THE GENTLEMAN'S
STABLE DIRECTORY;
or,
MODERN SYSTEM
OF
FARRIERY,
CONTAINING
EXPERIMENTAL REMARKS
UPON
BREEDING, SHOEING, EXERCISE, and
BREAKING, STABLING, ROWELLING.

TO WHICH ARE ADDED,
PARTICULAR INSTRUCTIONS FOR THE GENERAL
MANAGEMENT OF
HUNTERS and ROAD HORSES:
WITH
CONCLUDING OBSERVATIONS
UPON THE
PRESENT STATE OF THE TURF.

By WILLIAM TAPLIN, Surgeon.

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INTRODUCTION.

AFTER the many publications upon equestrian subjects, it may appear to some rather extraordinary that matter either new, instructive, or entertaining, can be produced to excite the serious attention, even of those who are the most curious in their particular studs, and different appropriations; but such admiration will as readily subside, upon a retrospective allusion to the original motives of the various writers, the almost unlimited extent of the subject, the constantly increasing estimation of the object treated on, and the consignment to
perpetual oblivion of many literary productions, (unfortunately for their authors) so soon as they were brought to the test of public investigation.

The Gentleman's Stable Directory, having, by the unprecedented rapidity of its circulation through fifteen large editions, and the acknowledged utility of its instructions, in a great degree superseded former opinions, and established the professional reputation of the writer, it will be hardly considered a mark of presumption, that, under the flattering influence of popularity, the same pen should once more aspire to the hope of applause, in his desire to extend the system of management to a degree of consistency hitherto undescribed by any one of the numerous authors who have preceded us upon the same or similar subjects.
INTRODUCTION.

So far as health and condition are preferable to disease, so much the more desirable must prevention ever prove to the necessity of cure. The purport of the present undertaking will, therefore, be found appertaining much more to such parts of stabularian discipline, as come under the distinction of novelty, and not treated on in a direct way, than at all applicable to the investigation or cure of disease; unless in occasional allusions or medical references, evidently branching from the subject, and tending to corroborate and improve the intentional uniformity of the whole: it being the predominant wish of the writer, to render this publication such kind of collateral appendage to The Stable Directory, as may constitute in both, a complete chain of useful and entertaining instruction for the improvement of the spe-
cies; their management in sickness or health, the field or stable; including, under distinct heads, such facts from experience and inferences from nature, as will, the author is earnestly induced to hope, procure him the approbation of those, by the sanction of whose extensive patronage he has been already so very highly honoured.
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OF
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FROM its general magnitude, prevalent fashion, and great utility, is certainly entitled to precede every other subject, upon which we shall have occasion to enlarge, in the course of the work before us; and will afford ample opportunity to introduce such remarks and instructions, as may evidently tend to improve what is now become so universal, that the world at large, either in pleasure, agriculture, or commerce, seem interested in its success. Previous to embarkation in so extensive a field for investigation, it may be applicable to observe, that whatever opinions may be promulgated as matters of recommendation, they are not
to be considered the delusive effect of speculative rumination, but the result of long personal experience and attentive observation among horses in my own possession, from brood mares and colts to every description, whether for the Turf, Field, Road, or Draft.

Although some of the subjects upon which we proceed to treat, may have been slightly mentioned by writers who have gone before us, it is generally known to have been in so superficial and unconnected a way, that little information or instruction could be at all gleaned from their endeavours; a few loose hints upon each having been digressively obtruded, or indiscriminately introduced, amidst topics to which they did not bear the least allusion, and from whence conclusions of the smallest utility could never be drawn.

These errors it has been the principal design to correct, by reducing to distinct heads, all such observations and remarks as constitute the body of the work, and are intended as incentives to general improvement upon the great variety of subjects we shall en-
Breeding, though a subject of palpable importance to the improvement of this most useful animal, seems to have received less assistance from literary exertion than any other that has ever attracted the time or attention of those naturalists, who have in other respects contributed largely to the advantage and entertainment of the public. This assertion, generally considered, has one striking exception in the peculiar and con-
stantly increasing circumspection, to improve (if possible) what absolutely appears to have already reached the very summit of perfection: it will be readily conceived if allude to the almost incredible care and attention bestowed upon the breed and management of our blood horses for the turf, at this moment esteemed equal (if not superior) in speed, bottom, and discipline to any other in the known world, particularly since the fashionable rage for Arabians has so gradually declined.

Personal emulation amongst some of the first characters in the three kingdoms for near a century past (with the most unremitting perseverance and practical experience of the subordinate classes, upon the advantageous crosses in blood, bone, shape, make, and strength), has rendered Newmarket not only the first seat of Equestrian celebrity, but, to a breeder and sportsman, one of the most enchanting scenes the universe has to produce. This part of the species having, under such accumulated power and industry, attained the very pinnacle of pre-eminence, nothing can be introduced to
breeders of such nice distinction, that will possibly add weight or give force to so complete a system of unsullied perfection: As it is, however, generally admitted this systematic knowledge is by no means universal, such useful remarks and appertaining observations will be occasionally introduced under this head, as will afford useful intelligence or instruction to those who have commenced breeders, without adverting to the qualifications or advantages absolutely requisite for the successful management of a breeding stud.

Taking leave for the present of blood, pedigree, and fashion, we advert to the very capital breed of real English hunters, and beautiful draft or carriage horses, for which the counties of York, Leicester, Lincoln, and Northampton are so deservedly famous; they are certainly entitled to take the lead of every other county in the kingdom, not more in the care and superiority of their breed, than the consistency of their proceedings to improve it. This preference, so generally known and universally admitted, will create no surprize when we recollect
how admirably gifted by nature those counties are with requisite advantages, that other parts of England have not to boast; nor can they, from locality of situation, ever obtain.

Situate as the inhabitants are for these conveniencies, they have consequently dedicated more time and attention to the improvement of the species in general, for the purposes of emolument, than the natives of most other counties, where the attempt (however judiciously made) becomes in some degree abortive, not only in respect to the deceptive expectation of profit, but a certain degeneracy from such heterogeneous unions (if I may be allowed the expression) as will be hereafter more clearly explained.

Customs and opinions upon this subject are both local and numerous, notwithstanding which they are frequently subservient to exigence of circumstances, and become productive of a propagation calculated for little more than a consumption of food, without a single prominent or distinguishing mark of blood, strength, or utility.
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There are many substantial reasons to be adduced, why the breeders of the northern counties exceed all other parts of England, in the consistency, strength, fashion, and symmetry of their stock; for, exclusive of their natural advantages of the most luxuriant pasture and temperate climate for such purpose, they are rigidly attentive to every component minutiae of the whole, not only to the shape, make, bone, strength, and uniformity of both sire and dam, but likewise to hereditary defects, blemishes, and deformities, rejecting every probability of stain or injury, divested of the paltry penurious considerations by which the conduct of many are regulated, who have been breeding all their lives, without the satisfaction of having ever once had a horse or mare of figure, fashion, or value in their possession.

This is a fact so clearly established, it will come home to the remembrance of every reader, when taking a mental survey of his rural neighbours, amongst whom he will perfectly recollect some one or more so invincibly attached to the merits of a blind stallion, or the virtues of his own spider-legged
mare, that, destitute of judgment, and deaf to remonstrance, he ranks in (in imagination) the produce a prodigy even in embryo, and proceeds regularly, year after year, increasing the number, without a single addition to the improvement of the species.

These are the kind of hypothetical breeders, (and great plenty there are) who calculate doubly in error, by calculating upon profit, without a single contingent reflection upon loss; ridiculously supposing a mare in foal, or after delivery, can support her own frame, and that of her offspring, upon less food than any other horse or mare in constant work; and begin breeding under an idea that it will be attended with little or no expense. Thus totally inadequate (or indifferent) to the generating of flesh, blood, and bone by the effect of nutrition, they penuriously and inhumanly adopt a kind of temporary poverty, and after a year or two of artificial famine seem greatly surprised that air and exercise alone have not produced a colt or filly, of equal size, strength, and perfection with those who have omitted no one expense or necessary acquisition that could in the least contribute
to the formation of points so very desirable, in objects of such tedious expectation, and no little anxiety, before their merits or deficiencies could be at all satisfactorily ascertained. To avoid the accusation or even suspicion of intentional repetition, the uninformed reader is referred for an investigation of *nutriment*, its process and effects, to Vol. I. of the *Stable Directory*, under the article of *feeding*, *surfeit*, and *mange*, where he may collect every information he can possibly require upon the subject.

Those who succeed best, and render the business of breeding a matter of emolument, are evidently *gentlemen*, *graziers*, or *farmers* who adhere closely to the plan of producing a distinct stock for either the *turf*, *field*, or *draft*, by a direct systematic union of the requisite qualifications in both *sire* and *dam*, without falling into the erroneous opinion of forming an *excellent hunter* from a blood horse and cart mare; with similar changes eternally ringing by those who fall into the egregious mistake of expecting that an equal partition of qualities, from both sire and dam, will be so critically blended, as to
constitute a medium exactly between both, when every judicious observer will be enabled to corroborate the opinion, that the event frequently proves the error, and demonstrates a palpable degeneracy from even the worst of the two.

These are the kinds of connection I have before termed heterogeneous, upon experimental conviction, in such propagation; the natural sluggishness and inactivity of the old English draft horses, whether it be in sire or dam, generally predominates in the offspring, constituting an object of disappointment where so much improvement was expected by the cross. I believe (without adverting to memory) that in a number of years past, I may boldly venture to affirm, I could number at least twenty within the extensive circle of my own acquaintance, who, full of expectation, and certain of success, (in opposition to every persuasion) positively believed they should produce strong boney hunters of figure, fashion, speed, and strength in this way, when Time, the expositor of all doubts, has at length reduced the conjecture to a certainty; and after wait-
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ing four or five years for the fruit of their expectation to attain perfection, the prodigy has been unavoidably doomed to the drudgery of a butcher's tray, or the market cart of some industrious mechanic.

To this description of breeders, who are continually promoting the propagation of the species, without a single consistent idea, or relative consideration to the necessary requisites of country and keep, or qualifications of sire and dam, (with an additional prepossession in favour of certain ridiculous crosses) are we indebted for the infinity of horses annually produced in almost every (improper) part of the kingdom, that from want of shape, make, bone, size, and strength are of no proportional value to the expense they have occasioned; they can pass under no distinct denomination, are applicable to no particular purpose, but become an expensive burden to the owners, who, too frequently fond of their own production, fix an imaginary value upon their imperfections, and year after year permit them to consume food and fodder that might evidently be appro-
priated to services of much greater public utility and private emolument.

To the constant increase of horses that are of little or no value, may be attributed, in a collateral degree, the alarming advance in almost every necessary of life where the indigent and necessitous are mostly interested without exception: but as the introduction of minute calculations to demonstrate the fact would be digressing from the subject before us, I shall only refer the attention of the curious reader for a moment, to a comparative reflection upon the incredible consumption of pasturage in summer, and corn with hay in winter, that might through other channels be much more adapted to the promotion of a general good.

After the remarks hitherto introduced upon the inconsistency and very fashionable absurdity, of even attempting to breed horses in such parts of the kingdom as are but ill adapted to the purpose, whether from the hilly state of the country, the infertility of the soil, want of luxuriance in the pasture, or many other concomitant obstacles, (totally
unattended to by the parties concerned) it becomes perfectly applicable, to revert once more to the frequent and inconsiderate practice of uniting horses and mares, with every joint hereditary blemish or defect that can render the offspring unpromising; without a single perfection, or encouraging ray of expectation to constitute a junction of points, possibly tending in the least to form a produce even tolerably adequate to the particular purpose for which it may be intended, when at a proper age it is brought into use. Such breeders seldom pay the least attention to merits, tempers, vices, constitutional blemishes, or hereditary defects, of either sire or dam; the grand and leading object is to obtain a horse or mare of their "own breed;" in that happy thought alone is to consist their perfection, and in such expanded idea is buried every just or relative consideration.

Predominant reasons are by no means wanting to elucidate this strange and invincible infatuation; for penury in some, absolute inadvertency in others, and palpable indolence in the remaining class, affect the
annual increase to a certainty; the same unaccountable prejudice that prompts them to commence breeders, without a consistent qualification in horse or mare, influences them also to reserve a colt of such breed to perform the office of Stallion, in the vicinity of their own residence, that the absurdity begun by themselves may be persevered in by others: this prodigy, with all his imperfections, is permitted to cover gratis, or for a trifling pecuniary consideration to the servant (as a complete gratification of the owner's ambition in breeding)! and, proving a local convenience, is readily embraced by the inactive classes before described, while others of more prudence, spirit, emulation, or consistency of conduct, will rather send a mare fifty miles, and encounter any consequent expense to obtain a horse whose shape, make, bone, strength, and action are calculated to correspond with the dam, promising to produce a colt or filly, adequate in figure and value to the purpose originally intended.

Notwithstanding these necessary precautions, the long standing adage of there be-
ing "no one rule without an exception," is sometimes verified; and this even in the first blood studs in the kingdom, where the strictest attention to every consonant point is so rigidly persevered in, that the least deviation from symmetry, speed, and perfection, could hardly be believed, did not the result so clearly demonstrate the frequency of the fact.

Extraordinary as such circumstance may appear, it is certainly true that many of the most capital runners, when they have become stallions, seldom or ever begot a winner, though the mares have been selected with the greatest care as objects of equal perfection. These remain among the abstruse recesses of nature, that will, perhaps, ever continue unexplained; we may therefore patiently adopt a supposition as a substitute for discovery, presuming, "so far shall ye go and no farther," is all that can be advanced in elucidation of such a subject.

In corroboration of this well-authenticated assertion, great numbers might be particularized of the present day, where the
progeny have degenerated in almost every point from sire and dam; but the rapid succession of one capital horse upon another; (season after season) would render the names of such as might now be mentioned, a matter of oblivion to future readers, and prove to them little or nothing of an opinion we wish to establish beyond the power of contradiction.

So much chance appertains to the act of breeding for the Turf, that one lucky get very frequently constitutes a Stallion of Fashion, to which the rage of future seasons becomes incredibly subservient; innumerable instances might be quoted in proof of this sporting credulity, but we will contract the number to such only as are too eminent in their stock ever to be forgotten, so long as the pedigrees of "great, great, great, great, grand dams and grand-sires" shall be transmitted to posterity.

It is now within the memory of hundreds upon the turf, that old Marsk (a most capital runner of his time) covered in Windsor Forest and its neighbourhood, a very great number of mares so low as half a
guinea each, but upon the production of **Eclipse**, (a horse whose almost unprecedented qualifications and performances will in all probability never be forgotten) his price was enhanced to fifty guineas, and that only for a certain number in the season, out of which (though much advanced in years) he produced many winners, where the selection of mares became so much in his favour.

Such fluctuation of popularity still depends upon the uncertainty of events, an additional proof of which deserves to be recorded as worthy the attention of sportsmen, to whom it is not very generally known, though too well authenticated to admit even a shadow of doubt, and reduces to a certainty the former observation, that **Chance** alone is often entitled to the merit so constantly attributed to **judgment** and **penetration**.

The dam of **Eclipse** having been covered in that season by both **Shakspeare** and **Marsk**, it remained a matter of doubt for some days with his late Royal Highness the Duke of Cumberland and his stud groom,
to which the colt should be ascribed; however, the time of the mare's bringing forth (during the great Eclipse) coming nearest to the day she was booked to have been covered by Marsh, to him was attributed the distinguished honour of getting one of the first horses in the known world; whose strength, power, and speed were so great, that he with ease double distanced the most capital horses when running with twelve stone for the king's plate, and afterwards walked over most of the king's plate courses in the kingdom. The doubt respecting his sire having been thus removed, with at least an apparent degree of precision, it may naturally be supposed to have been decided with the strictest justice! but had such doubt still existed upon his own pedigree, the superiority of his qualifications would have appeared in his produce, he having proved the sire of a most wonderful progeny in Mercury, Meteor, Soldier, Gunpowder, King Fergus, Dungannon, Bowdrow, Jupiter, Vertumnus, and many others too numerous to recite, whose blood (in so great a variety of branches) will no doubt be
continued with fashionable crosses to the end of time.

It is hardly possible for one little acquainted with the customs and manners of the turf to conceive, how the decision of a single match or sweepstakes alters the properties and value of a stallion, whose reputation is placed (in blood and performance) upon the summit of eminence; for should some of the first of his get that start fortunately become winners, such circumstance instantly enhances his superiority to a degree of enthusiasm, and more business being marked out for him in the act of procreation than nature is equal to, his number of mares are consequently limited, and he becomes immediately an object of great annual emolument, several instances having occurred in the last twenty years where different stallions have produced to their owners five-and-twenty hundred pounds in one season.

But in this state of acknowledged excellence and superiority, they are still subject to the versatility of chance, and one "unlucky step for ever damned their fame;"
for two or three of his get being beat at a subsequent Newmarket meeting, the victorious sire soon supersedes the favourite, who falling into the back ground of the picture, glides imperceptibly to an almost total oblivion. In such fluctuation or succession submits the fate of an Herod to an Eclipse, an Evergreen to a Sweetbriar, and a very long list of etceteras to those reigning favourites of the present day, Highflyer and Woodpecker; the former of which having produced thirty-nine winners of ninety-one capital prizes, and the latter seventeen winners of fifty-four, both in the year 1789 only, it will create no surprize that they at present enjoy, under the sunshine of popular influence, a more extensive and beautiful seraglio than any Arabian on earth has ever had to boast.

Having ventured a few remarks upon what I before termed exceptions to general rules, or predominant opinions, it becomes perfectly consistent to strengthen a belief of such possibilities, by the recital of a direct contrast within my own knowledge, and perfect remembrance, of a galloway that
never exceeded thirteen hands, though got by Marsk, (who was a large horse) out of a full-sized hackney mare in the neighbourhood of Windsor; as well as a very large, bony, handsome, useful gelding full fifteen hands, out of a poney mare, under twelve, that was bought of a troop of gipsies near Basingstoke for a single guinea. An increased list of such instances might be easily formed and equally authenticated; but these are sufficient to encounter the assertions of those who seem firmly to believe the impracticability of obtaining bone, size, or strength, but from horses and mares of such size and bone only; and although it is certainly right to admit the probability of deviation from sire and dam in such cases, yet the minute investigation of causes must lead us into a field of physical reasoning, and anatomical disquisition, that would prove in general reading too remote and extensive for the subject before us.

There are, however, very just and fair reasons to be adduced, why these contrasts so frequently occur in opposition to the established notions of breeding, without at all
adverting to an abstracte animadversion upon
the "animalculæ in semine masculino," the
probable expansion or contraction of the
uterus, the act of generation, the crisis of
conception, the formation and growth of the
fœtus in embryo, with other relative con-
siderations that might very well bear se-
rious and scientific investigation, were we at
all inclined to perplex, by the introduction
of conjectures calculated to promote the
learned lucubrations of a certain society,
but little to entertain the members of a
sporting club at Newmarket, or to improve
the different gradations of their numerous
dependents.

The uncertainty of all human expectations
being therefore universally admitted, and
such matters of opinion only passed over as
can never be brought to the decisive test
of infallibility; it is natural to conclude
(notwithstanding such casual deviations),
much more may be expected in the produce,
from a direct coincidence of parts with an
union of strength, shape, and symmetry, than
from any improper or convenient connection
founded only upon the local situation of sire
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and dam, without a single reference to their different natural blemishes, defects, imperfections, or hereditary taints, of which many may be frequently discovered by care and the necessary circumspection.

After the introduction of such remarks as evidently tend to constitute the necessary apology for, and prelude to, the undertaking, it will be naturally expected I should revert to instructions that become immediately worthy the attention of every young and inexperienced breeder, who feels a desire to excel in his stock from the motive of emulation, amusement, or emolument. It has been before hinted, that those succeed best for either who propagate the different kinds according to the distinct species of each, whether for the Turf, Field, or Draft, without descending to the adoption of crosses in themselves erroneous and seldom productive.

In the present enormous price given for horses of every denomination (universally said and believed to be occasioned by the constant and unprecedented exportation of
our most valuable English breed) it is almost difficult to decide, which class contributes most to the profit of the breeder. I cannot, however, in my own opinion, hesitate a moment to pronounce the preference to have fallen upon those that turn the soonest into specie: of these, for instance, are the best bred blood stock, now in the highest and most incredible state of cultivation; the common marketable prices of these, if of the first pedigrees, and brought to a promising size when yearlings, are one hundred and fifty guineas for colts, and one hundred for fillies, at which they pass current, provided they are crossed in blood from any of the stallions whose celebrity we have before had occasion to mention.

