the dealer will contrive that his near leg stand before the other, as the shoulders in that position appear to lie further in the back. If his knees stand nearly close, and his toes quite in a line, not turning in, nor turning out, be assured he will not cut ; if he takes his legs up

a moderate height, and neither clammers nor yet goes too near the ground he will most likely answer your purpose.

Back, Body, &c.] Observe that the chine of his back be broad, even and straight, his ribs well compassed, and bending outward, his fillets upright, strong, short, and above an handful between his last rib and his huckle bone ; his belly should be well let down yet hidden within his ribs, and his testicles close thrust up to his body, those being marks of health and goodness. Be careful in observing that he has no swelling in his testicles, a disorder that usually proceeds either from some strain in working or from the horse's having continued too long in the stable, or from his putting one leg, over any bar, and being checked by the halter, or, in a word, from any other accident that confines a horse, makes him kick or fling, and bruise his cods and there is no other way of knowing this distemper, but by some outward swelling upon the part.

The coming down of the testicles proceeds from the same causes, with this difference only, that it is a long time discovering itself; whereas the other may come in one night. If his chine be narrow, he will never carry

a saddle well ; and to have it bending or saddle backed, shows weakness. If his ribs be flat, there is but small liberty for wind. Should his fillets hang low, or weak, he will never climb a hill, or carry a burden well. A belly that is clung up, or gaunt, and testicles hanging down loose, are signs of sickness, tenderness, foundering in the body : and unaptness for labour. His buttocks should be round, plump, full, and in an even level with his body. The narrow, pin buttock, the hog or swine rump, and the falling and down let buttock, show an injury in nature. The horse that is deep in his girthing place, is generally of great strength. His hinder thighs, or gastains, should be well let down, even to the middle joint, thick, brawny, full and swelling, this being a great sign of strength and goodness ; lank and slender thighs show disability and weakness. From the thigh bone to the hock it should be pretty long, but short from the hock to the pastern. Observe the middle joint behind, and if it be nothing but skin and bone, veins and sinews, rather a little bending than too straight, it is perfect as it should be ; on the contrary, should it have chaps or sores on the inward bought, or bending, it is a salender.

Spavins.] Should the joint be generally swelled all over, he must have had a blow or bruise ; if in any particular part, as in the pot, or hollow part, or on the inside, the vein full and proud, and the swelling soft, it is a blood spavin. You cannot therefore take too much care in examining the houghs of delicate horses, for let the swelling appear ever so small upon the flat of the lower part of the hough, within side, though the horse may not limp, you ought to be apprehensive that in time and with but little labour, the spavin will increase on him.

The fat spavin comes almost in the same place as the other, but is larger.

A third kind is the ox spavin ; and this is thought the worst of the three. If the swelling be hard, it is a bone spavin ; you should examine a horse thoroughly, therefore, before you buy him ; and, in particular, see if all the joints of his legs move with equal freedom. Most horses that have the bone spavin, are very apt to start when you go to take up their legs, and will hardly let you touch them with your hand. Examine them well, therefore with your eye, and see if, between the fetlock and the crown, the leg descends even and smooth ; for if you see

any protuberance between the flesh and the skin, that looks like a sort of knot, or kernel, you have found the defect.

A Curb.] If you observe the swelling to be exactly before the knuckle, it is a curb; which is an accident that may happen in different manners; such as a strain in working, slipping his foot in a hole, or in marshy ground &c. out of which he pulls it with pain, and by that means wrenches his hoof, without dislocating any thing, and yet, without speedy care, he may be lamed.

A Rat's Tail.] There is also a defect which is more common in the hind than the fore legs, though the latter are not quite exempt from it, and it is called the rat's tail, and is thus known: when you see, from the hind part of the fetlock, up along the nerves, a kind of line or channel that separates the hair to both sides, this is a rat's tail. In summer, there appears a kind of small dry scab along this channel; and in winter, there issues out a humidity, like the water from the legs. A horse may work notwithstanding this disorder, for it seldom lames him; it sometimes occasions a stiffness in the legs and makes horses trot like foxes, without bending their joints. The hind legs should

be lean, clean, flat, and sinewy; for if fat they will not bear labour; if swelled, the grease is molten into them; if scabbed above the pasterns, it is the scratches; and if he hath chops under his pasterns, he hath what is generally called the Rains. If he has a good buttock, his tail cannot stand ill, but will be broad, high, flat, and couched a little inward

A Walk and Trot in Hand.] Having with care examined the horse, let him be run in hand a gentle trot; by this you will soon perceive, if he is lame or not. Make the man lead him by the end of the bridle; as in this case you cannot be deceived by the man's being too near him. The far fore leg, and near hind leg, or the near fore leg and far hind leg, should move and go forward at one and the same time; and in this motion, the nearer the horse takes his limbs from the ground, the opener, the evener, and the shorter is his pace.

Forging.] If he takes up his feet slovenly, it shows stumbling or lameness; to tread narrow, or cross, shows interfering, or failing: to step uneven, shows weariness; and if he treads long, you may be apprehensive he forges: by which I mean, that when he walks, or trots, he strikes the toes of his

hind feet against the corners of his shoes before, which occasions a clattering noise as you ride : and this proceeds generally from the weakness of his four legs, he not having strength in them to raise them up sufficiently quick to make way for the hind ones. A horse of this kind is not near so serviceable as one exempt from it ; and the dealers, to get rid of him, will make abundance of pretences. If he has been just shod, they will say, the farrier has put on him too long shoes. If his shoes are old, they will tell you he has just come off a long journey, and is much fatigued. You must not therefore be over credulous to any thing a jockey or dealer affirms ; for what they say in this manner, is too often with an intent to deceive ; and it is very certain, that a horse who forges can never be surefooted, any more than one who has tottering and bow legs.

Walk and Trot mounted.] On his being mounted, see him walk. Observe his mouth, that he pulls fair, not too high, nor bearing down : then stand behind him, and see if he goes narrower before than behind : as every horse that goes well on his legs goes in that manner. Take notice that he brushes not by going too close ; a certain sign of his cut-

ting, and tiring in travelling. Have nothing to do with that horse who throws his legs confusedly about, and crosses them before: this you may observe by standing exactly before or behind him, as he is going along. In his trot, he should point his fore-legs well, without clambering, nor yet as if he were afraid; and that he throws well in his hind legs, which will enable him to support his trot, and shoot his fore parts forwards.

A Canter or Gallop.] In his canter, observe he does not fret, but goes cool in his pace; and in his gallop, that he take his feet nimbly from the ground, and do not raise them too high; but that he stretcheth out his fore legs, and follows nimbly with his hind ones; and that he cutteth not under his knee, (which is called the swift or speedy cut) that he crosses not, nor lays one foot on another; and ever leadeth with his far fore foot, and not with the near one. If he gallops round, and raises his fore feet, he may be said to gallop strongly, but not swiftly; and if he labours his feet confusedly, and seems to gallop painfully, it shows some hidden lameness; for in all his paces, you should particularly observe that his limbs are free, without the least stiffness.

Tottering legs.] Now that he has been well exercised in those different paces, it is your time to examine for an infirmity not easily discovered, and that is what I call Tottering Legs: You cannot perceive it till after a horse has galloped for some time; and then, by letting him rest a little, you will see his legs tremble under him, which is the disorder I mean: how handsome soever the legs of such a horse may be, he never can stand well on them; you are therefore not to mind what the jockey says, when he talks of the beauty of the limbs; for if you oblige him to gallop the horse, or fatigue him pretty much, (which is commonly done in order to try the creature's bottom) you will, in all likelihood, discover this defect, unless you suffer the groom to gallop him to the stable door, and put him up in a moment; which he will certainly endeavour to do, if he is conscious of it, while the master has another horse ready to show you, in order to take off your attention from what he is afraid you should see.