Without enlarging upon this sort of sporting speculation, I shall only observe, that under certain regulations, and very nice distinction, with great care and unremitting attention, this may prove a much more profitable mode of breeding for those who wish to ascertain a fixed emolument, (without hazarding the loss of a certainty in breaking, training, racing, &c.) as is the prudent
practice of the most eminent dealer in the kingdom, who is annually accumulating a very considerable fortune by the constant transfer of equestrian property in its infancy, rather than encounter the incredible expense and anxiety of a stud in training, the glorious uncertainty of the turf, the unbounded insolence of the necessary dependents, and the immaculate purity of those to whom your honour and property must be eventually intrusted, as will be more fully explained when the subject comes again under consideration, towards the conclusion of the work.

Concluding, therefore, this class of breeders to derive the greatest pecuniary advantage from their increase of stock, by converting it expeditiously into cash with so little trouble, expense, and inconvenience, it is not matter of surprize that the rage for blood and pedigree should be daily increasing, (and likely to continue so) though the palpable effect of "training on and training off," annually dissipates and reduces to humiliating indigence some of the most princely fortunes in this and the neighbouring
kingdom of Ireland, where the thirst for equestrian pre-eminence is equal if not superior to our own.

The breed of horses most profitable to the graziers and breeders of Lincoln, Leicester, Northampton, and some few other counties adapted by nature to the purpose, are probably the old English black draft horses, so remarkable for their bone, strength, and hardiness of constitution; these, from their great size, beauty, and uniformity, become to every curious observer, objects of singular attraction; their wonderful power in business renders them in general request, and the breed is cultivated with the strictest attention to corresponding points and perfections in both sire and dam, little inferior to the class last treated on. Stallions of eminence in the above counties are estimated at very considerable sums, and frequently let out to cover from one hundred to two hundred guineas for the season; the stock generally comes into gentle use at two years old, or under, and when brought to a good size in proper time, frequently fetch from thirty to fifty guineas at two and three years old.
Those horses passing under the denomination of hunters, but more particularly the common crosses for roadsters and hacks, can by no means prove so generally profitable, when all contingencies are taken into consideration; the length of time they are obliged to be kept on hand and maintained, (till at least four years old (with the unfavourable changes they may probably undergo before they can be brought to the ultimate market of emolument most applicable to their different qualifications, render the whole a matter of much greater uncertainty than with horses of the preceding description; for the unavoidable difficulties of cutting, breaking, backing, docking, and nicking, render them serious operations, the success of which cannot be ascertained without encountering a chance of misfortune or failure to injure the subject and affect his value.

Notwithstanding these considerations are intended for general application, it must be remembered they will ever remain subject to the different degrees of success, arising from the variety of circumstances already explained. Counties, as I have before remarked,
differ so very much in their situation and fertility for breeding, that many will not produce horses of size, and the desirable qualifications, at even treble their real value, when brought to the very highest market for disposal: for it is a fact indisputably certain, that nothing but a part of the kingdom remarkable for the abundance and luxuriance of its herbage, can ever produce stock of size and value to render breeding a matter of emolument; the attempt, therefore, in unfavourable situations, must ever recoil upon the adventurer with additional disappointment.

These observations, so immediately relative to the idea of profit and loss, are by no means introduced to restrain or deter those from the practice, who are so unavoidably circumstanced in situation, as to breed under such disadvantage from the motives of amusement only, where pecuniary compensation is no way concerned or expected; it is, however, to be presumed, that occasional references to the instructions hereafter inculcated upon an extensive scale for the improvement of stock in general (without again
adverting to the superiority that one part of the country enjoys over another) may contribute more to a gratification of their wishes than to pay an implicit obedience to the effect of chance unassisted by any personal effort "to better the example."

Previous to further discussion of the subject before us, it is worthy admiration in how many ways the animal production of the temperate region we enjoy has been enabled to demonstrate its individual excellence over a similar part of the creation, when transported from any other part of the globe. This remark might be justified by a very slight comparative view of the different animals, whose abilities or power (according to their distinct qualifications) have been purposely placed in competition with others to prove the inferiority; one, however, comes immediately applicable to our present design. Attempts have been repeatedly made by very strenuous advocates of the first eminence and property, to improve the breed of our own nation by the elaborate introduction and cross of the most celebrated Arabians, carefully selected under impor-
tant commissions, where expense and trouble proved only inferior considerations: but the trial afforded by time, and experience by observation, have fully shown the improbability of adding to the perfections of the true English blood horses by the importation of theirs.

This rage for improvement with a cross from the blood of Arabia, was near half a century past very fashionably predominant; but has so gradually declined for the last twenty years, that they are held in no kind of estimation by any systematic sportsman or breeder in the kingdom. The original advantage expected in the cross, was some addition in speed, even to our fleetest mares; this, when obtained, was totally counteracted by a want of bottom, for, after repeated trials, the most exact and disinterested, they were found incapable of keeping their rate, for much more than a mile, and consequently became of so little consequence to a racing stud, that a short time will, in all probability, render them of no other utility than to constitute part of the retinue in the triumphant return of an English Nabob, or an ad-
tion to the ostrich, porcupine, and rhinoceros, of some eccentric collector of curiosities.

Bracken has introduced a few judicious remarks upon the subject of breeding, but in his usual way so perpetually interspersed with inapplicable stories, and strange conclusions, that you are dragged through forty or fifty pages of extraneous and digressive matter to be informed, that "Spanking Roger, belonging to the late Sir Edmund Bacon, was a round barrelled horse;" that "Mr. William Penry cured his stammering patients of that defect in speech by purging;" that "a mare belonging to Mr. T. Makin, of Prescot, in Lancashire, run with her fore feet as wide as a barn door; yet she ran as fast as most of her size, which was all owing to bringing in her haunches quick, for 'they must needs go when the devil drives;'' that "an old woman can cure a wound as well as a surgeon;" that "physicians may, from their ignorance, be considered a set of vile pickpockets, almost as numerous as the caterpillars of the law;" that "he who sails with a bad wind had need understand tacking about;" with a great number of
curious remarks, equally sublime, and as highly applicable to the subject he was treating on; upon which he has introduced no new matter in any direct chain of connection, tending at all to enlighten the topic or improve the management, having literally taken up the business by way of amusement, and laid it down precisely where he found it.

We might here, with great seeming propriety, introduce a long list of instructions, containing the shape, make, bone, strength, with all the variety of points necessary (or at least likely), in horse and mare, to constitute a progeny of promising perfections; but those requisites are so extensively and accurately described between the twelfth and twentieth pages of The Gentleman's Stable Directory, Vol. I. and must be so nicely implanted in the mind and memory of almost every sportsman or breeder, that a repetition here might be candidly deemed entirely superfluous, and consequently render us subject to an accusation we wish most attentively to avoid.

Such descriptions of points and qualifi-
cations standing therefore, not only incontroverted, but in possession of general acquiescence, to those pages the juvenile or inexperienced inquirer is referred for any additional information he may wish to obtain; this reference being justified only upon the natural presumption, that there will be very few purchasers of the present work, but what are holders of the first Volume of the Stable Directory likewise:

Having there so extensively shown what are the requisites desirable to obtain, we now proceed to explain what the defects are most necessary to be discovered in either sire or dam, that the possible retention of hereditary taints, defects, or deformities, may be the better avoided; for although it remains, and in all probability ever will, a matter of ambiguity why an unblemished horse and mare may produce a colt or filly full of disease or deformity, it by no means follows that a diseased or deformed sire or dam are equally likely to produce a progeny of perfection. This being unequivocally admitted (as by every impartial investigator of nature it certainly must be), it will undoubtedly prove...
an act of consistency to evade so palpable a chance of disappointment, by forming an union of propriety apparently calculated (from every external appearance) to transmit such original purity to their produce.

To effect this, the mare having been obtained corresponding in size, frame, bone, and strength, with the wish of the breeder, and found upon accurate examination to be perfectly free from the blemishes and defects so frequently mentioned, the choice of a stallion becomes the object of serious attention; in him should be accumulated all the points and good qualities it is possible for a single object to possess, upon a proof exceeding all speculation (and this every observant naturalist will allow), that the produce, whether male or female, much more frequently acquires and retains the shape, make, marks, and disposition of the sire than the dam; and although such assertion may not obtain immediate credit with many, yet rigid observation has long since demonstrated the fact, and justifies the great consistency of rejecting stallions with the least appearance of disease, blemish, or bodily defect, indicating even the
slightest probability of transmission to the offspring.

Supposing a neighbouring stallion, and such there generally is in every part of the kingdom, to have great recommendation in his favour, as to the matter of common inquiry and fashionable figure, it is still necessary to descend to the minutiae of symmetry in head, neck, shoulder, forehand, ribs, back, loins, joints, and pasterns, attending to a strict uniformity in the shape, make, and texture of the very hoofs, and were it possible (which in almost every case it certainly is not) even to ascertain the temper and disposition of both sire and dam, rather than be accessory to a procreation of vices or imperfections, that by a more judicious selection may be so easily avoided.

After all that can possibly be written (and if it were probable that all could be universally read) upon this subject, every reader possessing the power of free agency has still the privilege to reject any opinion not perfectly coincident with the plan he may have adopted, and to enjoy the uncontrolled
right of persevering in his own decision; but presuming on the task I have undertaken, I conscientiously recommend a proper examination to discover the state of the wind, spavins, curbs, tendency to cracks or grease, bad conformation of the feet, as corns, thrush, or long and narrow heeled hoofs, either of all which would furnish sufficient foundation to prejudice me against him as a sire, however well I might be pleased with his other most promising perfections.

These casual blemishes or hereditary defects being carefully avoided, we come to an inquiry of much greater consequence, the inattention to which has been productive of more disappointment and vexation to the before-described class of unthinking breeders, than perhaps any other part of their inconsistency. Opposite opinions will always be the support of two distinct classes, the right and the wrong; for while one party asserts (from experience and observation) the great hazard, and certain danger of breeding from a blind stallion, the other from innate obstinacy or affected superiority of penetration, is determined to encounter such indiscretion
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upon the heroic basis of "the more danger the more honour," and in the event repentantly discover the want of knowledge and prudence in themselves, they so exultingly presume to arraign in doubting the judgment of others.

The introduction of new opinions as mere matter of speculation is a communication of just as much as amounts to nothing; such conjectures, without the show of reason to establish an apparent discovery of the proof, would be gaining no ground in the estimation of public opinion, nor laying any just claim to credit for the responsibility of our assertions. Luckily, however, for the support of the subject before us, accumulated proofs are by no means wanting even (within the pale of my own personal experience and conviction) to counteract opposite opinions, whether imbibed from prejudice, obstinacy, or ignorance.

Adverting again to what I so lately admitted, the possibility of sound sires and mares producing a defective progeny; and vice versa, that blind stallions may sometimes get colts
with good eyes; yet the chance, or rather imprudence, of breeding from such had much better be avoided; as the incontrovertible evidence I shall introduce, upon the folly of embarking in such an expedition, (where the odds are entirely against the adventurer, without a single point in his favour) must prove exactly similar to playing at hazard with false dice, where you may eternally lose, but never can rise a winner.

It is likely these considerations may want proper weight with those who supply a contemptuous smile of disbelief at the very idea of transmitting hereditary blemishes or defects from sire to son, as the result of cynical opposition to the more rational system they adopt, of annually breeding under every possible disadvantage, in confirmation of their inexperience: I shall therefore recommend to their incredulity a few instances, confirming as facts what may have been hitherto considered matters of doubt, without the least criterion for general decision.

The first opportunity I could avail myself of to justify or render nugatory my opinion
of the impropriety and danger of breeding from horses of this description, was in the year 1773, or 1774, when a great number of mares in that neighbourhood had been covered by a very popular "blind stallion," (for that was really the appellation under which he passed) of the Hon. T. King's, near Ripley, in Surry, whose pedigree, shape, make, figure, and qualifications, were so effectually fascinating with the multitude, that the want of eyes did not seem at all to impede the daily progress of his procreation. The infection of fashion was then (and ever will be) as predominant as at present; for the slaves to that gew-gaw continued to bring their mares in unremitting rotation, and never discovered their own want of sight, or common comprehension, till the third or fourth year, when the major part of the produce became as blind as the sire.

Still anxious to ascertain to some state of certainty, an object of so much consequence (not only to the sporting people, but the world at large) as the hereditary transmission of this defect, I was constantly upon the watch to enlarge my inquiries to some de-
gree of satisfaction; I remained, however, without any thing perfectly conclusive till the spring of the year 1780, when a grey horse called Jerry Sneak (that had proved a tolerable runner, in the possession of Lord Spencer Hamilton) coming into my hands upon very easy terms just as his eyes were failing, I covered a few mares gratis with him in the neighbourhood of Frimley near Bagshot, which having made memorandum of, with a design to purchase any of the produce that appeared tolerably promising, and making my excursion through the different parishes to obtain from the parties the necessary information, I found in the fourth year many of the produce totally blind, and the remainder nearly so without exception.

Facts (it is universally admitted) are stubborn things, and to the establishment of this fact I have been anxiously labouring as to the acquisition of individual emolument, though I have ever considered it a promotion of general good, in which the community is so much interested, that it would be an absolute want of philanthropy to con-
It is not the purport of the present work (nor is at all applicable to the purpose) to enter into physical researches, leading the reader through a long chain of philosophical disquisition upon Lewenhoek's microscopic investigation of the animalcules contained in the semen of animals, founding upon such inquiry a thousand conjectures respecting this abstruse process of nature, that may very much perplex the mind, but can neither tend to entertain or improve the judgment.

Of as little consequence or advantage it must certainly prove, to attempt any exact decision by what nice and undiscovered operation in the animal system, a horse is rendered first partially, then totally blind by too frequent or hard racing; as well as the very common occurrence of a stallion's becoming equally so by too constant and repeated covering, though the act itself is a spontaneous effort of nature.
However difficult it may be to furnish an opinion applicable to every idea, I believe with the scientific investigator there need be little scruple to hazard a professional description, by what means so serious a revolution in the frame is effected; for the brain being the very basis of the nervous system, and the nerves the acknowledged seat of pain and pleasure, any exquisite or preternatural extreme in either may be productive of great debilitation, and the optic nerves being nearest the origin, may become more sensibly affected in a paralytic or some other degree, than any subsequent part, and the sight gradually decline from a partial vision to total blindness,

For the honour of human nature, I can but most earnestly wish the applicable introduction of these remarks may induce the parties interested in the event, to be in future a little less strenuous in their different exertions, whether for credit or emolument; the first, never to distress one of the noblest animals on earth, by those frequent and severe runnings that evidently exhaust nature to such a state of mortification; or the latter, in the truly contemptible method of letting a
horse cover such an infinity of mares, as not uncommonly terminates in the irretrievable loss of his eyes, but the inevitable loss of his reputation also as "a certain foal-getter;" for the great number of mares covered by him without produce brings his character the following season into disrepute, should even the state of his bodily strength, constitution, or chance, preserve his eyes from the great probability of annihilation: this remark pertaining only to the owners of stallions who attend the markets of different towns every day in the week during the whole season, exclusive of the additional portion of business in their own neighbourhood on the Sunday morning.

Of these there are so great a number, and in their performance so general a failure, that it is absolutely wonderful how so many can become dupes to the customary infatuation of leading a mare to any market town, to be served by a horse who is continually covering from four or five, to eight or ten mares in every twenty-four hours, during the season; with the additional consideration, that these extra exertions are most frequently
made under the corrupt influence of stimulants, provocatives, and cordials adapted to the purpose, and supposed to act with the same excitement as cantharides upon the human body. Incredible as it may appear to those whose situation in life has rendered them little subject to discoveries of this kind, I have been repeatedly called upon in my professional department, to dispense large quantities of this very article to many of those who travel the country with stallions of such denomination; first obtaining from them a communication of the use it was intended for before they were intrusted with it, upon an experimental conviction of its danger; having in the course of my private medical practice known one life lost, and another miraculously saved, where it had been given under the denomination of love powder for the unfair gratification of the worst of purposes.

Without entering again upon the act of generation, the semen, or animalcula contained in it, as before adverted to, can any intelligent reader, to whose deliberate attention these pages may become subject, be at
all surprised, that in such a constrained and prostituted state of nature, so few of her attempts should be productive of success?—Here we might be readily induced to enter another large field for scientific disquisition; but as it would evidently extend not only beyond the present purpose, but prove "ca-viar to the multitude," our inferior class of readers might occasionally exclaim with Mungo in the Padlock, "What signify me read, if me no understand!"

Avoiding, therefore, the indifference in general shown to remote medical explanation, and dull anatomical descriptive, I come directly to a question founded in reason, upon the merits of which the interested part of the world will be enabled to decide, at least so far as corresponds with their own opinions upon the subject. Can it be possibly believed or expected (but by the most illiterate, who in fact possess the gross comforts of life only, and never enjoy the sublime gratification of thinking), that horses thus eternally jaded and harassed, not only with the diurnal routine of copulation, but the incessant fatigue of travelling perpetually, can be at all
equal to the Herculean task assigned them? Can it be matter of surprize, that not more than one-third, or, upon a more favourable computation, one-half at most, of the mares covered in this way produce a colt, and that the half of those so produced never come to a proper size, bone, or strength? Then can there remain a doubt in the mind of any unprejudiced man living, but to these causes may be attributed some portion of that deficiency so generally complained of, and too frequently attributed to the want of bone in sire or dam?

Having hitherto introduced what I conceive to be the leading qualifications in horse and mare to render the business of breeding pleasant and advantageous, we come next to consider the season most proper for bringing them together: as it must be admitted, an inconvenience will certainly arise to the mare by foaling too early in the spring, or to the produce by falling too late in the summer, it will undoubtedly prove more eligible to adhere a little to the line of mediocrity, letting either extreme be carefully avoided.
Nevertheless, it must be understood, this circumstance can by no means be altogether universal, as it depends in some measure upon the country and situation: the pasturage being of different states in different counties, and dependent upon the fertility of soil as well as the temperature of climate, the season is consequently forwarder, at least the herbage, (by a fortnight or three weeks) in one part of the kingdom than another,—a circumstance that should always be properly attended to by the parties concerned.

It will therefore prove perfectly consistent in all counties, however they may be situated, to have the produce and pasture appearing at the same time as nearly as fluctuating or unavoidable circumstances will allow; for when mares are permitted to take the horse too soon in the season, they bring forth before there is sufficient grass for their support, and being necessarily assisted with dry food, the lacteals (or milk vessels) for want of gradual supply and expansion, become contracted; the very sharp winds early in the spring, with a restraint in food, sometimes so stint the colt (particularly should a wet
unfavourable summer and severe winter follow), that he never reaches a proper size in growth, but displays the disadvantage of his earliest state when arrived at maturity.

It is no uncommon thing in different parts of the country, to observe mares that have dropped their foals early, (before there is a blade of grass for their support) placed in a rick yard, where by incessantly tugging out a scanty living, it is ridiculously believed both mare and colt are indulging most luxuriously, though the direct contrary is really the case: hay may undoubtedly, if administered in due supplies, contribute a sufficiency of support for the mare, but is not calculated to yield, even in almost constant mastication, any great nutritious superflux for the subsistence and desirable improvement of the colt. As there is a very great difference in the nutritive qualities of food, so there is a very material difference in the milk it produces: indifferent or sparing aliment will certainly produce a thin aqueous impoverished milk, of quality and in quantity, to sustain and barely subsist nature, but by no means to give it strength, vigour,
growth, or the formation of flesh and bone so generally desirable.

However hastily some part of the world may be inclined to decide, (as every observer has a right to indulge his own opinion) there can be no doubt but to the inconsiderate practice of inadvertently leaving mares and colts to subsist upon bare land; or barren pastures, for the first summer, and a successive scene of poverty in the ensuing winter, are we in some degree indebted for a proportion of those horses I have before described, as coming under no denomination, applicable to no particular purpose, never rising to any considerable worth, and doing so little credit to the breeder, that you can never discover (if you were so inclined) from whence they came, after they are once out of his possession.

In this mistaken notion and ridiculous system of breeding fails every penurious and mercenary breeder, who, prompted by his own narrowness of disposition, affects to believe there is little or no difference between filling and feeding, considering a run after
the cows as good as a run with them; that chaff is a much more profitable and healthy food than oats, and that an open farm-yard, with a crib of barley or oat straw, during the severe frost and snow of a long dreary winter, are preferable to all other accommodations of food and shelter, as (to make use of his own justification) they are then in the most proper state, "a state of nature." These are the persuasive motives assigned also by those strenuous advocates for general improvement, who barely subsist their mares during the tedious months of gestation, under an idea perfectly coincident with the principles just described, that a mare after having been covered, requires but "little or no keep," as (with such contemptible speculators) the act itself is ridiculously supposed to make the mare fat. This is the invariable opinion among the less enlightened class of rustics: and though the act and its consequence may be justly said to make the mare big, yet the original remark is certainly too ludicrous for serious consideration.