Thus having, to the best of my judgment, gone through every requisite observation relative to the purchase of a horse, studiously avoiding its being drawn into an unnecessary length, yet at the same time being as careful

to avoid an affected brevity, the gentlemen, to whom many of my observations are familiar, will please to observe, that I have endeavoured, as much as possible, to write for the information of a person entirely unacquainted with the qualifications which form a complete horse; in the purchase of which, the person should particularly consider the end for which he buys; whether for running, hunting, travelling, draught or burden: and it is therefore almost unnecessary to remind him, that the biggest and strongest are fittest for strong occasions, burdens, draught, or double-carriage; as the middle size is for hunting, pleasure, general employments, and the least for summer hackneys. The last thing I shall take the freedom to observe to my reader, is, that a very small portion of this treatise has been taken from a late publication, deficient in many respects, though, at the same time, containing some trite observations; and that the bulk of it has been compiled from my own experience, assisted by various authors on the subject, of which Monsieur Saunier is the principal. All I have therefore to observe is, that it was compiled at the request of the publishers, as a suitable companion to a book of the same

size, entitled, *The Gentleman's Pocket Farriery*; showing how to use a horse on a journey; and what remedies are proper for common accidents that may befall him on the road: which having been universally approved, and met with a very extensive sale, they are hopeful, that a well drawn up assistant towards the purchase of a horse, describing the disorders, &c. to which he is liable, might stand fair to be received with marks of the same public approbation.



THE STALLION.

[From the *Farrier's Dictionary*, by Dr. Hunter.]

STALLIONS should be chosen as free as possible from all kinds of natural imperfections. They should in particular be totally free from moon, watery, and blood-shotten eyes, splents, spavins, curbs, &c. for all these imperfections are liable to be entailed on their stock, which must of course render them infinitely less valuable than such as are free from every thing of the kind. Perhaps it is utterly impossible to find a stallion that is totally free from imperfection, but they should at least have none of the gross ones above-

mentioned ; in addition to which they should be bony, of a good colour, a fine shape, and above all, high spirited and full of mettle.

At four years of age, a stallion is fit for covering, and most of them will continue able to get colts till they are twenty or upwards, though it is suspected that the stock of old horses is far inferior to that got by them in their prime and vigour.

Stallions should be so high fed as to be full of lust and vigour, and twelve, fourteen or at most, twenty mares, are as many as a good horse should be permitted to cover in one season. It may not be amiss to observe, that when mares are covered in hand, or at large, they should have the same kind of feeding as the stallion, that is to say, if the horse is at hard meat, the mare should be so likewise, or she will be apt not to hold to him so well. In like manner, if the stallion is at grass, the mares should be at grass likewise.

When the stallion has done his duty, let him be removed from the mares : they likewise should be put into fresh pasture. Those mares that are in midling case generally conceive the most easily, whereas those that are fat and gross hold with more diffi-

culty ; such, however, of both descriptions as are hot, and in season, retain a great deal better, their heat exciting the stallion to perform his part of the action with greater vigour and ardour.

When you have a mare covered in hand that she may the more certainly stand to the horse, let the mare and stallion stand in the same stable for some time, that they may see each other, which will make them both more keen, and consequently more apt to generate.

It is the opinion of many, that a stallion should be well fed for at least three months before he is to cover. He should also be led out to water twice a day at least, and gently exercised each time for an hour or thereabouts, but not so as to make him sweat. For if he be not thus brought into condition and wind before he covers, he will be in danger of becoming pursive, or broken-winded, and if he is not well fed at the same time, he will be unable to perform his task in a proper manner, at best his stock would be poor, pitiful, weak things, and no credit to their sire : and besides, if he was not in a proper condition at the commencement of the season, he would be so reduced before it is

concluded, that though you take all imaginable care and pains of him after, he will continue very weak for a long time.

If he is put to too many mares, it will soon wear him down, and his mane and tail will fret and fall off through mere poverty, and it will be found a difficult matter, notwithstanding the length of time that intervenes, to bring him into condition against the season following.



BREEDING MARES.

IN speaking of mares, we shall only consider them as kept for breeding; for which purpose they should be chosen as free from defects as possible, and should (no more than stallions) have either moon, watery, or blood-shotten eyes, nor any splent, spavin, curb, or other natural imperfection, as the colts would be apt to have the same. But choice should be made of the best and ablest, the highest spirited, and finest shapes that can be, for such only can be expected to breed valuable colts. As for example, if you would breed for the manage or pad, let your mares have fine forehands, their heads well

set on, large sparkling eyes, broad roomy breasts, and legs not too long. They should be of a gentle disposition, and all their motions both nimble and graceful. But if you would breed for hunting or racing, the mares must be lighter, with short backs, and long sides; their legs must likewise be longer, and their breasts not so broad; but above all things, be sure to make choice of such mares for this purpose, as have got good blood in their veins. If you have tried the speed and wind of any mare that you wish to breed from, and find her to your mind, you need not fear of having a good colt, providing she is in health and vigour, and you put her to a good horse.

A mare may be put to the horse when she is past two years old, but the best age for a breeding mare is from four to seven, for although she may breed to fourteen or fifteen, she cannot nourish the colt so well, and besides it has long been remarked, that an old mare's colt is more dull and heavy at labour, than that of a young one. Some people will tell you, that the best time for a mare to be covered, is from the end of the first quarter to the full of the moon, and that colts got at that time will be much stronger and hardier,

than such as are got during the other periods of the moon's age ; this, however, is but little regarded among breeders, nor do I believe that those who are the greatest advocates for such a notion, can advance one sound argument in support of it. It will not, however, be amiss to take the mare into the stable, and have her well fed with good hay and oats for a few weeks before she is covered, that she may have strength and vigour to perform the office of generation. It is not uncommon to take about a quart of blood from each side of the mare's neck a few days before she is put to the horse, in order that she may the more certainly concieve, or stand to him. As for the manner of covering it is pretty well known that the mare should be brought out into some roomy place, and be either tied to a post, or held in the hand, while some stone horse of little value is brought out to try her, and provoke her lustful appetite ; after which the stallion should be led to her, and suffered to leap her, and when he is dismounted, let a pail of cold water be thrown over her hinder parts, which will make her shrink and truss up her body, and consequently must occasion her to retain the seed more certainly than otherwise she might do. Let her

then be taken away out of the hearing of the horse, and let her neither eat nor drink for four or five hours ; but at the end of that time give her a mash, and afterwards feed her as usual. You will soon be able to tell whether she stands to her covering, by her keeping a good appetite, and not neighing at the sight of a horse. While, on the contrary, you may conclude, that she does not stand, if she neighs at every horse that comes in her sight, or stales often, and frequently opens and shuts her shape.

The same method of feeding the mare with good hay and oats should be followed for a few weeks after covering, during which time she should be kept in the stable, with little or no exercise, and be well cleaned ; after which she may be turned out for the summer, and taken up again towards the latter end of September, after which she should continue to be housed till after she has foaled.

If there should happen any difficulty in foaling, authors recommend holding the nostrils so close, that the mare cannot take wind ; and if that has not the wished for effect, they recommend a decoction of madder roots or fennel in water, with the addition of a little wine, or ale, to be given luke-warm. Some

mares are apt to eat the secondines after foaling, but they should be prevented if possible, as it is unnatural food, and will injure their health. When the foal has been licked, and before he is permitted to suck, let some one milk the mare, which will both cause her milk to come down more easily, and in greater abundance, and likewise prevent her udder from becoming wedged, which often occasions them to go dry, or at least to appear so; though while this is a recent thing, the cure is frequently very easily effected by the following simple application.

Let as much milk as can be obtained from her, be boiled with some lavender flowers in it, and the udder thoroughly bathed with the warm decoction three or four times a day. But if no milk can be obtained, cow's milk, or even water, may be substituted in its stead, as the effect is produced entirely by the heat of the liquor, and the penetrating qualities of the lavender flowers, which together mollify and soften the tumour; and then the colt, by sucking more and more as it gets strength, will prevent any accident of that kind from happening in future.

The water that is given to mares for the first month, or thereabouts, after foaling,

should have some bran put into it, and be stirred together till the mixture becomes white. This is what horse-dealers call the white mash. At the end of the month she may have a little brimstone and saving given her in a moderate strong decoction. And after that, she may be put occasionally to any moderate exercise, which will be of service to both her and the colt ; only care should be taken not to let the latter suck while the mare is hot, as he might be surfeited thereby, and his growth greatly hindered.