After the necessary introduction of such observations as are evidently connected with,
and branch directly from the subject, we return to the time best adapted by nature and the season to the foaling of the mare. A few words having been already interposed upon the inconvenience of dropping her foal too early, something consequentally appertains to its falling too late; this should never happen when the year is too far advanced, as the produce then has to encounter hourly increasing difficulties: the daily declination of the genial sun, the decaying state of the verdure, the impending rains, bleak winds, long nights, foggy days, and the lank weak grass, form so strong a combination against improvement, (particularly if the winter should prove an additional stroke of severity) that the colt frequently feels the disadvantage, and constantly displays it by the deficiencies in frame and figure, as before described.

Taking, however, the variation of different counties into the aggregate, to fix a criterion of time applicable to all parts, I shall not hesitate a moment to pronounce the last week in April, and the three first in May, the most proper months in the year for mares to take the horse, provided it can be by any means
effected; to promote which the following methods should be adopted: it is generally perceptible when a mare is horsing, and it is likewise universally known she will then take the horse without further trouble; mutual consent therefore renders animadversion unnecessary; but should the mare, upon being brought to the horse, not make any shew, on the contrary, give proofs of denial by repeated kicking and other violent exertions, let her (after sufficient trials) be taken away, and some addition be made to her keep; give her a substantial feed of good oats and a pint of old beans twice a day, continuing to offer her the horse once in three days till a compliance is effected.

After which it will be necessary to offer her the horse at the expiration of eight days (that is, on the ninth) from the day of her having been covered; if she again take the horse (which is not at all uncommon) you reckon from the last time of covering, upon a supposition no conception took place from the first copulation, and that it is consequent-ly obliterated. On the contrary, should she, after repeated offers, persevere in rejecting the
horse, the first covering is then supposed to have been effectual; notwithstanding which, the mare, in either case, is to be produced and tried with the horse at the end of a second eight days, when circumstances must be regulated as at the end of the first, entirely by her compliance or rejection.

Sentiments have varied exceedingly upon the little probability of a mare conceiving when the act of copulation has been forcibly committed without the least external display of desire, and in opposition to the most violent exertions of the mare. However my opinion might have originally fluctuated with the various representations of others upon this subject, I availed myself of an early opportunity to ascertain the fact, and remove any doubts that may have arisen within my own mind, although the recital will not perhaps render a repetition of the trial equally successful in the opinion of others; yet I have been since repeatedly informed the experiment is very frequently made, and not without its share of success.

In the year 1773, (residing then at Hor-
sel, near Chobham, in Surrey) I intended covering two mares by Woodcock, half-brother to Eclipse, who then remained at Egham for the season; one of the mares took the horse without reluctance, the other rejected him with the greatest violence: at the expiration of the time before mentioned, they were again offered the horse, and both refused. On the ninth day I made the same journey with the same success, and then concluded the mare that had been covered to be perfectly safe; determined, however, to make no more journeys of uncertainty upon the business, I asked Townshend, the owner of the horse, if he had any objection to let the horse cover the mare compulsively, upon condition she was so completely trammeled as not to injure the horse? This being readily agreed to on his part, and the mare strongly hobbled, the horse was brought out; and being luckily very fresh, full of vigour, and eager as she was reluctant, the leap was obtained with much less difficulty than could be possibly expected: at the end of the eight days I again attended with the mare, and found she rejected the horse with more inveteracy than in any of my former jour-
neys; I now made up my mind to take no more trouble in the business, but leave the rest to chance: in a very few months she was visibly in foal; and produced me an exceeding handsome colt, that I disposed of at a high price to a gentleman in Norfolk, when rising two years old.

This circumstance I have related, to establish by proof the consistency of adopting the alternative, when the season is so far advanced as to hazard the loss of the year by longer delay: for my own part, (and it is clear I speak experimentally) I should never hesitate to cover a mare in this way, if she continued to refuse the horse till the last week in May, or the first week in June, much rather choosing to ravish the mask of delicacy from her disposition, than lose her contribution to the stock for that year, or have a colt fall six weeks or two months too late in the season.

It will become perfectly applicable here to introduce a few words respecting the exact period of gestation in mares, upon which I never remember to have heard or read any thing.
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dictatorially decisive, more than the general assertion of their going eleven months (or the common witticism, that "a hare and a mare go a twelvemonth") but whether it is understood eleven lunar or calendar months, I believe has never been critically explained (at least generally known): and this is in fact the more extraordinary, when we recollect that eleven calendar months make within two days of twelve of the other; nor indeed are there but few instances in which the knowledge of such nice distinction can be productive of much utility; yet it creates some surprize that it has not been particularly noticed by successive naturalists, as circumstances have arisen and may sometimes happen, where such precision would effectually remove a doubt or establish a fact.

A want of early attention to a discovery of this minutia was attended with a trifling loss to me some years since in my first breeding embarkation, when in possession of much less observation and experience; for, having obtained the loan of a strong bony mare from a friend in Windsor Great Park, for the purpose of breeding, I had her covered by a large
powerful horse then in the neighbourhood, and booked the leap, according to custom: but having made no calculation of the calendar months, I kept her eleven lunar months and a fortnight (by the almanack), and not perceiving her to spring in the udder, or grow larger in the carcase, I returned her (after taking the opinion of almost every farmer and breeder in the country), upon an universal decision that "she had no foal within her." The ultimate event proved for once the error of general judgment; for the owner (Mr. Johnson, then one of the keepers of the Great Park) taking a morning's walk among his stock, found her with a fine colt at her foot in about ten days after her return, which proved a valuable horse to him at five years old, that I had lost entirely by my inadvertency and impatience.

The mare having taken the horse but once, and that under my own eye (a trust I never delegated to another), added to the strictest attention in point of time, formed a combination to give proof, that a mare carries her young twelve lunar or eleven calendar
months (which accurately taken are just the same); or that the exact given time varies in different subjects, and is so regulated by age or constitution, that there has yet been no criterion fixed for a nice distinction. The matter, however, if at all entitled to consideration, may be most easily reduced to a certainty, by any gentleman having a variety of brood mares in his possession, who will note those who have taken the horse but once in the season, and take the trouble to book the day of their bringing forth; when, by comparing the whole, the exact time of gestation will be nearly demonstrated, where no second covering has intervened to render the decision imperfect.

The treatment of mares after being covered is regulated entirely by the class to which they belong; for, having twice refused the horse at the periods of time before stated, they are then said to be stinted, and concluded in foal. But this is by no means always the case, for it frequently happens that such mares produce no foals, although appearances are so much in their favour. Thorough bred mares (that is, mares whose blood is
entirely untainted with any inferior cross, and kept as brood mares for the turf only) are thrown out to grass for the summer season without further consideration; only taking particular care that no geldings, or yearling colts, are suffered to accompany them in or near the same pasture, for some few weeks after conception.

Mares of an inferior description in general use for the saddle, or those for agriculture, may be continued in their common employment with moderation; they seldom suffer abortion but by great and improper exertions; they are therefore very frequently used till within a few weeks of dropping their burden, without the least fear of inconvenience. This is a fact so universally established, that instances have repeatedly happened of mares obtaining stolen leaps when out at pasture, without the knowledge and very much against the inclination of the owners: this circumstance, from various motives, has been considered so prejudicial, where breeding has not been intended, that different and powerful methods have been adopted, as the administration of sarine in large quantities, violent
exertions in drawing, or long and very speedy journeys taken to promote abortion, and those without the least effect; to corroborate which, the introduction of one only becomes at all necessary, as it is too well authenticated to admit a doubt of its certainty.

Some few years since, Sulphur, a well-known running horse of the Duke of Cumberland's, having leaped the paddock paling, of an immense height, in Windsor Park, covered a hunting mare of Mr. Jeph's (then resident at Sandpit Gate) in the sight of many labourers, who reported the occurrence. As the hunting season approached she was perceptibly in foal; this was what he by no means wished, and was so much hurt at the awkwardness of the circumstance, that he continued to hunt her incessantly, covering the strongest leaps and taking the deepest ground to obtain abortion.

The event, however, sufficiently proved the folly (not to add cruelty or presumption) of opposing nature in her nicest operations; for all the severity so inconsiderately put in practice, never in the least hurt the mare or
debilitated the foetus: at her proper time she produced a foal, that (to render the circumstance more remarkable) at five years old won the fifty pound plate annually given for the keepers and yeoman prickers to be run for over Ascot.

This invincible stamen, or hardiness of constitution, so worthy recital in this instance, is not (let it be understood) so entirely general as to be applicable to all the class without exception; it therefore becomes perfectly in point to introduce a case in direct contrast, that may be likewise productive of utility, in preventing too great exertions with mares in such state, under a firm opinion that the loss is less likely to happen than it really is, and actually may.

Having about seven years since purchased of the breeder at Horton in Buckinghamshire, a four year old mare, got by Bell's Denmark, I observed to him (during the negotiation for purchase) that from the depth of her carcase and hollowness of the flank, she was certainly early in foal; on the contrary, he assured me, positively, no horse had ever been
near her, and that it was merely the effect of
lying at grass. This mare, though so young,
was a very excellent trotter; and having soon
after occasion to take a professional journey
with some expedition (the road being ex-
ceedingly good), I made observation by my
watch that she trotted the seven miles in five-
and thirty minutes, without the least seem-
ing inconvenience; but on the morning fol-
lowing I found she had slipped a colt foal very
perfect, of about three months' conception,
though no extraordinary exertions were used
on the occasion.

The recital of cases so exactly in point lays
claim to the attention of breeders in general,
as they undoubtedly constitute a basis in ex-
perience, upon which the judgment may be
discretionally formed at what time it will be
proper to discontinue the working of such
mares, when it is clearly ascertained how
slight a portion of labour may endanger the
dam, and prove destructive to the progeny.

The necessary qualifications for procreation
in both sire and dam having been fully inves-
tigated, and the blemishes, defects, and local
contingencies, that tend to forbid the attempt fairly explained, we now come to the crisis of delivery, or the mare's bringing forth; an event so wonderfully accomplished by the almost unerring efforts of Nature, that upon the fairest calculation, not one mare in a hundred suffers in any respect, more than the temporary disquietude from an exertion of so much magnitude, although in the moments of reflection it absolutely becomes a matter of admiration how the shock is sustained, without a much greater frequency of the danger that so seldom ensues.

Notwithstanding this providential interposition for the safety of animals so little enabled to relieve themselves, it is worthy remark, that where difficulty and danger once occur, the case becoming preternatural, it generally terminates in the death of one or the other, and not uncommonly in the destruction of both; this may probably proceed from the construction of parts not being generally understood, and the little chance of assisting nature with the same ease and accuracy as some other parts of the creation.
A loss of this description, after a year or more of tedious hope and expectation, consequently produces temporary gloom and serious disappointment; in some instances the dam becomes the victim, in others the foal; to the latter there is no palliative, to the former but one alternative: it is a custom almost universal, upon the death of the mare (soon after relief from her burthen), to despair of success in raising the foal by art, and it is frequently disposed of without delay, that a circumstance so unlucky may be the sooner erased from memory and buried in oblivion.

This hasty decision is by no means to be commended, although it is most generally known the power of instinct is so very predominant in this species, that it must be a fact exceedingly rare, to find a mare that will, by whatever stratagem you can put in force, cherish any other foal than her own: this most undoubtedly arises from their seldom or never producing a plurality of young at one time; a circumstance by no means uncommon with almost every other animal in the creation, who are the more easily imposed upon to nourish and protect a spurious offspring,
The general despondency before mentioned, respecting the survivor, is not to be justified where the foal is of value adequate to the trouble; nor indeed to be neglected upon the score of humanity, when unremitting industry and perseverance can so readily furnish an artificial substitute for maternal care and nutrition. It may be naturally concluded I allude to the great probability (and in some case certainty) of bringing the foal up by hand; a remarkable instance of which becomes immediately applicable, in the perfect recollection of a horse bred by his late Royal Highness William Duke of Cumberland, that at his death became the property of the celebrated Captain O'Kelly, and in the successive possession of both, for a series of years, won more give-and-take plates than any other horse in the kingdom.

The fact was exactly thus: the colt being the first foal of a young mare that had been taken into the brood stud without training, upon the produce of which his Royal Highness had formed great expectations, it proved matter of much surprize and disappointment (being totally repugnant to the reciprocal af-
fection in nature) that, so soon as the colt had fallen, the mare absolutely took fright at her own offspring, and never could be once brought to the least association with it whatever. Every stratagem that could be devised was put into practice under the immediate inspection of his Royal Highness, to effect a natural union between the dam and her foal, but without the least probability of success; those fruitless efforts were therefore relinquished, and alternate attempts made to render the abandoned orphan a son of adoption with different mares in rotation, but with no prospect even of hope. In this dilemma the Duke, whose humanity in matters of much greater importance will stand recorded to the end of time, fully intent upon preserving the colt if possible (with a declared presentiment of his future eminence), determined upon his being brought up by hand, if possible, without a relative consideration to trouble or expense, and issued his orders accordingly. The event justified the endeavour, and the success of the undertaking was transmitted to posterity by the Royal Sponsor, with the name of the horse; for, under the appellation of Milksop, his very capital per-
formances may be found in the "Racing Calendar," so long as it shall retain a place in the sporting libraries.

Circumstances of this kind happen, however, so very rarely, that instructions respecting casualties, remote and unlikely, might be deemed superfluous, did not a vindication immediately arise from the exulting consolation of knowing by what means to encounter such difficulties whenever they occur.

Returning, therefore, to the act of foaling, which, as before observed, generally happens without the least danger or difficulty, and nine times out of ten in the night, it becomes the business of the owner or superintendent, to dispose the mare in such place of safety, that mischief is at least not likely to ensue; and this caution may prove the more acceptable, when it is recollected by every breeder, sportsman, or resident in the country, how very common it is in the season to hear of foals being smothered in a ditch, or drowned in a rivulet, to the possibility of which, the attention of the inadvertent
owner had never been even for a moment directed. It is likewise by no means inapplicable to observe, that for some days previous to the expected foaling of the mare, she should be kept in rather a sparing than plentiful situation, to prevent a too great repletion of the intestines, and consequent compression upon the uterus, producing extreme pain, difficulty, and delay, in the delivery, which might otherwise never occur.

The mare having (as is generally the case) been freed from her burthen without inconvenience, and no circumstance arising to forbid it, let her be immediately removed to a healthy and luxuriant pasture, calculated to furnish not only a sufficiency of support for her own frame, but affording a superflux for the substantial and nutritious support of her young. In this a proper discrimination is absolutely necessary; lank, swampy, sour grass will certainly expand the frame, subsist the dam, and contribute a flow of milk for the foal, but not of that rich and luxurious quality that is derived from feeding upon the succulent herbage of maiden meadow,
or upland grass in high perfection; both which contribute so very much to the daily growth and improvement of the colt, that it is a matter of the utmost consequence to the breeder, whose principal object should be to attain every possible advantage in height, bone, and condition, previous to the commencement of severe weather, during which growth is in general suspended, unless liberally promoted by the salutary interposition of good food, and proper shelter to encounter the inclemency of the season.

This is the first step to be taken where no disagreeable traits intervene to require a different mode of treatment; but should the mare (by foaling before her time, or in severe sharp winds, a cold wet night, long and painful delivery, or other circumstances too abstruse to be discovered) visibly labour under fixed dejection, bodily languor, loss of appetite, lying down as if painfully weary, and totally inattentive to the infantile fondness of her foal; it may be justly presumed, nature has sustained a severe shock from some one of the causes just recited, that cannot be too soon attended to and counteracted,
for the prevention of more distressing consequences.

Fate is in general rapidly decisive in cases of this complexion, therefore delay (under any pretence whatever) may prove not only dangerous but destructive; the mare upon such discovery should be immediately removed, with her foal, to a still and comfortable situation, as a large open stable, close cow-house, or bay of a barn, where she should be expeditiously supplied with such articles as invigorate the system, increase the circulation, and recruit exhausted nature. About a gallon of water made warm and impregnated with a portion of bran, or oatmeal, may be directly given to allay the thirst, which pain, fatigue, or disquietude never fail to excite, as well as to form a kind of substitute during the preparation of a plentiful mash of malt, oats, and bran, equal parts, into which should be stirred six ounces of honey: this being given to the mare, of consistent warmth, will not only gently stimulate the debilitated powers, and gradually assist the strength, but promote an early flow of milk for the grati-
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fication of the expectant foal, which is always in some degree obstructed, if not totally suppressed, by the least indisposition of the dam.

The mash may be repeated twice every day, with plenty of the best hay, and occasional supplies of the water before-mentioned, till her recovery is sufficiently established, and the weather proportionably calm for her enlargement, in the way above described, had no difficulty intervened. Should the same lassitude and dejection continue more than four-and-twenty hours after these methods have been adopted, bring into immediate use a dozen of the cordial pectoral balls from "The Gentleman's Stable Directory, Vol. I." and let one be given every night and morning in its prepared state, or dissolved in half a pint of gruel, and administered as a drink, or incorporated with each mash at the stated periods, till the whole are taken; continuing the aids of mashes, warm water, nursing, and clothing (if symptoms of great cold appear), till every appearance of com-
plaint is removed, and nature perfectly restored.

Some mares, whether from a rigidity of the vessels in not having their first foals till an advanced age, slight colds that obstruct the secretions, or whatever cause unassigned, are very deficient in a necessary flow of milk, by which means the foal is deprived of perhaps half the sustenance necessary for his support and expected improvement; this is a matter well worthy minute inspection for the first three or four days after foaling, by which time the food should be perfectly assimilated, the lacteals expanded, and an ample secretion furnished for the full feed of the foal. This not being the case, such deficiency should be very early discovered, and as eagerly assisted when known.

The richest and most luxuriant pasture that can be obtained, with good soft water at will, is the first and best natural step to remove such obstruction in its infancy: that, upon observation, not succeeding in the desired degree, and the colt becoming percep-
tibly stinted (which may be plainly perceived not only by his external appearance, but incessant attempts to obtain supplies without success), artificial means must be adopted to solicit a due discharge of this very necessary fluid, without which every expectation of the foal's growth and gradual improvement must be rendered abortive.

This object can only be accomplished by enlarging the mode and increasing the means of conveying a larger portion of more nutritious aliment into the system: from the general diffusion of which the lymphatics and lacteals become proportionably distended, and are consequently enabled to secrete and discharge a much greater quantity than nature, in her more reluctant state, seems inclined to bestow.

This systematic process of nature may, to the less enlightened reader, seem matter of so much ambiguity, that somewhat more in explanation may be probably required; but as abstruse reasoning and physical definition (it has been before said) are not the purpose of the present publication, every irrelative
matter will be carefully avoided that can tend to perplex the mind or embarrass the judgment. It would, therefore, be deviating widely from the plan originally formed for the accommodation of general comprehension, were we, by unnecessary introduction, to enter into the very extensive field of anatomical structure and animal mechanism, demonstrating physically by what admirable means the excrementitious part of aliment is ejected from the stomach and conveyed through the intestinal canal, when divested of its more subtle and nutritious properties; which being totally absorbed by an infinity of vessels in the very work of digestion, is carried into the circulation, and there constitutes, by its different secretions, the source of life and support; from which systematic transformation is derived that formation of blood, that gradual enlargement of flesh and bone, only to be explained by much literary information on one side, and understood by no small portion of medical knowledge on the other.

It will consequently suffice to say, that the reader, whose mind is more enlarged,
whose views are more extensive, and who cannot reconcile his opinion or found his judgment upon the quality of aliment, the process of digestion, or the effect of nutrition, by what has been concisely introduced upon those subjects, must derive more substantial assistance from the variety of excellent professional publications more particularly adapted to such investigation and inquiry; as the majority of those who do me the honour of occasional inspection, will certainly expect, under the head we now write upon, to find much more matter of amusement and rural instruction than scientific disquisition.

Declining, therefore, a matter of so much extent, and so little applicable to the present purpose, we naturally revert to the state of the mare, and the means of enlarging the powers; from which, alone, the foal is to receive not only a sufficiency of nutriment for bare subsistence, but an absolute abundance or superflux for the promotion of advantages we have so particularly explained. The deficiency before mentioned having been
attentively ascertained, and excellent pasture with good water not being found to increase the flow of milk so much as is evidently required, an addition of more substantial and nutritive food must be associated with what has been always considered the first and most natural aliment for equestrian improvement.

All rules, however established, are perpetually liable to some exception, and nature is not uncommonly assisted, or counteracted, by ways and means the very least expected; for every constitution will not be acted upon in the same manner either in the human or brute creation. In fact, daily experience with the human species affords ample proof, that the same articles in physic or food shall act in a direct contrary way, and produce a very different effect upon one habit to what it shall in another; a circumstance so generally known and admitted, would furnish sufficient latitude for conjecture respecting the animal we now treat of, were proof really wanting to establish such opinion; which is by no means the case, as numerous instances might be quoted to corroborate a
variety of similar contrasts, were they at all necessary, to confirm a belief of what in reality there cannot be the least doubt.