A great many receipts are given by different authors for preventing mares from going barren, slipping their foals, &c. but they appear too trifling and insignificant to be introduced in the present work.

Mares are said to go eleven months, and as many days with foal, as they are years old, but I imagine that they are no more exact in bringing forth their young to a few days, than other animals.



PARTS OF A HORSE'S BODY.

1. The hair and hide, which includes all the hair and skin on the horse's body.

2. The mane, or that long hair on the horse's neck.

3. The fore-top, or topping, which hangs down the face.

4. The fetter-lock, or fetlock, the hair that grows behind the feet.

5. The coronet or cronet, the hair that surrounds the top of the hoof.

6. The brills, which is the hair on the eyelids.

The external parts of the head and neck are as follow :

1. The crest or crist, that ridge on the neck on which the mane grows.

2. The neck itself, by which is meant the whole of that part of a horse which is betwixt his head and breast, or shoulders.

3. The breast, brisket, or chest, is the fore part of the neck, from the shoulders down to the fore legs.

4. The star, or blaze, is in the forehead.

5. The rache, down the face, when the hair there is of a different colour to that on the other parts of the head.

The parts of the body are :

1. The withers, the top of the shoulder blades, at the setting on of the neck.

2. The dock, or place where the saddle is put.

3. The navel-gall, or that part of the back opposite to the navel.

4. The reins, are all the middle part or ridge of the back, from the mane to the tail.

5. The dock or strunt, which is the tail of the horse.

6. The fundament or tuel.

7. The swayed back, is the hollow or sinking down of the back bone.

8. The thropple or windpipe

9. The girth place, or the fore part of the belly.

10. The belly or navel place, the middle of the belly, or that part where the navel is.

11. The flank, or the hinder part of the belly next the sheath.

12. The groins, or hinder parts near the thighs, on each side.

13. The sheath in which the yard is inclosed.

14. The yard itself.

15. The nut, or glans, at the extremity of the yard.

16. The cods, or the loose skins which contain the stones.

17. The fillets, or fore parts of the shoulder next the breast.

18. The two sides, near and off, or farther and rising sides.

19. The buttocks, or hindermost parts of the horse's body.

20. The top of the buttock, or that part next the ridge of the back and the tail.

The parts of the legs and thighs are reckoned in the following manner :

1. The stifle, or stifle joint, which is the first joint or bending at the buttock and above the thigh.

2. The thigh or that part betwixt the stifle and the gambрил.

3. The gambрил, or elbow, is that joint or bending of the upper part of the hind leg that bends backwards, whereas the bend of the stifle comes forwards.

4. The ham and bight, or bought, or the inward bending of the chambril. The bending of the knees in the fore legs are likewise characterised by the same name.

5. The hough, leg, or shank. This reaches from the chambril to the fetlock, or pastern joint.

6. The small of the legs, is the smallest part of both the fore and hind legs.

7. The foul of the legs.

8. The back sinews, which are the back parts of the legs, just above the fetlocks.

9. The pastern joint, fetlock, or ankle, is the joint in the fetlock which in all the feet bends forward.

10. The coronet is the foot above the hoof of the ankle joint, and is called by the same name in all the feet.

11. The curb.

12. The shoulder is that part which extends from the withers to the top part of the fore thigh.

13. The thigh reaches from the bent of the thigh to the knee.

14. The off legs are those on the right side, and the near legs those on the left, which is likewise called the rising side.

The feet consist of the following parts :

1. The hoof or horn.

2. The coffin, or the hollow of the hoof in which the foot is fixed.

3. The frush, or that tender part of the hoof next to the heel.

4. The sole of the foot.

5. The frog, or as some call it, the ball of the foot.

6. The ruff of the hoof, or the part that is pared or cut off when grown too long betwixt the frush and the heel.

7. The heel, or the rising in the middle of the sole.
8. The toes, or fore parts of the hoofs.
9. The quarters, or insides of the hoofs.
10. The pastern, or that part which reaches from the fetlock to the hoof.

The parts of a horse's body which many people suppose most proper to draw blood away from, are the following :

1. The jugular veins, which lie on each side of the neck, and these are commonly opened for the farcy, mange, repletion, &c.

2. When a bite or blow has been received in the eye, it is usual to take away blood from the temples with a very small lancet.

3. Farriers have a lancet made on purpose for opening the veins under the tongue which operation they perform for head-achs or for being disgusted or overheated with hard labour, as likewise for the vives, &c.

4. It is usual to bleed horses in the gristle of the nose for the same complaints, but it is sometimes rather a difficult matter to hit the vein.

5. Some let horses blood in the middle of the palate, either with a lancet or sharp horn for the same disorders.

6. Blood is taken from the veins in the

thigh for strains in the shoulders, or for the mange in those parts.

7. Horses are bled in the pasterns with either a fleam or a lancet, for strains, or other infirmities of the hams or knees.

8. They are likewise let blood in the toes with a buttress or drawing-knife, for swellings in the legs, and the like.

9. The veins in the flanks are sometimes opened with a small lancet made on purpose for the farcy in the adjacent parts.

10. Sometimes blood is drawn with fleams from the flat part of the thighs, for blows or strains in the haunches; and

11. They sometimes bleed horses in the tail or dock, with a long lancet, for fevers and short or thick-windedness; it is, however, a matter of little moment, some few cases excepted, from what part of the body blood is drawn, notwithstanding the diversity of opinions entertained about it.



SIGNS OF DISEASE IN HORSES.

THE first symptom of indisposition in these creatures is their loathing their food, and whenever this takes place, the master

of the beast should take the alarm, and endeavour to find out the cause, that a timely remedy may be applied. In order to do this, observe if he looks wild and haggard or dull and stupid, also whether his ears are cold or warm, his mouth hot, foaming, dry, or clammy; or if the hair about his flanks is rough and staring, and his dung hard, or black, or of a greenish cast, or his urine pale and like water; from which appearances you will be enabled, in some measure, to judge of the nature of the complaint, and of the consequences with which it is likely to be attended.

When a horse that has been long ill stales without striding, or even without drawing his sheath, letting the water drop from the skin, it is almost a sure indication of death, unless, as is the case with some horses, they have been accustomed to stale in this manner when they were in health.

It is likewise a bad sign when the hair on his scull, or that on his tail, can be easily pulled off.

Another dangerous symptom is, that if a horse never lying down during his illness, or if he does, starting up again immediately; such horses seldom recovering.

When the eyes of a horse are subject to weep, and he hangs down his head and appears heavy, stumbles as he walks, and is slow, though he used to be lively and vigorous, never minds other horses, frequently lies down and gets up again, looks towards his flanks, and is indifferent and mindless of what is done about him, that horse is in danger.

But to speak more particularly, if a horse is heavy in the countenance, much scoured or very costive, short of breath, troubled with a hollow cough, works in the flanks, and hangs down his ears, it is a fever; and sometimes these symptomes are the fore-runners of the staggers.

When a horse turns his head back frequently to his right side it indicates some obstruction, or disease of the liver; but when he puts it down, almost under his belly, it is a sign that he is troubled with worms or bots, or else that he is afflicted with pain in his bowels from the cholic, or some other cause.

A stinking breath, or foul matter proceeding from the nostrils, indicates an ulcer or imposthume in the head; and if the matter is black, white, or yellow, and very offensive,

it is a fatal sign, as it shews that the glanders, or a consumption of the lungs, are the occasion.

The breath, or body being very hot, indicates a feverish disposition, or a preternatural heat at the stomach; and the tongue hanging out, and being swelled, betokens an inflammation of the liver, or some other of the principal viscera. The strangles occasion a horse to heave violently in the flanks, as likewise do most feverish complaints. Sometimes however, this symptom is owing to the horse's wind being touched, or broken.

A swelling under the throat, attended with a continual propensity to cough, is a sign that the glanders are to be feared; if the swelling is about the root of the tongue perhaps the strangles are the sole cause of it; and if there is nothing but little knots, like waxen-kernels, they may have been occasioned by a common cold, without indicating any disease whatever. Whenever a horse appears scabby, and looses the hair from his body and neck, it is a certain sign that he has got the mange; and ulcers, full of knots, spreading about the veins, characterise the farcy, or canker.