Convinced, therefore of such facts, it is but a natural inference to conclude, the best, or indeed pasture of any kind, may not be so equally conducive to the improvement and condition of *all immediately after foaling*, but that it may act as a powerful restorative upon one, while it relaxes and debilitates the system of another; particularly where, from a vitiated or diseased state of the stomach and intestines, it passes so rapidly and indigested through the body, as to deposit but little of either *essence* or *substance* for the subsistence of the frame or support of the foal.

This is undoubtedly one of the predominant causes of the defect, and should be counteracted by such means as are calculated to strengthen the digestive powers, animate the circulation, and diffuse a plentiful supply of chyle to preserve the necessary secretions, without which a healthy and improving state is not to be expected. To
effect this, give a warm mash every morning, composed of brown malt three quarts, and one of cracked oatmeal (commonly called grits), let the water be poured on boiling hot, and repeatedly stirred up till of a proper warmth, when it may be given in either field or stable, unless any severity of weather should render the latter most eligible. In the evening of each day, give half a gallon of good sound mealy oats, with the addition of a pint of old beans, either whole or split, as will be most readily taken by the subject for whom they are intended: these feeds, exclusive of their great nutritive property, will powerfully assist in retaining the aliment in the stomach by their restringent quality, thereby contributing largely to the general purport of the whole.

This plan should be persevered in for six days without intermission, when an increased supply of milk from the mare may be earnestly expected: but should that improvement not become perceptible, she may be reasonably deemed a very poor nurse, and no other extraordinary means be attempted to assist the imperfection; but care must be
taken to wean the foal very early in the ensuing winter, (as will be hereafter explained) upon a well justified presumption, that at the autumnal declination of grass, her slender portion of support for the foal will disappear also.

How far it may be consistent, at least prudent, to breed a second time from mares whose powers are evidently deficient in furnishing such portion of milk as is absolutely necessary to stamp the attempt with success, must be left entirely to the decision of the parties interested in the event; some of whom, I have before observed, are, from different motives, too much attached to undeserving favourites ever to suffer their opinions to be warped by any consideration or remonstrance whatever. For my own part, I feel justified by personal experience and attentive observation, in again making public declaration, that in so serious and expensive a business as breeding for either the turf, field, road, or draft, no blind prejudice or infatuating prepossession should influence me to persevere in the practice with
palpable points, defects, or disqualifications against me in either horse or mare; and I have not the least shadow of doubt remaining, but those who confidently make the experiment will have sufficient reason to repent the hazard of the undertaking.

Returning now to the successful foaling of the brood mare, properly adapted to a continuation of breeding, we revert to the accustomed method of soon taking her again to horse: upon which a variety of opinions have been transmitted from sire to son, and re-echoed from one generation to another. It has been the invariable practice with some, to offer the mare a horse on the fourth day after foaling, to insure "the greater chance of immediate conception;" with others, "to promote an increased flow of milk;" and an established opinion, "that the horse will be more readily taken at that time than at any future part of the season."

These are opinions in themselves so perfectly inoffensive, and of so little consequence, that they require not the least ani-
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madversion; on the contrary, are left open to the judgment of every reader, upon the consistency of which, he may determine as most coincident with his own wish, or the practice of the place he lives in. As it is my invariable plan not to enlarge upon points that are unnecessary, or start obstacles and condemn customs that can be attended with no palpable prejudice, I shall only introduce some slight remarks as occur, without obtruding any thing dictatorially decisive to affect or discourage the local customs of others.

To prevent, however, such inconvenience as may probably arise from too hasty a determination, let it be taken into consideration, that by having the mare covered so very soon after foaling, you bring her (should such covering be productive) full three weeks or a month sooner the next season than the year preceding; and should that have been only in proper season, (viz. the latter end of April or beginning of May), you encounter the probability of much inconvenience; for, this calculation remaining unattended to, your produce may fall early in the month of March, not only under the disadvantage of
bleak winds and frigid showers, but before there is a single blade of exuberant pasture to subsist the dam, or encourage the growth of twelve months tedious expectation.

From what has been so lately and repeatedly urged, respecting the properties of different kinds of aliment, and its effect upon the aliment system, little more can be required to prove, that whenever a necessity absolutely exists for subsisting the mare entirely upon dry food, the secretion of milk must be inevitably reduced, and the improvement of the foal proportionally obstructed. Taking this, then, as a matter universally admitted, and, in fact, what no man living will attempt to disprove, we may naturally conclude no rational investigator of truth and consistency will ever deviate so much from the line of his own interest, as to promote the propagation of what must, at the time of its birth, be in a great degree deprived of its most natural means of existence; a deficiency not in his power to supply by any adequate substitute whatever.
Relinquishing, therefore, so extravagant an idea, we proceed to the time most natural for bringing the mare to the horse after her foaling, if she is intended to continue her services as a brood mare, and to be managed accordingly. The time most applicable in one respect, may not prove always the most convenient in another, as it should be regulated, if possible, to avoid the before-mentioned extremes of the foal falling too early or late in the season. Most mares will take the horse on either the ninth, fifteenth, twenty-first, or twenty-seventh day after foaling; of these, neither will occasion any great variation in the time of her foaling the next season, though I should adhere to either of the two last, unless the mare had foaled late in the year, when the first or second should certainly be preferred. After which covering, or refusal of the horse, she should continue to be tried at the stated periods so particularly specified in the earlier part of the work; always concluding the mare to be stinted, and in a state of conception, when she has repeatedly declined the horse in the manner there described.
Before we take leave of this part of our subject, it comes directly in point to offer a few words upon the almost universal practice of continuing to breed, year after year, from the same mare, till nature, over-driven, thwarts the attempt by the occasional introduction of a barren year, in direct opposition to the intent of the breeder, demonstrating upon compulsion the necessity of what he did not intend to comprehend by choice.

The very means by which the embryo is generated, and the nutriment required, not only to support its growth during the months of gestation, but the subsequent term of its suction evidently point out the consistency of some portion of rest or respite for the dam, to acquire additional strength, after the incessant labour of continually collecting a double portion of food to subsist herself and support her offspring.

The fashionable and predominant plea of attachment to interest and self-preservation, will render deaf to this remonstrance numbers, who, "unwilling to lose the year,"
and incapable of imbibing instruction from
the nicest laws of nature, will be regulated
implicitly by the dictates of their own mer-
ccenary sensations; affecting to believe, that
the mare, producing a foal every year, will
continue her stock equally strong, healthy,
and valuable, with those that are favoured
with occasional and necessary intermissions.
This is not the fact; attentive observation,
accurate estimate, and impartial decision, will
clearly prove such succession to degenerate in
bone, size, strength, and value, when pro-
duced from the same mare for a series of
years without the least cessation; while, on
the contrary, a single year's fallow in every
three or four, will, upon comparison, criti-
cally made, prove in the aggregate decidedly
in favour of the breeder.

Having gone regularly through every
branch of information at all appertaining to
the propagation and preservation of stock,
we now come to the time and manner of
weaning; a matter that must ever be regu-
lated much more by the circumstances of the
case than the state of the season, depending
in a great degree upon the conditions we proceed to explain. Considerations upon this subject are so unavoidably complex, and depend so much upon contingencies, that a nicety of discrimination is upon all occasions necessary how to proceed in the business before us.

The difference of a mare foaling early or late in the season; her remaining fallow, or having taken the horse and renewed her conception; the forward growth and rapid improvement, or puny and backward state of the foal, are all conditional matters upon which variations are to be formed. For instance, where the mare has dropped her foal early in the season, has again taken the horse, and the foal at her foot has improved properly, and acquired the desired strength and size previous to the commencement of severe weather; such foal should be taken from the dam so soon as the decay of pasture perceptibly occasions a reduction in the supply of milk; and this separation becomes the more immediately necessary upon an established truth, that the longer a foal is permitted
to oppress nature, by a compulsive secretion and evacuation of milk from a mare again advanced in foal, the more will the subject in embryo be consequently impoverished and restrained, when deprived of its portion of nutriment, then converted through another channel, and appropriated to a different use. This incontrovertible system of the animal economy must be so evidently clear to the most uncultivated comprehension, (accustomed to dedicate but little attention to the slightest indications of nature), that it becomes matter of admiration how so absurd a practice can ever be supported upon the basis of inadvertency; when it would be rendering nature accessory to a perversion of her own laws, even to suppose it was ever intended, that any animal existing should longer subsist or prey upon the very vitals of its dam, when the frame was again advancing in pregnancy with another.

From this necessary allusion to a practice that is not only exceedingly common and too little attended to, but is also prejudicial to the subjects themselves in a greater
degree than generally understood, (merely for want of a little scientific reflection upon the properties of food and its different effects) we come to a case apposite in itself, that must be regulated accordingly; as, where the mare has foaled late in the year, and has not been again put to horse, or where the retarded and unpromising state of the foal renders extra care and nursing absolutely necessary; in either of which, every encouragement should be given to promote the strength and growth of the foal, during the inclemency of the winter season, which it should be remembered, he is not nearly so well enabled to encounter, as those of a greater age possessing the advantages before described. In such instances as these, although the flow of milk from the dam will be very considerably checked by the alteration of food dependent upon the different seasons, yet with frequent supplies of good hay to the mare, it may be proportionally assisted, and with occasional aids of proper food to the foal, great advantages may be derived from letting them run together through the severest months of the winter;
to evade the ill effects of which, nocturnal shelter will very much contribute.

Notwithstanding every possible information that can be introduced, such variety of case may occur, with so great a complication of circumstances, that no literary description, however diffuse, can prove completely adequate to every idea upon the subject; conditional instructions must always become subservient to the discriminating judgment of the owner or superintendant, upon whose favourable opinion or prejudice, caprice or compliance, will depend the effect of the whole; and to such precarious decision alone must the writer ultimately submit the consistency and execution of his directions, though he were to produce an immaculate volume upon the subject.

Conscious, however, of the compulsive necessity for such dependence, and the diversity of cases requiring conditional changes to the variety of circumstances that may occur, no particular week or month can be invariably fixed for weaning; as some of the con-
tingencies before mentioned may render it unavoidably necessary in the earliest month of the winter, or protract it to the latest in the spring; which must, after all that can be offered in print, depend entirely upon the discretion and interest of the parties more immediately concerned.

Waving, for those reasons, farther animadversion respecting the time, we advert to the manner of effecting a change, sometimes attended with difficulty, but seldom or never with danger, particularly when regulated by due attention to circumstances, season, state, and condition; considerations that never escape the eye of vigilance, and generally insure their own reward. Towards the conclusion of the year, the foal acquires, by instinct and observation, some relish for pasture, but unluckily begins to enjoy it just at its autumnal declination, when long dreary nights, damp fogs, and frequent rains have succeeded the enlivening rays of the genial sun, depriving it of its former substance and vernal sweetness; at this critical period all nature undergoes a visible alteration,
and the change is as severe in its effects upon the animal as the vegetative part of the world.

In this general revolution, the expected and former nutriment from the dam becomes not only reduced in quantity, but impaired in quality: divested in a great degree of its balsamic and nourishing property, it wisely points out to the foal the feeling necessity of an adequate substitute for such deficiency; under so predominant a sensation as hunger, he readily submits to an alteration in the means of subsistence, and in a few days becomes perfectly reconciled to the food allotted him, provided it is applicable to the state of his infancy, good in its kind, and properly selected to gratify the calls of nature.

Of these there are various kinds, that have each their different advocates, whether in oats, bran, chaff, barley, wheat, hay, or straw, and each advocate loaded with reasons of the first importance, and self-consequence, (regulated perhaps by pecuniary sensation) to justify the opinion he has formed: but as
it is by no means the purpose to lead our readers through a dull and tedious labyrinth of perplexities, without a glimmering of either utility or information, we shall endeavour to ascertain the preference without animadverting upon the judgment and opinion of others, wishing, upon the basis of truth and consistence, only to establish the criterion of our own.

It has been generally said of Oats (although the universally established food for horses) that they are dangerous to foals at the time of weaning, under an idea of the optic nerves being so violently affected by the strength required in mastication, as to occasion future disease, debilitation, and sometimes loss of the eyes: as this is, however, a matter that never can be reduced to certainty, but must always remain dependent upon conjecture, without even the possibility of proof, it may be perfectly applicable to the disposition of those who entertain doubts, to adopt the alternative of feeding with the grain or grits only first divested of the hulls, as in the shell or husk such difficulty must be resident, and not in the meal.
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Bran may have its occasional use, when called in aid of other aliment, but is entitled to little or no estimation on the score of nutriment, being like the different kinds of straw or chaff, evidently calculated more to amuse the appetite and expand the frame than subsist the body. Barley, (particularly when manufactured, and meliorated into malt) as well as Wheat, commands the priority of invigoration with almost every part of the creation; for, whether the experiment be made on man, beast, or the more inferior classes of fowl or vermin, it becomes every way conspicuous. The great salubrity and nutritive property of sound, fragrant, well-made Meadow and Clover Hay are too universally known to require a single line upon their excellence.

In addition to these, most of which are in constant use, may be introduced two articles equally applicable, though not in such general request: they are, nevertheless, in the highest estimation with those who have proved their utility, and stand entitled to the warmest recommendation. First, the
pulse, passing under the denomination of Horse Beans, which from their great substance, adhesive quality, and known invigorating power, are justly supposed to convey a greater portion of nutriment to the system than any other corn appropriated to the same use. Admitting this to be really the case, they likewise retain the advantage of being readily adapted to horses of every description, from infancy to age, and may be given as exigencies require, either in their natural state, whole or split, as is the usual method when given with bran (a feed very common with horses of the lower class of mechanics) or completely ground, (and called bean meal) for the use of foals or colts, so young that they are incapable of receiving them in any other state.

The other article, whether recommended as a useful winter substitute for the more succulent herbage of the summer, or only as a cheap and additional method of subsistence, need only be more generally known to establish its own reputation: whether joined to the accustomed food of draft horses used
in agriculture, colts during those months of
the year when the growth of pasture is re-
strained, foals when weaning, or in addition
to the keep of mares whose foals are required
and permitted to run at the foot all the win-
ter, it is of equal utility, particularly to the
latter, whose flow of milk it greatly enlarges
if given in sufficient quantities to promote
the advantage.

Carrots, the article thus highly com-
mended, after fair and impartial trial, is one
of the most valuable in the vegetable world,
and so easy of cultivation, that in a light
sandy soil no crop is supposed to produce a
greater share of emolument: of this, certain
adventurers are so well convinced, that the
very labourers in the north-west parts of the
county of Surry rent from the neighbouring
farmers a moiety of even the poorest land
upon the verge of the barren heath, at the
exorbitant price of three and four pounds per
acre for the summer season, only to produce
a single crop, when it is immediately resigned
to the landlord for his season of wheat to
follow.
The largest and handsomest they begin to pull in September and October; these are very neatly formed into bunches, and consigned to the London market by the waggon load, at the enormous expense of two guineas for the carriage only, which, with the additional trouble and charge of double hoeing, pulling, washing, and bunching, gives it the appearance of a very expensive crop: but when it is taken into the calculation, that three, sometimes four loads are produced from a single acre, that (according to the season) sell in London from four to six pounds per load, the great advantage becomes palpably striking even to the most indifferent arithmetician. But the emolument ends not here; for, upon the average, no more than two-thirds of the produce are included in the above proportion, as turning out sufficiently handsome for the trade before described; the remaining proportion, that are short, ill-shaped, and forked, are deemed refuse, and used in the winter by such growers as have stock of their own, or disposed of by those who have none, to their neighbours, at a very moderate price. To the corroboration of this
this fact I speak experimentally, having been a consumer among my own stock of *fourscore bushels* in one winter, purchased at only *sixpence* each bushel, exclusive of a very considerable quantity produced from a part of my own land, then under similar cultivation, from a thorough conviction of their utility and profit.

The method to preserve them for the winter consumption is as follows: let them be taken up early in the autumn, so soon as their superficial or vegetative parts begin to decline, and laid upon a bed of *new wheat-straw*, in a dry room, or close granary, without cleaning, just as they are taken out of the ground; they are then to be plentifully covered with the same bedding, to protect them from long and severe frosts that frequently ensue, after being affected by which, they soon decay and become rotten: no fear of this need, nevertheless, be entertained, provided proper care and attention be paid to the bed and covering, as they then continue perfectly sound to the expiration of a very long winter. There is also another equally
effectual method of preservation much in use in the neighbourhood alluded to, by substituting sand for straw, letting them be very substantially covered to exclude the external air: but as that article is not so universal, or to be obtained by any means in many parts of the kingdom, straw must undoubtedly prove most convenient for the purpose.

During the season required for consumption, let any quantity be taken from the heap and placed in a mash or other tub, there covered with water from a pump or pond, as may be most convenient; when having stood an hour or two, to soften the surrounding earth left on for preservation, they should be well washed with a heath broom for a few minutes, till properly clean; then pouring off the foul water, and washing them once more with a pail or two of clean, they will soon become dry enough for the following operation:

Let them be cut first longitudinally, then transversely; or, to make use of a more comprehensible term, (at least rather better
adapted to the rustic capacities of those likely to become the operators) "athwart and across," into small squares about the size of a horse or tick-bean; in which state they will be consumed in the winter with the greatest avidity, by any class of horses, mares, or colts, either alone or intermixed with chaff, oats, bran, or any other dry food to which they are accustomed.

To remove such doubts as may arise in the minds of those who pass through life in the true mechanical dog-trot of their great grandsires, and who, from their personal pride and innate dulness, never condescend to make an experiment, or sanction an improvement when made; I think it necessary to repeat the fact, that I have with the greatest success introduced this additional article of food to all the different horses in my possession (hunters excepted) during a long, dreary, and severe winter, never remembering to have had them in better health, vigour, and condition. Among these were a team of draft horses in constant employment, not only in agriculture, but occasional hard
work upon the road: growing colts of different kinds, as well as brood mares and foals, who all equally enjoyed a participation of the experiment in every kind of way it could be offered them; tending sufficiently to justify every thing I can presume to offer in recommendation of the practice, more particularly with stock required only in improving condition during the winter, and not destined to any kind of labour.

In this just representation, I beg by no means to have my expressions misconstrued, or my meaning perverted, but desire it should be generally understood, I urge their utility in applicable proportions as a cheap auxiliary to other food, without indulging an idea of their being used alone; as well as to have it held in remembrance, however serviceable and healthy they may have proved, and certainly are to the unemployed part of stock, it was never my intent to declare them capable of constituting the basis of nutrition and support for horses in constant and laborious work. On the contrary, knowing experimentally the great expense of breeding, and
how necessary it is to acquire occasional aid from the frequent interpositions of economy, I earnestly recommend the culture of them, upon that score, (in those parts of the kingdom not so favourably adapted to breeding) as a very useful and profitable associate with other food for brood mares, foals, and growing colts, in severe or long winters, when hay and corn are at an exceeding high price from a general failure in the crop, or an indifferent season for the harvest.

From this unavoidable deviation we return to the business of Weaning, a matter that will be in some degree more easily reconciled by permitting the foal to feed with the mare for a few days upon the dry food previous to the entire separation. The question naturally, and indeed generally, arising at this period, is not, what food is the most salutary for the subject in question; but, which is the kind of food most applicable to the sensations of the owner? Though were reason or prudence consulted, that food would be adopted most adequate to the probable value of the foal; for, notwithstanding all that can be urged in the defence of breeding systema-
tically, to produce stock of shape, strength, figure, fashion, bone, or speed, (according to the purposes for which they are designed) there will still remain a more than moderate proportion of the breeders formerly described, who must inevitably continue to propagate stock, not worth the proper support of even the first twelve months, was their intrinsic value to be brought into arbitrative competition with the year's consumption.

No doubt can be entertained but the sweetest hay, with a daily portion of the hulled oats, and a trifling addition of the bean meal, would be as perfectly grateful to the weaning foal of a five pound pony mare as to the palate of a son of Highflyer; but it is natural to conclude, in the present hourly increasing age of sagacity and penetration, self-interest, with its concomitants, will never be so totally obscured, as not to regulate the conduct of the majority, and that mares and colts will in general be supported with a political reference to profit and loss, however some exceptions (with favourites of a former description) may produce many a four-year old at the domestic expense of thirty, forty, or fifty pounds.
whose whole accumulation of points and perfections will never exceed five-and-twenty, when brought to the test of inspection at a public market.

Conscious how many will continue to breed under every disadvantage, and to persist under every peculiarity, I shall submit the distinct kind of aliment to be selected, and the quantity to be regulated entirely by the judgment, whim, caprice, experiment, or local custom of every individual, upon a perfect conviction he will justly claim and exert that privilege, in opposition to any opinion or dictation of mine; whose further instructions upon this head might be candidly considered obtrusive, where conditional directions under so many contingencies (as the state of various subjects and temperature of severity of different seasons) must prove totally inadequate to general application.

Convinced, however, on the contrary, how very many there are, who, anxious for information and open to instruction, possess patience to receive, and judgment to adopt, every species of improvement calculated for
the promotion of general good; it is entirely for their accommodation, that I have minutely descended not only to an explanation of the quality of different kinds of food, but repeatedly to the work of digestion and effect of nutrition, that the very means of growth, strength, and condition may be more rationally considered and fundamentally understood.

Presuming on the care taken to inculcate such knowledge, and thoroughly convinced of the advantages that arise from a liberal distribution of provender to stock of every kind upon certain emergencies, I beg to conclude my observations under this head, with an additional injunction to breeders of every denomination, to endeavour, in the two first winters, to acquire all possible advantage in size, strength, and bone; which I have before said, and again assert, depends as much upon the judicious and plentiful supplies of food, as the qualifications of horse and mare, so solely relied upon, and eternally echoed by those subordinate cavillists, who possess the opinion, but not the means to justify their assertion. For size, strength, and bone, being thus constantly promoted by care and atten-
tion, they not only form the frame for a ready acquisition of flesh in that season of the year when nature dispenses her gifts with a more liberal hand, but being once obtained can never be obliterated; while, on the contrary, the first opportunity of acquiring those perfections being totally lost by an unfair restraint in sustenance during the first two years, the stock is more or less stunted, and an irreparable deficiency constituted that can never be supplied in the same subjects, by either present regret or future repentance.

BREAKING.

IT will not come within the limits of this work, or the intention of the writer, to interfere with the operative part of the art, offering a dissertation upon the routine of leading, lunging, backing, riding, mounting, or dismounting, with ease, grace, and agility: these are the professional privileges of Breakers alone, from the rustic rough rider of the most obscure village in the country, to the fashionable and accomplished Menage Master.
General of the metropolis. Professing, therefore, no interference with, or attack upon, the principles of the science, I proceed to such allusive remarks and inferences as interest not only breeders and sportsmen, but all those who have any immediate intercourse with the species, whether from the motive of attachment, pleasure, health, or business.

The first object for general consideration is the age most proper for bringing into work horses of different descriptions, according to their distinct appropriations; but this, like most other matters, has become subservient to the prevalence of fashion, and in much less than half a century undergone a total revolution. Some years since (and not a great many) colts and fillies were haltered and handled a little at three; turned out again, and completely broke at four; used moderately during their fifth year, and thought to be sufficiently matured for constant work at six: such system has been, however, gradually changing, as the value of horses continued to increase, a circumstance that in all probability effected the alteration, by tempting breeders to turn their stock into specie.
with much less trouble, expense, and anxiety, than when kept so long upon hand before they could be taken to market.

This has turned so much to advantage in their annual transfer to the London dealers, who purchase at the famous fairs of Banbury, Northampton, Leicester, Reading, and many others, (exclusive of their extensive agencies in Yorkshire and other distant counties) that they are now broke and sold as soon as they have obtained size, and undergo the most infamous practices upon their teeth, to enable the conscientious seller to dispose of two, three, four-year old, for a four, five, or six; which he frequently does with such assurances of truth and integrity, that the cheat is very little likely to be discovered by any sagacity or circumspection whatever.

A similar degree of refinement has been effected upon the turf, as with the more inferior classes; for what has been promoted by interest on one hand, has been extended by the invincible spirit of opposition on the other. It is but a few years since a four year old plate was considered the first public trial
of speed and bottom, between young horses calculated and trained for racing: but horses (as well as women) are by the great and illuminated effect of modern penetration, found to be so much forwarder in the natural state of their constitution, that they are brought into use many years sooner in the present than the past century; having now not only plates constantly run for by three years old, but frequent matches and sweepstakes with two years old and yearlings.

In this general improvement (if it can be so termed) I believe any observant or experienced reader will coincide with me in opinion, and hazard the assertion, that many hundred horses are annually crippled and irrecoverably injured before they arrive at maturity; that is, before they arrive at a proper age for the work to which they are so frequently most injudiciously destined. In support of this fact, no greater or more indisputable authority need be adduced, than a reference to the infinity of invalids to be daily seen on all the popular roads leading to the metropolis; but should a stronger proof be required, to meet the opinions of the interested and incredulous,
let it be extracted from the visible effect of the burning cautery, or rotational multiplicity of fired horses in perpetual liberation from the hands of every eminent operator in the various parts of the kingdom. As this custom is now too far advanced in practice, and too firmly established by interest (at the original source of circulation), to admit of cure or palliation, further animadversion upon its ill effects cannot be productive of either success or utility: continuing, therefore, our determination to avoid remarks extraneous or desultory, we proceed to such practical observations as are more likely to excite general attention.

Of these, none become more entitled to the consideration of horse-breakers and their employers, than the natural disposition and temper of the subject they are taking in hand; for it is a positive fact that more horses have been injured in their tempers and dispositions by the indiscretion, impiety, or professional intoxication of those to whose management they are unavoidably intrusted, than by any other means whatever.
Reason and observation afford evident demonstration that horses have their different degrees of sagacity and penetration; their spontaneous efforts are all regulated by the most impressive and inherent sensations, dependent upon passions conspicuous as our own; subject to an equal display of fortitude, fear, joy, grief, courage, timidity, attachment, and prejudice, as any of the human species; and this is so perfectly known to those who have made nature the object of frequent meditation, that they cannot consider the communication a matter of novelty; while those who receive the information under an impression of doubt, must, in the moments of reflection, be seriously convinced they have read but little in the fertile volume of experience.

Upon the most palpable conviction that those passions have a predominant ascendancy over their different subjects, I presume to urge the consistency of rendering the animal obedient to the will, by such methods as are calculated more to acquire his submission than excite his anger; or, in other words, to accomplish the business more by gentle means than coercive exertions. The necessity for
earnestly recommending this lenity in the practice, has arisen from innumerable instances within my own knowledge of horses rendered invincibly restive by the dint of perpetual ill usage and unjust opposition; when, from the natural bent of their dispositions, a different mode of treatment would have produced a direct contrary effect.

To this part of the subject I have ever paid the greatest personal attention, and declare, with the strictest adherence to truth, I never yet saw a restive horse made better by violence and abuse. If any vociferous disputant, fond of displaying his courage and exerting his power, feel his innate cruelty in some degree abridged by the intervention of humanity, and arrogantly ask, "Whether he is to abandon his purpose, and permit the horse to gain the victory and become his master?" I answer him with the greatest serenity, "On no account whatever." Such is not the purport of my recommendation; our intents are undoubtedly the same, but to be eventually accomplished by very different means: I repeatedly urge the propriety of due attention to the various tempers and dis-
positions of horses, upon the purest conviction that the treatment really necessary for a horse of very high courage and almost invincible spirit, cannot be consistent or proper for one of extreme timidity; that one horse may be subdued from any predominant vice, or regulated to any particular action, by a moderate exertion of power, while another will submit only to a constant display of the greatest tenderness and familiarity. These extremes frequently exist in horses of a similar class, value, speed, and qualifications; equally liable to injurious impressions, from being managed in a way directly opposite to the very nature of their dispositions.

A due degree of patient discrimination should be always exerted, to discover the temper of the subject, and ascertain the line of distinction; what may be expected from a steady firmness and persuasive mildness, previous to the too ready exertion of violence, in general very eagerly conceived and maliciously executed. Horses are perfectly conscious of the different treatment they receive, and give the most striking proofs of their attachment or dislike in consequence:
This is a fact but little known amidst the multitude of superficial observers, and metropolitan sportsmen, but incontrovertible with those who survey this animal with the daily eye of exquisite pleasure and admiration.

The equanimity, fortitude, and sobriety, so indispensably necessary for the successful breaking and management of young, restive, timid, or high-spirited, and refractory horses, must be too sensibly felt by every judicious reader, to require the least animadversion upon the advantage of such qualifications; I shall therefore proceed to a few remarks upon the almost systematic conduct of grooms, breakers, and servants, (to whose care horses of the first estimation are unavoidably intrusted) who, persisting indiscriminately to effect all their purposes by force, frequently err much more from the very motive that Pope's rustic hero whistled, "want of thought," than any pre-determined spirit of opposition to the rules of consistency and discretion.

It is no uncommon occurrence with constant travellers, to perceive one of this description mounted upon a horse denominated...
restive, that without any apparent motive (at least perceptible to the rider) by which the cause may be discovered, suddenly stop, retreat, or turn round upon the road, visibly increasing his reluctance to go forward, in proportion to the anger and violent opposition of the rider; who, too frequently a slave to irascibility, rashly supposes his courage is now put to the test, and becomes immediately determined to conquer by violence or lose his life in the attempt. This hasty resolve affords no moment to reflect upon the imperfections of our own nature, the daily inconsistency of our proceedings, or the means by which they are excited or restrained; a total stranger to the school of philosophy, and little read in the book of refined sensation, he deals about him with whip and spur most unmercifully, till the animal, (with perhaps a disposition directly like his own) revolting still more at the severity or inhumanity of the treatment, becomes outrageous, and by exertions of strength or stratagem, dismounts his rider, or in a retrograde motion deposits him in a ditch, on one side of the road or the other. The action is now renewed between horse and foot in a different way.
the latter attacking the former with the utmost violence over the head and eyes, erroneously adopting an iricism, to bring him forward by driving him back; this perpetual and severe discipline often rouses in the subject a certain kind of habitual callosity to every future intervention of tenderness, and renders him ever after incapable of becoming cheerfully obedient to what he considers his most inveterate enemy.

Some horses are also brought to a certain degree of starting, exceedingly dangerous, by a similar and equally improper mode of treatment; for there can be no doubt but horses that are young, or have been but little used, must have some time, patience, care, and attention bestowed to reconcile them to the strange and numerous objects upon a public road, before they can be expected to approach or pass them without sudden surprize and trouble. Indeed, the great variety and velocity of the different vehicles upon all the populous roads, but particularly round the metropolis, render it a matter of absolute wonder, how such an infinity of the highest mettled horses in the kingdom should be
eternally passing each other in crowds, without those dreadful accidents so natural to expect, and fortunately so little heard of.

It is really a matter of concern, that a custom so inconsiderate and absurd should ever have gained ground, as the practice of instantly beating and goading a horse upon his only method of expressing a momentary and natural impulse of fear, at any strange or uncommon object that may come suddenly upon him, or to which he may not have been accustomed: in this, as the former case, a similar degree of severity and cruel display of power are exerted by the major part of the humane and enlightened class beforementioned; for upon the horse's first starting, whether from fear or dislike, he instantly receives a blow on the head with whip or stick, accompanied with the very emphatical impression of both spurs, without allowing the poor animal a moment to recover from the first surprize; this repeated, constitutes a ceremony we have before explained, and totally destroys the basis of mutual confidence, that should be carefully preserved to insure the
faithful services of one, and the protection of the other.

Great inconveniences arise from this unjust and severe method of treating horses in general, where, from blows indiscriminately dealt in passion, the bones of the head, or the eyes are irreparably injured by the servant, and the real cause never truly known to the master; several instances having occurred within my own knowledge, of exfoliations from the jaw-bones, (with and without a dislodgment of teeth) some of which I discovered upon inspecting what the owners imagined to be a disease or canker in the mouth, and not till an examination of the bones of others after death; the greater part or all of which, I have no doubt, were produced by blows with weapons very little calculated for rods of correction.

That there can be no doubt of horses sustaining great injuries by these means, I have every reason to believe, from numbers I have seen fall instantly to the ground, upon receiving a blow seemingly slight and of no great force immediately behind the ear;
among those, my memory furnishes me with instances of two that happened in the public parts of different large towns; one passionately inflicted by a brother of the faculty, the other by a son of the church; the last of which was almost accompanied with so singular a circumstance, that I cannot resist the temptation of a short digression to recite it.

Being a man of very low stature, and engaged to preach, for an absent friend, in an exceeding large church and high pulpit, not a hundred miles from one of our universities, he delivered his text from that part of scripture including the words, "In a little time you shall see me, and in a little time you shall not;" at this moment, the stool upon which he stood, to render himself conspicuous to the congregation, slipping from under him, rendered him not only instantly invisible, but proved the words of his text to have been selected with the most prophetic inspiration.

Leaving to the force of imagination the general consternation of his auditors and the
confusion of the preacher, I proceed to his additional mortification in the same town a short time after; where, riding up to the door of his draper upon a favourite horse, and the horse very little used to the hurry of large towns, instantly started at some object within or without, when the little man, in his warmth, giving him a petulant blow upon the head, brought both horse and rider to the ground in the presence of twenty inhabitants, who having his former dilemma fresh in their memories, it doubly insured him the appendage of "A little time ye shall see me, and a little time ye shall not;" which honourable distinction will, in all probability, accompany him to the grave, he being at present only in the prime of life.

From such remarks as I thought absolutely necessary to expose the cruelty of ill-using horses, and demonstrate my invariable opinion, that violence and unjust severity, nine times out of ten, injures their tempers and confirms their vices, I come to such proof as may tend not only to obtain converts to that opinion, but to introduce a justification of my own; viz. that horses of mild tem-
pers and pliable dispositions may be brought to every state of perfection by gentle usage corresponding with their own frame of mind; while, on the contrary, the ferocity of the highest-spirited may be gradually subdued by exertions of steady authority and persevering fortitude, blended with intervening acts of kindness and occasional encouragement, without descending to the most unjustifiable ill usage, tending only to excite invincible prejudice and perpetual opposition.

The proofs upon which such opinion is incontrovertibly founded, constitute an experience of twenty years, in which time I have attentively analyzed the tempers of horses, and the practical principles of their breakers, with as much fervency as the professional abilities and medical knowledge of Country Farriers, so fully and repeatedly explained in different parts of the former Volume. There is a certain analogy in the practice of both: and kill or cure may be adopted by each for his motto, without injury to either; and with much greater propriety than one of the same learned fraternity defined his employer's horse to be "semper eadem," Worse and worse: or
the other "Vivant Rex, Dead as a door nail, by G-d, Sir." These slips are, however, to be charitably considered sublime effusions of fancy, to which men of superior genius are justly entitled, as laudably emerging from vulgar explanation, and sublimely soaring beyond the limits of common comprehension.

Experience is, upon the foundation of the ancient adage, universally said to make fools wise." To a little of that salutary experience I acknowledge myself indebted: and am not ashamed to confess, that in the very early part of life I became a temporary slave to custom, and credulously bestowed my premium of three guineas, exclusive of the keep, to have a colt rendered every thing that was bad, by the most popular distributor of equestrian discipline in the neighbourhood of my residence: when, after an absence of six weeks, the time fixed on necessary to complete his education, and render him a paragon of perfection, he was returned so caparisoned, bitted, cavisoned, martingaled, and cruppered, that he seemed admirably decorated for the immediate adventures of a knight-errant, the field-day charger.
of a general officer, or ready accoutred for the champion of England to make his public entry into Westminster-Hall. My instructions were to ride him for some time "in his tackle, though he was as well broke, as steady, temperate, and safe, as any horse in the kingdom." My very first excursion, however, convinced me of the honour and probity of this scientific operator; for the colt was in possession of every vice without a single perfection in his favour, except a wonderful alacrity at stepping, which he had the kindness to do, unsolicited at every public house upon the different roads for some miles round: to all which he had been rotationally led, and daily placed for many hours in the stable of one or the other, while his indefatigable tutor was, like "friend Razor" in the Upholsterer, constantly getting drunk for the good of his country!

As I before said, he was much worse in qualities and condition than at his departure; but as the reward had been gradually drained during the time the supposed work was in hand, purchased experience and patient repentance were the only remaining con-
solutions. This mortifying imposition having excited no small degree of stabularian emulation, I commenced rough rider to my own little establishment, under the influence of just resentment, determined to try the effect of frequent association, regular personal feeding, constant exercise, and gentle treatment, to complete my purpose; which attempt having been crowned with the most perfect success, and formed the basis of all my future endeavours, I have never since (a period of twenty-one years) condescended to accept or reward the service of breakers or rough riders of any denomination for their inestimable assistance; although in some instances I admit their utility, and acknowledge there are many whose merit and integrity are entitled to commendation and reward; but their proportion is by no means equal to those pot-valiant heroes, who take their rides and potations in strict succession, upon the principal of Pan in Midas, who says, "When I am most rocky, I best sit my saddle." This I can never be induced to doubt in opposition to ocular demonstration, as it is the general state in which I meet the most eminent professors in every
part of the country; from whose sober system of instruction their subject must certainly derive every necessary advantage.

Without descending to a tedious enumeration of the injuries colts in breaking, or horses in exercise, receive from pretended breakers or worthless grooms under the effect of intoxication, I return to the subject of those that are restless or addicted to starting; the general mismanagement of which I have already described without at all heightening the picture to a degree of exaggeration, and have now to add, that upon a well-founded opinion of the inconsistency of such severe treatment, I first formed my determination to encounter the cure of those defects, by a method directly opposite, whenever time should afford me applicable opportunity.

It is, I must acknowledge, some little gratification of personal ambition, to have succeeded so well in a confirmation of the opinion I had indulged, respecting the erroneous and cruel treatment of horses of such description; and with no trifling satisfaction I communicate the fact, of having been pos-
essed at different times of three horses incorrigibly restive, and as much subject to that dangerous failure of starting as any horses in the universe, without exception. These were separately purchased with a perfect knowledge of their defects, and at a price proportioned to their deficiencies; each of the owners and their servants considering themselves in such perpetual danger, that it was determined to afford no farther chance of a fracture for the Surgeon or a survey for the Coroner, but to dispose of them at all events as incurable. The horses purchased under such accumulation of disadvantages, without arrogating to myself a superiority in horsemanship, or courage, I reduced by a patient perseverance, in the plan I have already laid down (as infallible), to the most pliable and best conditioned horses I have ever had in possession; using no other correction of severity with either whip or spur, than just sufficient to let them be convinced I did not practise lenity from the motive of pusillanimity, but to afford them the alternative of submitting to treatment much more adapted to their own ease and safety.
By this invariable preservation of temper, and perseverance of discipline, I never found but little difficulty in effecting my purpose, not only in reducing them to unconditional submission, but in exciting so great an attachment from them, that their obedience and perfection in the field or upon the road, rendered them objects of general request among my friends, at any equitable price I thought proper to fix them at. If I had, however, a single doubt remaining upon the propriety of this mode of treatment, a recent case has arisen to eradicate a thousand if they had existed; and left me in the most unsullied possession of an opinion not to be relinquished upon the persuasion of any advocate for the violent measures I have so justly reprobated, and so earnestly despise.

The instance so far exceeding all others I have seen, is of a blood-horse now in my possession, and universally known to be one of the fleetest in five of the most fashionable popular hunts in the kingdom; this horse, when purchased, was perhaps the most restive, sullen, and refractory ever brought into use; his figure and qualifications were nevertheless
so palpably striking, they naturally excited every unremitting endeavour to reclaim him. The task, however, for the first two or three weeks bore the most unpromising aspect; no method that I could adopt seemed to have the least effect upon the obduracy of his disposition; hardened to an almost invincible spirit of opposition by former victories on his side, and repeated ill usage on the other, neither persuasive encouragement nor violence could prevail on him to move a single yard forward but when it was perfectly his own pleasure: he would not only continually stop in all paces, without the least obstacle or visible cause whatever, and continue his determination not to go at all forward for a great length of time, but persevere in a retrograde motion an incredible distance, with the usual concomitants of rearing, plunging, and kicking, to so violent a degree, that numbers, of a much more serene and philosophic temper than myself, would have certainly proceeded in their resentment to the utmost extremity, and some time or other have left him crippled or dead upon the spot. In this daily dilemma, it was the general opinion of intimate friends, and those who were constant
spectators of the danger I rode in for some weeks, that he was absolutely not to be subdued, and they positively advised me to abandon the undertaking; but the instinctive spirit of attachment to that industrious motto, "Persevere and Conquer," encouraged me to continue my original plan, which I have repeatedly explained, and most forcibly recommend; for under that system of steady and unremitting firmness, divested of violence, and blended with intervening acts of tender encouragement, he is become one of the steadiest and most temperate hunters in the field; though it is plainly perceptible by the agitation so constantly displayed in the eye, the ear, and action, upon the approach of every stranger, that he had repeatedly experienced the severe effects of bodily abuse and ill-usage before he came into the temperate region of my possession.

These cases are not introduced from any motive of vanity, to blazon my own practice with the stamp of perfection in fashionable "feats of horsemanship," but to afford experimental, demonstrative, and incontrovertible proof, founded upon repeated personal trials
of time, patience, and danger, that horses the most perverse, obstinate, and refractory, are to be subdued and rendered completely tractable, with much more certainty, humanity, propriety, and expedition, than by those unjustifiable acts of violence so repeatedly mentioned and accurately explained.