When the left side swells without any apparent external cause, there is reason to suspect that the spleen is diseased. The cholic will sometimes occasion a tumour in the flank, and it is a common case to see the belly and legs of such horses as are inclined to be dropsical, swell, and become much larger than they were in a state of health.

When a horse's coat stares and is rough it may be owing to being badly cloathed and looked after, but is not unfrequently the effect of a bad stomach, or the symptom of a foundering in the chest. Leanness and gauntness are generally accompanied by hide bound, inflammation of the liver, chest foundering, worms, cholic, or the yellows; staling with difficulty is a symptom of the stone or wind cholic; and if the urine he passes be thick, and of a blackish colour, it indicates that one or both of the kidnies are diseased.

Trembling is indicative of a fever, particularly when a horse shivers violently after drenching. Scouring indicates great heat in the liver, and costiveness is a sign of the yellows, or other diseases of the gall and liver.

If you see a horse frequently striking at

his belly, you may conclude that he has got the cholic; but if at the same time he frisks his tail, it betokens his being infested with worms or bots.

When a horse that has been some time sick, stales clear, and there is no sediment formed therein on its being set by, it is rather a dangerous symptom, but if it turns of a reddish or yellowish colour, and has a cloud swimming in it that is neither black nor earthy, and deposits a kind of brickdust-like sediment, smelling strong at the same time, it is a good sign in general, and is frequently the prelude to a speedy recovery.

If at different periods of the disease it varies greatly, sometimes appearing of an healthy aspect, and at others quite the reverse, there is danger to be apprehended as it is a sure indication that there is a considerable degree of malignity in the disease. The best appearances of a horse's urine are a yellowish colour, a thickish consistence, a strong smell, and penetrating quality, for these all betoken health and vigour, whereas the contrary of any of these indicate approaching disease.

But there is nothing by which an intelligent person can judge better, respecting the

health of his horses, than by their dunging. For the colour and consistence of a horses excrements, are sur e indications of the inward state of his body, and ought to be well attended to when he is in his best health, and at best feeding, that when he is found to alter therefrom in any particular, a judgment may be the better and more clearly formed respecting his health or sickness. The dung of a horse that is clean, well fed, and free from disease, will ever be found clear, crisp, and of a pale yellowish hue, hanging together, and not easily separating more than as it is broken in falling to the ground by its own weight, and is of such a consistence that it will be a little flatted by its fall to the ground. If his first and second dung be well coloured, and yet fall from him in round pellets or scybals, and the rest be good, there is no harm to be dreaded, for this is only an indication that he has been eating hay lately, which will always produce this effect, but if all his dung is of that hard kind, it betokens foul feeding, and that he has eaten too much litter or hay, and too little corn. When a horse's dung is voided in round hard pellets, of a dark blackish brown colour, it discovers inward heat of

the body ; if it be greasy, it is a sign of great foulness. Again, if the dung be strong and hard, it indicates that his heats have been too violent, and if care is not taken to prevent it, costiveness will ensue. If it be pale and loose, it shows he has had too much moist and corrupt feeding, or that his body is inwardly cold.

The disease of the Mouth and Tongue, is indicated by an inflammation of the lungs and throat, attended with a violent fever, difficulty of breathing and loss of appetite ; the head and throat swelled, the jaws stiffened, and the tongue swelled, and looking like that of a person having the yellow fever or the small pox, and the pulse will beat fifty strokes a minute instead of forty, as it should do in a state of good health.

After all that can be said on this head, the most experienced farrier will frequently find himself at a loss to distinguish one complaint from another, as he has nothing to assist him in making the discovery but his own judgment, and such symptoms as are most predominant at the time, many of which are common to several diseases. It is well however, in such doubtful cases, to be acquainted with all the principal symptoms

with which the diseases of this noble animal are accompanied, as such a knowledge, though it will not always prove an infallible guide, will give the person who possesses it a decided superiority over him that has neglected to make so useful an acquirement his own.