Convinced of this fact by the most attentive observation, my mind is too scrupulously formed to admit of an alteration in opinion: and I cannot indulge the least doubt but the subject will undergo in future a nicer decision, by those gentlemen whose opportunities have not been sufficiently numerous to ascertain the effect of the different mode of treatment, upon different subjects to a critical degree of distinction; venturing also an additional belief, in which I flatter myself most observers will coincide, that horses originally restive or addicted to sudden starting, are continually habituated in their vices by repeated ill-usage of servants, and the perpetual transfer from one owner to another, under all the disadvantage, prejudice, and resentment inflicted upon a bad name, without the lucky chance of once falling
into patient and proper hands to effect the work of reformation.

SHOEING

Is a matter of so much importance, that it cannot be too clearly explained, or too generally understood, consequently creates no surprize that so many writers have condescended to offer their sentiments upon a subject of such magnitude; but it is to be seriously regretted, those opinions have been submitted to public inspection in so remote a way, as applies much more to the professional conceptions of individuals than the standard of general comprehension.

The various dissertations upon shoeing, or diseases of the feet, have been in general too sublime in their language, and too much interspersed with anatomical disquisition and technical jargon, to acquire public patronage and commendation; to such inconsistency alone may perhaps be justly attributed their consignment to oblivion so soon after publi-
cation. A minute and scientific investigation, or anatomical description, of all the corresponding parts, their actions and effects, cannot be the most proper and consistent method of being clearly understood by the very class or classes of people particularly interested in the explanation. Rustic farriers and uneducated grooms cannot, and gentlemen will not, embark in the dull and disagreeable task of theoretic or practical dissection, to discover the seat and appropriation of the tendo Achilles, or the articulation of the coronary bone; nor do I consider it more necessary for a gentleman to pass through a study of this kind to ascertain a proper conditional method of ordering his horses to be shod, than to go through a course of anatomical lectures and physical inquiries, because, like the rest of mankind, he is subject to daily indisposition.

Abstruse study upon so plain a subject can never be expected from all the classes so immediately concerned; it therefore becomes the province of the writer, to reduce his instructions to such concise, undisguised explanation, and mode of plain reasoning on
one side, as may require no uncommon powers of comprehension on the other. Authors are too frequently vain of their own abilities, and seem to believe too much matter cannot be introduced (however extraneous or digressive) to give their works the appearance of elaborate study and profound erudition: losing the subject in an affected sublimity of diction, without adverting to the great numbers who either wish to acquire information by every possible means where the trouble of reading can be avoided, or to obtain the purport of their medical researches by the most superficial and least expensive inquiry.

The various animadversions of different writers, under this head, are evidently too closely wrapped in the veil of obscurity, and seem purposely addressed much more to the anatomical judgment of the scientific Artist and operative Farrier, than to the understandings of the many, by whom we are to suppose it should be equally understood. An elegant arrangement of words, and ambiguity of expression, may constitute a loftiness of style more pleasing to the gentleman or the
scholar, delighting in a judicious display of polished periods; but in the present instance is required such easy flow of plain descriptive matter, as becomes perfectly applicable to the inferior capacities proportionably interested in its effects, who have not the least right to be excluded their share of knowledge, for the ostentatious introduction of pedantic phraseology.

Such connected chain of useful information, divested of obscure references to remote considerations (that serve only to erect one mystery upon the basis of another), must certainly prove much more applicable to the intentional purport of common conception and general improvement than the many laboured dissertations, whose titles promise so much, and whose learned contents communicate so little, at least, to be generally understood: under the influence of this impression, I have ever considered such concise, plain, intelligent advice, as will enable every gentleman, sportsman, or traveller, to perceive the necessity of adapting the mode of shoeing to the shape of his horse's foot, and the man-
ner of his going, is all that can be required; to prevent bowing implicit obedience to the self-sufficient dictation of every rural Vulcan, who in general speaks such "an infinite deal of nothing," that it is equally difficult to understand as to be understood.

Previous to farther progress upon a subject we will endeavour to treat with great plainness and perspicuity, it becomes unavoidably necessary to take a slight survey of the inconsistent groundwork upon which the fabric of such publications has been raised; as we may, perhaps, have occasion to introduce some few observations of practical remarks upon the propriety of their recommendations, which shall, nevertheless, be produced with all possible delicacy to the different writers, wishing by no means to irritate their feelings in the support of an opposite opinion, where an incumbent duty renders the inculcation indispensable.

The inconsiderate career of some pens, and the invincible cacoëthes scribendi of others, compel the involuntary task of disquisition,
to prevent the ill effect of literary imposition, or misrepresentation, upon the credulity and inexperienced judgment of individuals; who are in general, particularly the uncultivated classes (by far the most numerous), disposed to believe every thing sanctioned with the authority of the press; and the name of the printer bears the incontrovertible stamp of infallibility. Under the influence of this reflection, and to prove the strict justice of the assertion, it becomes directly in point to state such inconsistencies as evidently arise in retrospection. A writer of the present day confidently tells us in his title-page, he is "an experienced farrier of fifty years practice," and promises (according to custom) a great deal more information and instruction than he ever condescended to perform. He then leads you through two hundred pages of dull, uninteresting, anatomical descriptive, obliquely copied from the elaborate work of Gibson; interlards the remaining hundred-and-seventy pages with the almost obsolete prescriptive parts of the ancient System of Farriery (slightly varied to evade the charge of direct plagiarism), with-
out the coinage of a *new thought*, or the least indicated knowledge of a *new medicine*. The utility of *bark, opium, antimony*, and *mercury*, those grand supporters of the *Materia Medica* seem almost unknown to him; and that great basis of external application in modern practice, with its accumulation of valuable properties, the *Saturnine Extract*, he has never once given proof of the most superficial acquaintance with. But what renders it still more extraordinary is, that out of so great a number of pages, he has thought proper to bestow upon the subject of *shoeing, and all the disorders, accidents, or infirmities, to which the feet are liable*, twelve only, including his long and inoffensive prescripts for their mitigation or cure. However, as the circulation of the book has been too contracted and insignificant to gratify the wants, or establish the reputation of the writer, it will be but an *act of charity* to contract the remarks also, submitting both to their inevitable oblivion.

Another, of not only longer standing, but much greater estimation, has condescended
to afford a few more "Reflections upon Shoeing Horses;" but, exclusive of its being a confessed translation (and consequently entitled to little more respect than hear-say evidence in a court of justice), it is so replete with mechanical principles and mathematical reasoning, so interspersed with abstruse references and technical allusions to certain bones and tendons their motions and effects, that I cannot reconcile the description as at all applicable to the intellectual capacities of those mostly concerned in the operative or superintending part of the process.

A third has produced what he denominated "A Treatise on the Diseases and Lameness of Horses, with a proper method of Shoeing in general;" but, whether from a want of stability in his own disposition, (or what other motive I know not), he soon took a formal leave of the principal subject, and entertained his readers with a dance through Turkey, the deserts of Arabia, and a comparative survey of the whole animal creation; ornamenting almost every page with various Latin quotations, as an excitation to the general im-
This author, in the early part of his tract, says, "if you pretend to have your horse shod according to your own mind, it is a general saying among these men, that they do not want to be taught." This very acknowledgment of his justifies the necessity of recommending to the remembrance of every gentleman sportsman, or traveller, that he is *in the business of shoeing*, only the imaginary main spring in the *operative part*; and that his inclination or directions become unavoidably dependent upon the will of another. That this remark may be divested of its paradoxical appearance, let it be understood how very much the *safety*, *propriety*, and excellence of manual execution depend upon the well-timed liberality of the *Gentleman*; or, in farther illustration of a passage that may savour too much of *ambiguity* to those whose pecuniary pulsations render it difficult of comprehension, it is almost incredible how very much occasional judicious interpositions of *good beer*, (or the means to obtain it), with the subordinate operator, improves,
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to a certainty, the system of “Shoeing in general,” through every part of England.

The mechanical world at large stand in no need of information, that in all climates, regions, countries, and counties, there are (passing under the denomination of gentlemen) possessors of horses, too mean and mercenary ever to be obeyed, farther than they can command by the incessant suspicion and personal fatigue of ocular demonstration; whose very servants, as well as tradesmen, justly hold them in so much detestation, and whose conduct is so inconsistently consistent, that it serves only to increase the general odium of their characters, (with the additional mortification of feeling the weight of the opprobrium), without the power or inclination to retrieve them.

This universal resentment extends itself, in its effects, to his most trifling concerns: the same dislike and indifference that follow him in all other respects attend him in this: the significant appellation of “a d—d bad one” is equitably bestowed upon him by the domestics under his own roof,
and re-echoed from servant to smith, and
smith to servant; while the poor animal be-
comes the subject of passive obedience; for
whether well or ill shod, pricked or lame,
is a matter of indifference to all parties except
the owner, who being thus acknowledged so
despicable a character, no one feels for his
disquietude or misfortunes, but exultingly
exclaims, that what's too bad for another is
too good for him.

Such characters as these are not the pro-
IFIC effect of a fertile imagination, but exact
pictures of objects the produce of every
soil. No gratification of ambition, no per-
sonal ostentation, can be indulged in the
present discrimination, by arraigning the
disgraceful want of liberality in others, or
vainly endeavouring to extol my own: it
is, however, matter of the most unsullied
exultation, that such accusation has never
been known to reach the hospitable hall
of a Sportsman's Habitation; their
universally admitted generosity, calculated
upon the principle of self-preservation,
stands much more in need of the curb
than the spur, the general tenor of every
pursuit, leaving them totally exculpated from the bare suspicion of being included in the "beggarly description."

Taking leave, therefore, of that part of the subject, as can but ill accord with the feelings of those who may become personally affected by so faithful a representation of their domestic penury, I beg permission to recommend for their deliberative imitation a part of my invariable practice for a series of more than twenty years. This has always been, to let the manual operator (or journeyman, whom I ever considered the main spring of the machine) enjoy some pecuniary compensation, in addition to the professional emolument of the master, not more from a conscientious conviction of its being greatly merited by the trouble, care, and danger of shoeing high-spirited and refractory horses, than experimental demonstration, that generosity, founded upon the basis of equity, will inevitably insure its own reward. This is at least a lesson I have every right to inculcate, when I can affirm with the strictest veracity, I have never had a horse sus-
tain the most trifling injury under the hands of the Smith, nor ever a horse plated but what proved a winner.

The trifling attention, the humane benefaction of a cooling beverage to allay thirst in the excessive heat of summer, or the salutary interposition of an invigorating cordial to encounter the extreme severity of frost or snow in winter, are offices of kindness that in their visible effects upon the hand and hammer, insure, beyond a doubt, the safety of the horse and the reputation of the owner. The philanthropic influence of "doing as you would be done unto," is repaid with the most flattering interest; the same care and attention bestowed upon the feet in shoeing, are extended in general tenderness to the safety of the whole frame upon all other professional occasions; if refractory or vicious, he is soothed by kindness, not provoked by violence; in short, whatever fatigue ensues, whatever difficulty occurs, the execution is cheerfully completed, with a retrospective reference to the persevering hospitality of the Master, who, living in an unvaried scene of uni-
versal benevolence, amidst his happy domestics, enjoys the very anticipation of his wishes in the cheerful services of a long list of old and faithful dependents.

A contrast in character so exceedingly common, that it may be found in almost every parish in the kingdom, is perhaps well worthy the attention of those who may be at all interested in the description, or their different effects. The constant ill usage and violent abuse of horses, either timid, vicious, or refractory, under the hands of the operator, is a matter of sufficient notoriety to every man who has had occasion to superintend their practice; such cruelties require not to be sought after in remote corners by scrutinizing curiosity, they meet the eye of the Traveller daily in the most public situations. No judicious observer, no old groom, or young smith, need be reminded what an infinity of fine and valuable horses go through a tedious task of misery in repeated bleedings, mercurial purges, rowels, and course of alteratives, for defects or diseases in the eyes, originating only in the cruel hand and heavy hammer of the Smith,
with the emphatical accompaniment of "stand still and be d——d to ye," when shifting and uneasy under the operation of shoeing; a circumstance that, during a certain season of the year, is frequently occasioned by flies only, and consequently to be removed with very little trouble either to the animal, or his more inveterate persecutor.

This delineation may serve as an epitome of the many injuries sustained from similar acts of injustice, the true causes of which are never discovered or known but to the inhuman perpetrators: from severe blows with instruments of this kind (as hammer, pincers, blood-stick, &c.) frequently originate lameness in various parts, tumors, formation of matter, wounds, exfoliations, with others too numerous and probable for enumeration; all or either of which are generally attributed to a different cause, or defect in the constitution, and treated accordingly. Injuries to the eyes and dislodgment of the teeth are, however, among the most common evils of this kind; which are in general tolerably reconciled to the too
great credulity of the owner, by the plausible fiction of the experienced adept in imposition, who is always prepared to report, one the effect of a kick, the other a bite. Dangerous as these practices are to horses of any age or qualifications, they are doubly so to young ones; for a degree of severity and ill usage at their first and second shoeings very frequently fixes in the disposition an habitual aversion to Smiths, and a reluctance in approaching their shops, never after to be obliterated by any means whatever; and however opinions may clash upon the subject of extreme severity to horses, I shall continue to persevere in the truth of my former assertion,—if they are innately timid, vicious, or restive, unconditional violence alone will never make them better.

Having found it unavoidable to introduce remarks that are not only evidently connected with, but necessary to usher in the subject, we now proceed to such superficial knowledge of the operative part, as it is absolutely requisite every person should be in possession of, who wishes to understand and retain the power to direct a method of
shoeing, best adapted to the foot and action of his own horse. I never considered it at all necessary that a gentleman, sportsman, tradesman, or traveller, is to commence blacksmith in theory, and go through the rudiments of the trade to promote his intention: that has hitherto been the systematic mode of tuition: but when it is considered how very few will enter a wide field of abstruse study, to comprehend what he is told is a proper method of shoeing his horse, it can create no surprize that it has been attended with so little success.

My conception of the necessary knowledge is unequivocally this;—although every Smith in professional etiquette, may be deemed an artist, I defy the force of logic itself to render every artist a conjurer; and as there must inevitably remain among the collateral descendants from Vulcan (as in most other professions) some prodigies of brightness, who, incapable of distinguishing right from wrong, shoe one horse as they shoe another, or, in plainer English, shoe all alike; such discrimination becomes palpably useful, as will enable the owners to give conditional
directions for the ease and safety of his horse, without relying entirely upon those who will frequently be found to possess little or no judgment at all:

The greater part of those writers who have favoured the public with a communication of their sentiments upon this subject, seem extravagantly fond of an idea borrowed from antiquity, and transferred from one to another, upon the practicability of horses travelling the road, and doing their constant work without any shoeing at all: such economical plan may be admirably calculated for the theoretical journey of some literary speculatist, up two or three pair of stairs in a remote corner of the metropolis; but I will venture to affirm, no such excursion can take place of any duration, without material injury to the Hoof, unless to the high-bred horses of authors, many of whom enjoy their journeys as Bajazet enjoyed his cruelty, only "in imagination."

One of these (Osmer) has introduced his remarks with the following rhapsodical ex-postulation:
When time was young, when the earth was in a state of nature, and turnpike roads as yet were not, the horse needed not the assistance of this artist; for the divine Artist had taken care to give his feet such defence as it pleased him; and who is weak enough to suppose his wisdom was not sufficient to the purpose in such a state?"

He then proceeds to justify an opinion, that horses are adequate to their different services in a state of nature, without the officious obtrusions of art; venturing to affirm, that they "will travel even upon the turnpike roads about London, without injury to their feet." I avail myself of the present opening to disclaim every idea of attacking the remarks or opinions of others, from a motive of intentional opposition, or to indulge a vein of satire, that assertions so cynically singular and extraordinary, naturally excite; and shall therefore introduce, upon the present occasion, no other reflection than a certain sensation of surprize, that he did not insinuate the palpable superfluity or luxury of shoes and stockings to the natives of our own country, particularly when even the
fair sex of many neighbouring kingdoms convince us they can walk equally upright without.

In further confirmation of the belief he wishes to establish, he says, "we may every day see horses, mares, and colts running about on all sorts of ground unshod, and uninjured in their feet." This is certainly a truth too universally known even to be questioned; but by no means to be so far strained in its construction as to be rendered applicable, in a comparative view, to the state of working horses upon hard or stony roads, where the constant friction in riding, or the fulcrum in drawing, must inevitably prove injurious, if not totally destructive, to the foot in general; producing sand-cracks, thrush, bruises of the frog, formations of matter, and other infirmities, as is very frequently the case, (when a shoe has been for some time cast unobserved by the rider;) constituting a blemish or defect in the subject never to be retrieved. Mares and colts, or horses turned out to grass without shoes, are generally kept upon low, moist, or marshy
ground, admirably adapted to preserve the foot in a growing state of perfection; the case is exceedingly different, and will bear no parallel with horses of the above description; nor can I hesitate to believe, but the absolute necessity of substantially guarding the foot is too well established, by immemorial experience, to be at all shaken by the introduction of any new opinions upon that part of the subject.

I must, to avoid a misconception of my purpose, before I proceed, confess my obligation, as an individual, to the memories of those gentlemen who have formerly attended to and written upon this head, with a desire to improve it for the promotion of a general good; and am sorry a total want of passive pliability in my own pen, will not permit me to adhere to the "good old custom" of implicitly transmitting to succeeding generations the immaculate purity of their dictations, without presuming to introduce an opinion of my own.

"Learn to do well by others' harm," is an axiom of too much excellence to be obli-
terated from a memory, replete with observant advantages arising from reflection. If I could become so subservient to the fashionable impulse of literary ambition, as to expect to be generally read, and after such reading to be generally understood, I might enjoy much pleasure in going over the descriptive conformation of the bones, tendons, the inner fleshy, and the outer horny sole, the frog, and crust or hoof, with their different appropriations; but having the most indisputable reason to believe, that very abstrusity of reasoning, and mysterious introduction of technical terms, have in a great degree prevented the reading of publications upon this subject, I shall (in earnest hope of laying just claim to superior attention) descend, like the orator in one of the celebrated Foote's comedies, "to the vale of common sense, that I may be the better understood."

It has been the secondary consideration of these speculative writers, or theoretical sportsmen, (supposing a perseverance in the custom of shoeing not to be abolished upon the power of their persuasions,) to propagate and re-echo a doctrine equally absurd.
tending to what they pretend to believe, a proportional reformation in some part of the operation; viz. "That the sole and frog of a horse's foot need never be pared at all." To take up as little of the reader's time as the nature of the observation will admit, I shall very much contract what I wish to introduce more at large upon the inconsistency of the declaration; particularly as these refinements seem brought forward, more from a scarcity of matter necessary to complete their arrangement of pages for the press, than the least probable utility to be derived from remarks so erroneous in their formation.

Says the author before-mentioned, in continuation of his assertions, borrowed from La Fosse, "There is another reason equally obvious, which is, that the wisdom of the Creator intended this outer sole and its obduracy as a natural and proper defence to the inner sole, which lies immediately under the other, between that and the bone of the foot." He then proceeds, "If it be asked, What becomes of the sole when not
pared? it dries, separates, and scales away.” In concise reply to this sublime justification and very simple explanation, I should, in any conversation with the writer, if he had not passed “that bourne from whence no traveller returns,” have solicited a greater degree of candour in his opinion: whether the nails were not furnished to our own frames by the “wisdom of the Creator, as a natural and proper defence” to parts of the most exquisite sensibility; and whether the exuberant superflux in constant growth was never to be reduced to the standard of mediocrity, till every individual of the human species became a voluntary Nebuchadnezzar? because, upon the opinions of La Fosse, Osmer, and others, it would be the greatest presumption to suppose “the divine Artist” had left in any part of his works the least room for rectification.

We might certainly introduce, with propriety, a succession of similes perfectly in point to render the idea ridiculous; resisting, however, the great temptation to animadvert upon palpable absurdities, we come to the
proof of its "drying, separating, and scaling away." The fact is not literally so, as may be corroborated by any judicious observer accustomed to examine the feet of horses with the degree of accuracy and nice distinction necessary to justify or disprove any opinion that may be promulgated for public investigation or improvement. It is a matter too well known to admit of momentary cavil, that the foot, by being permitted to remain too long in its natural state without reduction, acquires in its several parts the appearance of deformity; the hoof grows long, narrow, and weak; the sole, as he says, separates, (but in part only) and comes away in partial scales, leaving a rough, hard, uneven surface of cavities and projections; the frog becoming bruised, ragged and putrefied, even to different degrees of lameness. This being the exact representation of a foot left to growth in a rude and unimproved state, the propriety or impropriety of judiciously paring each part, to promote a corresponding firmness, and preserve the necessary uniformity, can never become the subject of disputation, but among those whose intellectual faculties are absorbed in
such an abundant flow of imaginary matter, as to render practical researches and ocular demonstration too insignificant for the condescending inquiries of superior understandings.