CONCLUSION.

EVERY person that has had a long experience and is acquainted with the power of drugs, from his own knowledge must be aware of the extreme difficulty of ascertaining their medicinal properties, and their effects on different constitutions, and also in the different stages of the same disease. There are many circumstances to which the practitioner does not, or perhaps cannot sufficiently attend ; which vary their operation and effects, and is frequently disappointed in his calculations and expectations of those medicines with which he is best acquainted.

Thus briefly, I have thought necessary to inform gentlemen of the great uncertainty of medicines in general ; to the end that they may not be imposed on by the trifling reasonings of those who pretend to the healing art in horses ; and who are often pouring down nauseous drenches into the stomach of the animal, and if he was not almost proof against them, he could never bear the attacks of those combustibles. It is the judicious timing and adapting the medicine to the na-

ture of the disease, that will constitute a beneficial remedy.

It has often occurred to me, that if a few young men in this country would turn their attention to the cultivation of this important branch of science, and make the veterinary art their study, they might become useful to the community and rise to opulence, by the profession. There are many who have good educations, and although there are no veterinary colleges in this country they might derive the necessary information from the study of the most celebrated authors, such as Barcken, Gibson, Bartlet, Taplin, &c. and the books of the veterinary college at London, written by Mr. Blame. These gentlemen were all surgeons and physicians, and thought is no disparagement to make the anatomy and economy of the horse their study. By a proper application to these works, a young man, even of ordinary capacity, might in a short time become a proficient in Farriery. While a great number of coxcombs are boasting of their diplomas and smattering of Latin, &c. and at the same time are destitute of a knowledge of the laws of nature; a young man, by attending to the works, which I have just mentioned, might

rise superior to all their bombast, and as I before observed acquire an ample fortune. It is by the study of those books, and an extensive practice that I have obtained a knowledge of the horse.

The receipts which I have given, I hope will not be thought too numerous or complicated. I have avoided as much as possible a numerous composition of drugs and herbs, such as most authors have prescribed; and for this reason, that before they could be obtained and prepared, the horse would be dead; almost all the medicines which I have recommended can easily be procured, and administered in a short space of time; besides, there is a difficulty in adjusting the quantities and qualities of drugs, even among persons who are well acquainted with them. In short I have endeavoured to prescribe the cure by the most expeditious method possible.

It cannot be expected that an extensive progress in the art of Farriery can be made in this country, until some ingenious young men apply themselves to the study of the anatomy and dissection of the horse in all his parts. This alone will unfold to their minds a new scene of contemplation, instruc-

tion and delight. They will then behold the wonderful works of nature in the formation of that noble and valuable animal, and exclaim with Galen, who was said to have been an atheist, on his finding a human skeleton;—This said he is of too great a construction to be the production of chance. By pursuing this laudable method, the young student will be led to dissect other animals and become acquainted with comparative anatomy. He may become an ornament to society in his day and generation; and it will lead him to contemplate nature and her immutable laws, and without a knowledge of those laws, the greatest professional character must be an ignoramus.

As the first edition of this work was disposed of in the course of eight months, it was thought advisable to publish a second, under the impression that the first met the approbation of the public. It will be found that the second far exceeds the first in point of size; and contains an original treatise on the subject of the origin, progress, and mode of treatment to be observed in the distemper that has recently made its appearance among horses, in Pennsylvania, N. York, and several other states. The present edition is em-

bellished with three excellent engravings on wood, of the skeleton of the horse, exhibiting a clear and comprehensive view of the intestines, and another showing the age of the horse by his teeth.

It will be of the utmost importance for the reader to attend to the chapter on alteratives, and particularly to the use of nitre, as by practical experience, I have given to the quantity of half a pound per day, particularly in fevers and inflammatory cases, with good effect. Almost all physicians have attacked the solids, and neglected too much the fluid system.

Hoping this work may prove of utility to the owners and lovers of horses, the author takes his leave of the public, and subscribes himself

Their obedient servant,

WILLIAM CARVER.

New York, May, 1820.

Med. Hist.

WZ

270

C331p

1820

(.)