Previous to a description of the different kinds of feet, at least the quality or texture of their formation, and the mode of shoeing best adapted to each; a few words may be properly introduced upon the many horses rendered temporary cripples by the injudicious or improper mode of forming or setting a shoe, without a relative consideration to the shape or make of the foot, or the size and action of the horse. What renders the circumstance still more extraordinary is, that this error in judgment so constantly happens without the least discovery by either owner or operator in their frequent surveys, and tedious consultations; and I am the more strengthened in my confirmation of this fact, by the repeated instances where the ceremonies of embrocating with those Vulcanian specifics, origanum and turpentine, have been persevered in (even to the acts of Blister-
Shoeing.

...and Roweling), till by my desire the shoe has been taken off; when the cause has been instantly discovered and immediately removed.

This is a circumstance that I doubt not has so frequently happened in the remembrance of every reader of experience, it can stand in no need of further illustration; we therefore proceed to such description of the exterior parts immediately concerned in the operation of shoeing, as upon a superficial survey meet the eye of every inspector. These are, first, the bottom or lower edge of the Hoof, surrounding the whole extremity of the foot, not only as a safeguard and general defence against external injuries, but is the direct part to which the shoe is scientifically fixed, to effect the purposes for which it was generally intended. Secondly, the horny or outer sole, covering the entire bottom of the foot, except the Frog, which is situate in the centre, (passing in a longitudinal direction from heel to toe) and forms by its elasticity the fulcrum, or expanding basis of the tendon,
upon which the very action of the horse depends.

These are the external parts appearing upon the surface, that present themselves to the spectator, and constitute in general all that he is supposed or required to know; remote considerations and operative consequences appertaining much more to the professional knowledge of the Artist than any acquired information of the owner.

Perfectly convinced that every man may judiciously superintend, or properly direct the shoeing of his horse, in a manner evidently adapted to his foot, size, weight, purpose, and manner of going, without the ill-according intervention of an abstruse study very little attended to, (however elaborately urged) I forbear imposition upon public patience, by any attempt to introduce an imitation or oblique copy of anatomical descriptive, so accurately delineated and described in the copper-plates and references of Gibson and Bartlet, with, I am sorry to say, so little success; if I may be allowed to explain, by
an opinion that the farriers themselves, a very inferior proportion excepted, seem to have imbibed no additional knowledge in equestrian anatomy, from studies so laudably exerted and clearly explained.

We come next to an explanation of the different kinds of feet, as they appear in different subjects in their natural state. These may be defined under three distinct heads: the short, sound, black, substantial hoof; the shallow, long, weak, white brittle hoof; and the deep, lax, porous, spongy hoof. Of these the first is so evidently superior, that, unless by improper or unfair treatment, it hardly ever becomes the subject of disease. The next is carefully to be avoided in the purchase if possible, not only on account of their being more subject to corns than any other, but indicative, in a great degree, of constitutional delicacy in either horse or mare, they not being so well enabled to bear hard work or constant fatigue. The last of the three is so equally inferior to the first, that from a variety of causes it is frequently productive of incessant attention, anxiety, disease and lameness.
Havino' taken a view of the kinds of feet that constantly pass through the hands of the Smith in his daily practice; and knowing the various states and forms in which they become subject to his inspection, it is absolutely impossible in all that ever has been written, or can be advanced, to lay down certain and invariable rules for the exact management of this, or the direct treatment of that particular foot, without a conditional reference to the judicious eye or discretional hand of the Owner or Operator. It must prove palpably clear to every enlightened inquirer, that no opinion or directions strictly infallible can be communicated through the medium of the press, applicable to every particular purpose, without proportional contribution from the judgment of the parties concerned, to give the groundwork of conditional information its proper effect.

Such instructions, however accurately described, must unavoidably remain subject to contingent deviations, regulated entirely by the state of the foot and circumstances of the
case; in a multiplicity of which, so many unexpected variations occur, as render one fixed mode of shoeing absolutely impracticable with every kind of horse, notwithstanding what may have been hitherto advanced from supposed high authority to the contrary.

There are, nevertheless, some general rules in the proper system of shoeing and preserving the feet, not easy to be mistaken by folly or perverted by ignorance, that shall be submitted to consideration before we take leave of the subject before us; previous to which, some part of M. La Fosse's observations, so strenuously recommended by Bartlet, become well worthy the attention of every gentleman or sportsman, who may wish to assist his judgment in the inquiry, and enable himself to decide impartially upon the propriety or impropriety of having his horse shod upon principles that have stood hitherto uncontroverted, from a fear (I suspect) of arraignmenting authorities, the dread of whose names may have deterred many practitioners of eminence from so desirable a purpose.
I have more than once asserted my determination to interfere as little as possible with the opinions or instructions of former writers, but where it became unavoidably necessary to establish an opposite opinion or corroborate a fact. It is a matter of some surprize that authors of eminence, who are naturally supposed to be "armed at all points," should be so incautiously off their guard, as to contradict themselves in the very act and emulation of conveying tuition to others. I have given a most striking instance of this error in my former volume, upon the inadvertency of Osmer, who repeatedly says with the greatest confidence and seeming belief, "Tendons are unelastic bodies; and frequently in the same or the very next page, tells you, "the tendon was elongated." I believe such assertion is of a complexion too paradoxical to require from me the most trifling elucidation.

Passing over this privilege of authors with no other remark than bare remembrance, I come directly to the analyzation of as palpable a professional contradiction broached by La Fosse, and given to the public by Bartlet, in the true spirit of implicit and
enthusiastic obedience. These Gentlemen have in succession, after going over (as before observed) a great deal of unnecessary ground, totally unintelligible to the sporting world, endeavoured to convince us, that *paring the sole or frog* is not only unnecessary, but absolutely prejudicial; for, say they, to establish a credulous confirmation of their erroneous conjecture, if you pare away the sole or frog in any degree; the more you pare, the farther you take from the ground the support of the tendon, which so entirely depends upon the elasticity of the frog." If any one person living could be found so unexpectedly ignorant as to pare the foot partially (that is, all behind and none before), such effect might probably ensue; but surely no rational observer will attempt to deny or disprove a palpable demonstration, that all parts of the foot being *equally pared*, (that is, the hoof, sole, and frog,) the centre of support and action must be still the same.

But was it really as they have said; if what they have so *learnedly advanced* was literally and justly true, what do they immediately do after this judicious and dicta-
torial decision? Why, strongly recommend, with the full force of theoretic persuasion, the introduction of a mode of shoeing directly contradictory to the opinion just recited, that may be perfectly adapted to and coincide with the sentiments of any writer in the act of amusing himself, employing the Printer, and deceiving the Public; but can never be brought into general practice, without perpetual hazard to the horse, and imminent danger to the rider. This is so perfectly clear, that I will go very far beyond bare literary assertion, and be bound to stake both property and professional reputation upon the certain failure of their improved proposition of shoeing, with what they call their half-moon shoe, with all its boasted advantages. A long chain of remarks in opposition is by no means necessary; a very concise and candid investigation will afford ample proof of their having reconciled (in compliment to their patient readers) as palpable contradictions in description as Osmer, whose "unelastic tendon" was immediately after "elongated."

You are given to understand (as I have
before observed) that, in their opinion, if you pare the sole or frog, you prevent the heel of the horse from coming into constant contact with the ground; and the tendon is deprived of the elastic assistance of the frog to promote its expansion and contraction. This is at least the exact purport of their description, if not given in the very same language, and is very well entitled to the deliberate attention of those who wish to understand accurately the state of the tendon (or back sinews) when, in the Stabularian tongue, they are said to be "let down."

Such a paring and hollowing out of the heel as they seem to describe, must be a most unmerciful destruction of parts, and what I believe can seldom happen in the present age, unless in the remote and least improved parts of the kingdom. Concluding, however, they took only a conjectural survey of this matter, I must beg leave to observe, that immediately after reprobating the idea of raising the frog from the ground by paring, they strenuously recommend a much more certain method of producing the very evil they tell you they wish to prevent. And this by
raising all the fore part of the foot, with "the half-moon shoe, set on to the middle of the hoof," not only forming an irregular and preternatural surface, but (by a want of length and support of the heel) constituting an unavoidable chance of relaxing the sinews in the perpetual probability of their being extended beyond the elastic power prescribed by nature.

This difference of opinion becomes so immediately connected with a particular passage in my former volume upon the subject of "strains," that it is absolutely necessary to quote a few lines for the better comprehension of the case before us; for I have there said, "To render this idea so clear that it cannot be misunderstood, let us suppose that a horse is going at his rate, and in so doing his toe covers a prominence, or the edge of one, where the heel has no support, it consequently extends the tendons beyond the distance afforded by nature, and instantly continues what is called a letting down of the back sinews," a circumstance that constantly happens upon the turf in running
for a heat, and the horse is then said to have "broken down."

This description comes so directly in point with the shape and state of the horse's foot in their mode of shoeing, that the horse must be at all times liable to sudden lameness, and more particularly at the rising of every hill, where his foot would be exactly in the situation by which I have described strains to be acquired. Every reader at all acquainted with, or having even a tolerable idea of, the anatomical structure of the leg and foot, by taking a comparative view of the mode of shoeing recommended, and the evident manner of sustaining an injury in the back sinews, as they are termed, will be sufficiently enabled to decide upon the consistency of the proposed plan, and, I flatter myself, enough convinced of the danger to coincide with me in opinion, that a horse shod in this manner, to cover a hilly country either in a journey or the chace, must inevitably fall dead lame from a relaxation of the tendinous parts; or, even in a low flat country, become so exceedingly weary from a want of proper support for the heel,
that he could never be able to go through a second day's fatigue without an alteration in his favour.

Establishing this as a fact not to be controverted by the fallacious effect of speculative rumination, and perfectly convinced neither entertainment nor utility can be derived from farther tedious explanatory remarks and observations upon the inconvenience of such mode of shoeing, as well as the numerous difficulties not to be surmounted if inadvertently encountered, I shall only slightly insinuate the absolute impossibility of hunting or travelling (particularly in the rainy seasons) in various hilly or chalky parts of the kingdom, without the accumulated probabilities of lameness to the horse, continual danger to the rider, and the inevitable certainty of bruising the heel and frog to a degree of disease, which must prove the resulting evil even upon the flattest and best turnpikes; but in the rough and stony roads, or strong and dry hard clays, such events may be expected as totally unavoidable.

Bidding adieu to a mode of shoeing calcu-
lated only for the soft and artificial flooring of a French Riding School, we come to such considerations as are adapted to the state of our own roads, the customs of our country, and the intellectual faculties of those to whose scientific skill the malleability of the metal, the important use of the butteris, the judicious formation of the shoe, and the equally decisive direction of the nail, are universally intrusted. Adverting for a moment to the before-mentioned allusion to Osmer's observation upon these men, who say, "they do not want to be taught," it is very natural to suppose, from the professional knowledge they should have acquired by strict attention and steady experience, that they cannot "want to be taught;" but that their judgment, founded upon the best basis manual art, and ocular inspection, ought to be much superior to any theoretical instructions that can be obtruded or enforced. Under that persuasion, and feeling for those few who have industriously rendered themselves adequate to all the difficulties of the trade, I feel no surprize that such spirited expostulations should be made, as must frequently happen in reply to many
pedantic consequential pretenders, who by their futile remarks and ignorant instruction, excite the jealous irritability of men, who, conscious of their own ability and integrity, possess (like Hotspur) too much innate spirit and personal courage to be perpetually pestered by "a popping jay."

It has been before observed, that many horses have undergone various operations for supposed lamenesses in different parts, when time, and the lucky interposition of a judicious opinion, have discovered the cause to be (where it is too seldom accurately searched for) in the foot. Lameness of this description proceeds in general from some one or other of the following causes; the nail-holes for the fastening of the shoe to the foot being inserted too far from the outer edge, in the web of the shoe, and consequently, when tightly clinched, bearing too hard upon the fleshy edge of the inner sole, constitutes a preternatural compression upon the internal parts and consequent impediment to ease or action.

Another cause exceedingly common, (when
the horse is said to be pricked in shoeing) is
the oblique direction of a nail, which, taking
an improper and inverted course, either per-
forates, or in its progress presses upon the
inner sole, puncturing some of the soft parts,
thereby producing certain lameness: which,
not immediately discovered, tends to inflam-
mation, that too often terminates in a remote
formation of matter constituting a case of the
most serious consequence.

A third cause is the inconsistent method of
forming the web of the shoe too wide for
the foot of the horse, and raising it so much,
or hollowing it out all round the inner edge,
as to give it a palpable convexity when fixed
to the hoof. By this convexity round the
inner edge of the web, the support becomes
unnaturally partial, and even in the constant
weight of the horse only (without recurring
to action) constitutes an opposition to its ori-
ginal purport; for the invariable pressure
upon the curved part of the shoe only, must
raise in the surrounding parts such a propor-
tional counteraction, that the harder the horse
bears in action upon a hard surface, the more
must every motion tend to force the very nails
from their hold, but that the clinches prevent their being withdrawn; in this state the horse, though not absolutely lame, limps in perpetual uneasiness, till the clinches of the nails are so relaxed as to bring the centre nearly to a level with the rest of the foot, where it frequently forms an additional cause to the original ill, by coming into close contact with the sole, which, *pressing upon* with any degree of severity, occasions a slight lameness that becomes immediately perceptible.

Another very common cause of lameness with horses of this description originates in the shoes being formed *too short* and *narrow* at the heel, by which means, in less than a week's constant wear, the hoof (or "crust," some writers have termed it for the sake of refinement) being also *narrow*, the heels of the shoes make gradual impression, and constitute a palpable indentation upon the edge of the sole directly over its articulation with the hoof, producing to a certainty, if persevered in, the foundation of *corns* or a temporary lameness, that is generally removed by removing the shoe.
A few additional bad effects, but of inferior consequence, resulting from injudicious shoeing, may be concisely ranged under the heads of raising the shoes too high in the heels, without due discrimination, throwing the fetlock joint into a distorted position; corns ill treated or horses ill shod, to occasion the imperfection of cutting either before or behind, an evil arising much more from want of professional accuracy in the operator, than any abortive effort in the process of Nature. These are, however, merely superficial inconveniences, to be remedied by such attention and circumspection as no one friend to the animal we treat of will ever refuse to bestow.

Rules for the prevention or cure of these are luckily calculated by their brevity for communication or retention. The heels of horses should never be artificially raised, only in exact proportion to the state of their feet, the season of the year, and their manner of going, not without some additional reference; to the road or country they generally travel; all which every Smith of the least eminence should perfectly understand from practical experience, without a long table of con-
ditional instructions to fix a criterion, which must, after all the speculative matter or experimental knowledge that can be introduced, be regulated by the exercise of his own professional penetration, or the personal superintendance of those whose instructions it must be his interest to obey.

Corns in general occasioned much more by the unobserved stricture of the shoe (as before described) than any defect in nature, are not sufficiently attended to in their earliest state for speedy obliteration; but permitted to acquire, by time and continuance of the cause, a rigid callosity before the least attempt is made for extirpation; during which inattention they become so inflexibly firm in their basis, that they are not easily to be eradicated, though great care and perseverance will greatly assist their mitigation, if not entirely establish their cure.

The best and most consistent method is to reduce it with the drawing knife as much as the extent of the corn and the depth of the sole will admit, observing not to exceed the bounds of discretion in penetrating the horny
sole too deeply, rendering, by a step of imprudence, the remedy worse than the disease. When it is thus reduced as much as the state of the corn and the texture of the foot will justify, let the entire destruction of it be attempted by the occasional application of a few drops of oil of vitriol over its whole surface; or its rapidity of growth restrained by the assistance of Goulard's extract of saturn, traumatic (commonly called Friar's) balsam camphorated spirits of wine, or tincture of myrrh.

This being performed, if the vacuum is large or deep from whence the substance has been extracted, and the operator has been under the necessity of nearly perforating the outer sole, so as to be productive of additional tenderness to the original cause of complaint; care must be taken to prevent the insinuation of extraneous substances of different kinds, as stones, gravel, dirt, or such other articles as may very much irritate and injure the part. This is best effected by plugging up the cavity with a pledget of tow, first hardening the surface well with one of the before-mentioned spirituous applications: remembering not to insert the tow too closely to
destroy its elastic property, forming a hardness from its abundance that may painfully press upon the tender part it is designed to defend.

It has long been an established practice after drawing a corn, an injury sustained in any part of the hoof, causing a partial defect or a diseased state of the frog, as inveterate thrush, &c. to protect the part with a bar-shoe, formed and adapted to such purpose; this is certainly a conditional security; but there is still a space between the foot and the shoe to receive and retain any substance that may become injurious by its lodgment and painful pressure as before-mentioned. To prevent the possibility of which I should always recommend (in cases that require it) the insinuation of a sufficient quantity of tow to fill up the interstice; and that its retention there might be rendered a matter of greater certainty, it should be well impregnated with a portion of diachylon with the gums, first melted over the fire; this will not only fill up the opening with neatness (properly managed) but form a bolster of ease to the part, and exclude to a certainty the admission of articles we have just described.
The cutting of horses is in general attributed to some impropriety in the mode of forming or setting the shoe; though this is by no means to be considered the invariable cause, for such inconvenience is sometimes produced by very different means. Horses, for instance, frequently injure themselves when in too long and repeated journeys they become leg weary, and though of great spirit and bottom, compulsively submit to the power of exhausted nature; when hardly able to get one foot before the other, it can create no surprize that they feel it impossible to proceed in equal direction, but move their limbs in the most irregular manner, warping and twisting, as if their falling must prove inevitable at every successive motion. In such state of bodily debilitation, injuries of this kind are undoubtedly sustained, and too often by the inadvertency or inexperience of the rider or driver, supposed to arise from some imperfection in the operation of shoeing, which in this instance is no way concerned.

It is not so in others, where the shoe being formed too wide for the hoof, or with a projecting sweep at the heel, (particularly in
horses, who, from an irregular shape of the foot called *turning out the toe*, are addicted to a kind of curve in action against the fetlock joint of the other leg) the evil is constituted to a certainty; but when it arises from these causes, it is always to be removed or greatly mitigated by the judicious interposition of the Smith, whose particular province it is to discover and remedy the defect.

Another cause of this inconvenience very frequently proceeds from what I have ever considered a palpable absurdity in the system of shoeing, and anxiously wish to undergo a general improvement: this is the inconsistent, ridiculous, and I may almost venture to add, invincible folly in forming a *groove* in the web of the shoe, neither large enough nor deep enough to admit the head of the nail, for the entire reception of which the plan was originally formed; though seldom or ever made sufficiently wide to complete the purport of its first intention.

The disadvantage arising from this want (or prostitution) of judgment in execution, is
not more the irregular surface of the foot, upon a hard road or pavement, throwing it unavoidably into a variety of unnatural positions by the heads of some nails being ridiculously high, or projecting from the shoe, and others as much below them, than the certainty of all the clinches being raised in a very few days' use by the weight and action of the horse, which, on the inside of each foot constitute the evil to a degree of severity with horses that go close, particularly if permitted to remain long in such state unattended to. Upon expostulation, you are told, "this is a matter of no inconvenience; that they will soon be worn down and become equal." If such assertion was to be admitted without opposition respecting the irregularity of the surface, and distortive positions of the foot, it by no means affects the certainty of rendering the clinches not only evidently injurious in the degree before recited, but of little utility (after a few days wear) in securing the shoe in the situation it was originally placed.

This is a circumstance so exceedingly clear, that every rational observer, possessing a de-
sire to promote general improvement, will coincide with me in opinion, and assist the recommendation by the force of example; in having the groove in the web of the shoe, for the reception of the nails, formed sufficiently wide and deep to admit the heads nearly or quite equal with the flat surface of the shoe, by which effectual insertion the shoe firmly retains its situation, and the nails their clinches, till a repetition of the operation becomes necessary.

There are (as I have before hinted an intention of explaining) some general rules to be remembered, as invariably applicable to all kinds of feet without exception. The shoe should be uniformly supported by the hoof only, entirely round the foot, and brought so regularly into contact, that it should not press more upon one part than another; it should also be formed with a concave inner surface, to keep it perfectly clear of the sole, that the point of the picker may occasionally pass under the inner part of the web, to free it from every extraneous or injurious substance. The shoe should not be made too wide in the web, or too weighty in metal,
for the size or purpose of the horse; if so, the insertion of the nails becomes unavoidably necessary nearer the edge of the fleshy, or inner sole, and the compression upon the internal parts proportionably greater, in the additional hold required to prevent the inner edge of the web from sinking directly, by constant pressure, upon the centre of the outer sole, constituting certain uneasiness in action, if not perceptible lameness. The heel of the shoe should always rather exceed the termination of the hoof behind, and be formed something wider than the heel itself; not only to constitute a firm basis of support for the frame, and prevent the indentation before described, but to afford room for the requisite growth and expansion of the heel, if a well-formed sound foot is at all the object of attention.

The hoofs of horses should never be suffered to grow too long at the toe; for exclusive of its soon constituting a flat, weak, narrow foot, it is uncommonly productive of stumbling and tumbling, to the no great entertainment, but certain danger of the rider; and this frequent error in the present
The practice of shoeing is the more extraordinary, as the very form, length, and texture of the hoof will always afford sufficient information in how great a degree it will bear reduction, with the additional consideration, in point of effect, that shortening the toe, will always proportionally widen, and give strength to the heel.

Horses said to be "fleshy footed," are those whose inner and outer sole are found to be too large in proportion to the substance of the hoof that surrounds them; or, in other words, to render it as clear as possible) whose hoof is too thin at the lower edge or bottom, for the size of the whole. This may be productive of inconvenience, and requires a nicer discrimination in the mode of forming the groove in the web, as well as in fixing the shoe; for the space upon which it must be unavoidably fixed (without an alternative) is so exceedingly narrow that the greatest care and attention is absolutely necessary to bring the nails so near the edge of the hoof, as to avoid every probable chance of injury by too great a stricture upon the component parts; a mat-
ter that has been already more than once concisely recommended to practical circum-
pection.

That such hazard may be the better avoided, it will be found an insurance of safety, to advance the front nails nearer to the extremity of the toe, where the seat of insertion is much wider, and bring the hinder nails farther from the points of the heel, where it is not only directly the reverse, but sometimes too narrow to admit of the insertion without danger. And in all cases, when horses are remarkably full and fleshy footed, with a heel exceedingly narrow, it is certainly the safest method to let them be shod with the nails entirely round the front of the foot, omitting their insertion in a proportional degree behind.

La Fosse, echoed by Bartlet, condemns the custom of turning up the shoe at the heels, upon the before-mentioned objection of its "removing the frog to a greater distance from the ground, by which the tendon will be inevitably ruptured;" but could they now become spectators of the hun-
dreds of post horses constantly running the roads with bar shoes, that totally preclude the possibility of the frogs touching the ground, to support such elasticity, they might be convinced what little respect such assertion must be held in, under a demonstration exceeding all contradiction. Nor is this retrospective remark brought forward upon any other motive, than to justify the great consistency and safety of judiciously raising the heels of the shoes to defend frogs that have been bruised, or are naturally defective, and heels that are flat and narrow; as well as to insure the safety of the rider, and prevent the slipping of horses, which must otherwise become inevitable in rainy seasons upon chalky roads or hilly countries.

Adverting once more to their promulgation upon "the inconsistency of ever paring the sole or frog," I must avail myself of the present opening to make one addition to my former observations upon that part of the subject: recommending it to the attention of every breeder, to make occasional inspections of the feet, even when yearlings, and in their progressive gradations, to prevent their
acquiring an ill conformation: by a want of proper correction they will very frequently be found spreading to a long flat thin foot, which left to time will become irrecoverably weak; on the contrary, proportionally pared at the bottom, shortened at the toe, and rounded with the rasp, will constitute the very kind of foot in shape and firmness of all others the most desirable.

Before we entirely dismiss this subject, a few remarks upon the management of the feet in stabled horses, cannot be considered inapplicable to our present purpose of general utility. First, it should be remembered, an equal inconvenience arises from having horses unnecessarily shod too often, or the ceremony postponed too long; the former by its frequency, batters and breaks the hoof (particularly if of the brittle kind) to a perceptible degree of injury; the latter promotes an awkward growth of the foot, an indentation of the shoe upon the sole, or inner edge of the hoof, and a probable destruction of the frog.

Various opinions may have been supported upon the propriety of stopping and oiling
the feet; but as it is not my present purpose to animadvert upon the diffuse remarks of others, I shall confine myself to practical observations of my own. The salutary effects of plentifully oiling, and nightly stopping, the substantial, firm, black, and white brittle hoofs, described in a former page, are too firmly established by long and attentive experience, to render opposition (from any authority whatever) worthy a momentary consideration or condescending reply.

A comparative state of the hoof that is carefully managed in this way, with one in its state of nature (more particularly in the hot and dry months of summer) will evidently bespeak the advantage and neatness of such care and attention. In one, the hoof is always in a state of pliable uniformity; in the other, a harsh, constant, and irregular scaling of the sole, an almost inflexible rigidity of the hoof in shoeing, and most frequently very large and dangerous cracks that separate the sole from the frog on both sides; leaving ample room on either for the insinuation of sand, gravel, or other injurious articles that may by their attention reach the
coronary articulation, constituting irreparable lameness too frequently attributed to every cause but the right.

Having gone through such chain of investigation and course of instruction, upon the subject of shoeing, and its effects, as I conceive to be at all calculated to assist the general judgment of those whose equestrian pursuits render such knowledge an object of importance; I shall proceed to that kind of communication, as I flatter myself will be equally acceptable to those who do me the honour of perusal and attention, whether for amusement, information, literary disquisition, or to render the influence of example more preferable to precept, by a contribution of their personal assistance to the promotion of general improvement.
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WILL prove a chapter more immediately appertaining to the proprietors of extensive receptacles in the metropolis, as well as other large cities, and those interested in their effects, than at all applicable to the present improved state of gentlemen's stables in every part of the kingdom, where the mode of management is approaching too near a degree of perfection to admit the aid of instruction, from either the pen of theoretic information, or practical experience. As it will, however, be unavoidably necessary to introduce under this head, such occasional remarks or useful observations as cannot with propriety appear under any other, hints may perhaps be discovered, in which every reader may feel himself in some degree individually concerned.

The very inferior state of action and appearance, so visibly predominant in horses of frequent use from the large public livery-stables, when put into competition with
hunters or hacks, enjoying the advantage of regular food, dressing, air, and exercise, will constitute all the apology I think it necessary to introduce for any degree of freedom I may be inclined to offer, in drawing a comparison very little observable by metropolitan heroes on horseback, but universally known to the discriminating eye of every experienced sportsman in the kingdom.

Such inferiority arises from an accumulation of causes, very little considered or inquired into by the owners, or riders, who philosophically define and experimentally demonstrate the horse to be an animal of general utility, and appropriate him to all their different purposes accordingly; with as little attention to his colour, perfections, or defects, as a tradesman at Manchester, who having, some few years since, occasion to attend the assizes at Lancaster, hired a grey gelding for the purpose, but unluckily returned with a bay mare, and obstinately persisted in opposition to every witness and expostulation, that he had brought back the very horse and equipments with which he had started, in obedience to the legal injunction he had re-
ceived. Of these equestrian Quixotes, Nature has been so exceedingly liberal, that we find numbers, who, when their steed is brought out of the stable, whether in high or low condition, see or not see, swollen legs, cracked heels, shoes or no shoes, his carcase expanded to its utmost extent, or contracted to a degree of unprecedented poverty, mount him with equal unconcern, and go through their journey, long or short, as prompted by necessity or inclination, without a single reflection upon the wants or weaknesses of the animal, unluckily destined to receive the honour of so humane an appendage.

In such unaccountable state of negligence stands many a valuable horse surrounded with an accumulation of ills and hourly promotion of misery from one week's end to another, and never enjoys the favour (if I may so term it) of his master's presence but of a Sunday morning; when, making the expeditious tour of Richmond, Hampton Court, Windsor, or some other of the fashionable excursions, he is consigned to his usual hebdominal dark abode of inactivity, to enjoy a profusion of
hay, water, and ease; but, in conformity with the idea of Major O'Flaherty, "a plentiful scarcity of every thing else."

It is impossible for any man living, who has made these creatures, their wants, gratifications, perfections, and attachments, the object of his contemplation, not to feel the greatest mortification when chance or choice brings him to a survey of the stables in London, with all their horrid inconveniences. To those totally unacquainted with the superior and systematic management of stables in general, it may all bear the appearance of propriety, consequently paves no way for the corroding reflections of vexation and disappointment; but to the experienced and attentive observer, whose sensations move in direct unison with the feelings of the animal he bestrides, and the accommodation of whose horse is held in equal estimation and retention with his own, they excite the joint emotions of pity and surprize.

Horses, in general, produced from stables of this description, all bear the appearance of
temporary invalids or confirmed valetudinarians; from living or rather existing in a scene of almost total darkness, they approach the light with reluctance, and every new object with additional apprehension. They walk, or rather totter out of the stable in a state of debilitation and stiffness of the extremities, as if threatened with universal lameness. The legs are swelled from the knees and hocks downwards, to the utmost expansion of the integument; which, with the dry and contracted state of the narrow-heel'd hoof, bears no ill affinity to the overloaded shoe of an opulent alderman, when emerging from the excruciating admonitions of a gouty monitor. Upon more accurate inspection, we find the list of happy effects still increased with those usual concomitants, inveterate cracks, running thrush, very frequently accompanied by a husky short cough, or asthmatic difficulty of respiration, in gradual progression to a broken wind; and the long list of inferior et ceteras, that constitute the invariable advantages of stable discipline, directly contrary to every established rule that can be laid down for the promotion of ease, health, and invigoration.
In confirmation of which, without a tedious animadversion upon so long a series of inconsistencies, let us advert concisely to the causes of such ill effects as we have ventured to enumerate. The disadvantage arising from horses standing in perpetual darkness, or with a very faint and glimmering light, must be too palpably clear to require much elucidation; for in such state, with the full and increased power of hearing, they are incessantly on the watch to discover what so constantly affects one sense, without the expected gratification of the other. To this eternal disappointment may be attributed the alternate stare and twinkling of the eye-lids, so common to every description of horses that stand in the most remote part of dark stables, at each time of being brought forward to face the light; as well as the additional observation, that being accustomed to see things but imperfectly in the stable, when brought into action upon the road, they are so much affected by the change, that they become habitually addicted to stop or start at every strange or sudden object that approaches. A certain danger also attends, when hurried by a careless or drunken hostler, from the ex-
ternal glare of light to the extreme of total darkness; for in such hasty transition, blows are frequently sustained against the racks, stalls, or intervening partitions, that sometimes terminate in the loss of an eye, with no other cause assigned for its original appearance than the fluctuation of humours, which the suffering subject immediately undergoes repeated consultations and a long course of medicines to eradicate.

The stiffness of the joints, the swelling of the legs, the severity of the cracks, the frequency of the thrush, the contraction of the hoofs, and the difficulty of respiration, are all so evidently the resultive effects of destructive situation and erroneous management, that to the sporting world alone, literary definition would be deemed superfluous; but to that infinity of Juvenile Equestrians, who are "daily rising to our view," and wonder, "why their horses, that they keep at so much expense, are unlike most others they meet in their rural excursions," such explanation becomes matter of indispensable necessity.
To the want of general cleanliness, pure air, and regular exercise, may be justly attributed all the ills we have just recited; and that such assertion may lay impartial claim to proper weight in the scale of reflection, let it be first remembered, that horses in the situation I allude to, are constantly living in certain degrees of heat, not only beyond the state required by nature, but very far exceeding even the stable temperature of horses in regular training for the turf.

That this may be the better understood by those whose situations in life have precluded the chance of such inspection, and that great body of readers in various and distant parts of the kingdom, who never have, and perhaps never may make a survey of public stables in the metropolis, I think it necessary to introduce an exact representation of systematic inconsistency, perfectly exculpated from even the slightest suspicion of exaggeration. As I have repeatedly observed, and it is universally admitted, there is no rule without some exception; so the following description may have some, but very few to boast of.
Upon entering the major part (particularly if the door has been but a few minutes closed, and is opened for your admission), the olfactory and optic nerves are instantaneously assailed with the volatile effluvia of dung and urine, equal to the exhalation from a stock bottle of hartshorn at the shop of any chemist in the neighbourhood. Here you find from ten or twelve to twenty horses, standing as hot, and every crevice of the stable as closely stopped, as if the very external air was infectious, and its admission must inevitably propagate a contagion. Naturally inquisitive to discover what irritating cause has laid such hold of your most prominent feature, you observe each horse standing upon an enormous load of litter, that by occasional additions (without a regular and daily removal from the bottom) has acquired both the substance and property of a moderate hot-bed.

Thus surrounded with the vapours constantly arising from an accumulation of the most powerful volatile salts, stand these poor animals, a kind of patient sacrifice to ignorance and indiscretion; and that the measure of
misery may be rendered perfect by every additional contribution of folly, each horse is absolutely loaded with a profusion of body-cloths, but perhaps more to gratify the ostentation or display the opulence of the owner, than any intentional utility to the horse. The sheet, quarter piece, breast-cloth, body roller, and perhaps the hood, are all brought forward to give proof of persevering attention and unremitting industry. In this state such horses are found, upon critical examination, to be in an almost perpetual languid perspiration; so debilitated, depressed, and inactive, for want of pure air and regular exercise, that they appear dull, heavy, and inattentive, as if conscious of their imprisonment and bodily persecution.

The effect of this mode of treatment soon becomes perceptible to the judicious eye of observation; the carcase is seen unnaturally full and overloaded, for want of those gradual evacuations promoted by gentle motion; the legs swell, becoming stiff and tumefied, till nature, in her utmost efforts for extravasation, terminates in either cracks, scratches, grease, or some one of the many
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disorders arising from an impurity, viscosity, or acrimony in the blood. The hoofs, by being almost invariably fixed to the constant heat of the accumulating dung before described, acquire a degree of contraction indicating hoof-bound lameness. The eyes frequently give proof of habitual weakness, in a watery discharge from the continual irritation of the volatile effluvia, the dilatation and contraction of the eye in search of light, the heat of the body, &c. all tending to constitute a frame directly opposite in health, vigour, and appearance, to those whose condition is regulated by a very different system of stabularian management.

The evils arising from this mistaken treatment are only yet enumerated in part, being those that evidently appear upon a superficial survey of the stables and their contents; others become discernible upon being brought into action. They are certainly less enabled to encounter fatigue than any horses in the kingdom; from so constant an existence in the absolute fumes of a hot bath, they never can be exposed to the external air in a cold, wet, or winter season, without danger to
every part of the frame. By such contrast they are instantly liable to a sudden col-
sion of the porous system, which locking up the perspiration matter so violently pro-
pelled to the surface, throws it back upon the circulation with redoubled force; where
nature being too much overloaded to admit its absorption, it becomes immediately fixed
upon the eyes or lungs, laying a very substantial foundation of disease and disqui-
etude.

If such horse is put into strong exercise, he soon proves himself inadequate to either a long or an expeditious journey: for whether the body is overburthened with weak and flatulent food and water at setting out, jaded with early fatigue, to which he has not been accustomed, or debilitated with the stable discipline we have so minutely described, the effect is nearly the same. If his journey is of any duration, or his exer-
tions of any great magnitude, it is no un-
common thing to find he has fallen sick, lame, or tired upon the road; and under the worst of curses, a bad character, is fre-
quently sold to the first bidder; under whose
systematic care and rational mode of management, a few months perhaps makes him one of the best and most valuable horses in the kingdom.

This is a circumstance that happens so very constantly in the equestrian fluctuation of fortune, and the assertion so repeatedly justified by ocular demonstration and practical experience, that I stand not in the least fear of a contrariety of opinions upon so conspicuous a part of the subject.

The ill effects of the stable treatment we have hitherto described, would be still more injurious did high feeding constitute a part of the system we presume to condemn; but a superabundance of food is what I by no means place to the inconsistency of the account. Prudence (divested of self-interest) powerfully prompts the parties concerned, to perceive the absurdity of over-feeding horses whose state so little requires it. Stable-keepers are not so destitute of penetration, as to be taught by me, the "folly of feeding horses that don't work." Oats are not only unnecessary but superfluous; hay
in small quantities will support nature sufficiently, by a constant mastication of which the appetite will be properly prepared to receive plenty of water; an article that is not only of very little expense and trouble, but by expanding the frame and filling the flank, will afford to the city sportsman and Sunday traveller, sufficient proof that the horse is amply fed, and "well looked after."

Having submitted to consideration the representation of facts, that neither the interested can, or the experienced will, attempt to deny, I shall (without much hope of effecting a reformation where so great a variety of opinions are concerned) beg permission to offer a few remarks, for the attention of those who are, from the nature of their situation, unavoidably connected with stables of this description; leaving the more minute instructions for the management of hunters or road horses, to be collected from the matter that will be hereafter introduced under those heads.

The pernicious properties of foul air must
be too well known, or at least too readily comprehended, (by every one to whose serious perusal these pages will become subject) to require even the most superficial elucidation; though in fact, entering into its destructive effects, with all is contingent consequences, would be to write, quote, and animadvert a volume upon the subject; which is in fact of too much scientific magnitude for present disquisition, in a publication that promises to be generally read, and it is intended should be as generally understood.

Under palpable conviction of the numerous ills that may arise in different ways from air so very much contaminated, and replete with impurities, I am convinced no one advocate for improvement can rationally object to the adoption of Ventilators in all public stables, where the situation is inevitably confined; as in London, and in other large cities, where they must unavoidably continue so without the most distant probability of rectification.

The utility, the convenience, the exhilara-
rating rays of "ALL CHEERING LIGHT," that enables us to enjoy society, (for which we were formed) is a matter standing in no need of tedious recommendation; it therefore cannot be too forcibly inculcated, or too cheerfully adopted.

Cleanliness is so indisputably necessary to health and invigoration, that it is matter of surprize how so palpable a system of filth could ever be permitted to pervade the equestrian receptacles of those who would no doubt, be exceedingly hurt and offended if they were to have the inconsistencies of their conduct personally demonstrated, and be compulsively convinced they either do not know or seem to care any thing about the matter. In fact, there is but one reason that can be urged, (and none with so much energy as those prompted by self-interest) in favour of a practice replete with so many disadvantages; this must be the high price and difficulty of obtaining straw in the metropolis, which, in its transformation to manure becomes so reduced to a mere nothingness in value, that the possibility of
being cleanly in those stables (we are told) is absolutely precluded by pecuniary considerations. But when the fixed emoluments of the weekly keep are taken into the aggregate, and it is not the effect of rumination but matter of fact, that many of the horses so kept, are, from want of exercise and the numerous causes before assigned, so very much off their appetites, as not to consume in a day but one or two of the four feeds of corn that are charged; an extra truss of straw from the loft liberally exchanged for each bushel and a half of oats accidentally saved in the granary, would certainly prove no violent prostitution of generosity!

EXERCISE

IS a matter of too much importance in the promotion of health and condition to be excluded its place in our present arrangement; and so evidently necessary to the natural secretions and regular evacuations, that the foundation of every disease may be laid
by a want of it. Horses are in their very nature and disposition so formed for motion, that they become dull, heavy, and unhealthy without it; of this nothing can afford greater demonstration than the pleasure they display in every action, when brought from the dark recess of a gloomy stable to the perfect enjoyment of light, air, and exercise. The natural sweetness of the external air is so happily superior to the stagnate impurity of the stable, that most horses instantly exult in the change, and by a variety of ways convince you of the preference.

Survey a spirited horse with the eye of attention, and observe the astonishing difference before and after his liberation from the manger, to which he is sometimes, under the influence of strange mismanagement, haltered for days together without intermission. In the stable you perceive him dejected, spiritless, and almost inanimate, without the least seeming courage or activity in his composition; but when brought into action he instantly assumes another appearance, and indicates, by bodily exultation and exertion, the absolute salubrity and necessity of what the
instinctive stupidity of many can never (from their inexplicable want of comprehension) be brought to understand. Such inconsiderate observers might certainly improve their very shallow judgment, by some trifling attention to the indications of nature in horses of any tolerable description, who all display, in different attitudes and by various means, the gratification they enjoy in their distinct appropriations. In fact, the animated aspect of the whole frame, the lively eye, the crested neck, the tail erect, with the most spirited bodily action of neighing, snorting, and curvetting, all tend to prove the constitutional utility of exercise in length and manner adapted to the size, strength, make, condition, and purpose of the horse.

Perfectly convinced of its indispensable necessity to horses of all kinds, in proportion to the uses for which they are designed, and the portion of aliment they receive, I am not unfrequently very highly entertained with the management of many within the extensive circle of my own acquaintance, (and those too with inherent pride sufficient to assume
the character of sportsmen) and who are in constant possession of good and valuable horses, perpetually buying, selling, and exchanging; but never, for years together, have one in their stables three months without swelled legs, cracked heels, grease, bad eyes, broken knees, or some of the many ills that constitute a stable of infirmities; all which they very philosophically and erroneously attribute to ill luck, that I most justly and impartially place to the account of inadvertent masters, and much more indolent servants.

The advantages arising from an unremitting perseverance in the regularity of daily exercise, (both in respect to time and continuance) cannot be so clearly known and perfectly understood, but to those who have attended minutely to the good effects of its practice, or the ills that become constantly perceptible from its omission. This is undoubtedly the more extraordinary, when it is recollected there is no one part of the animal economy more admirably adapted to the plainest comprehension, than the system of
repletion and evacuation; which may (avoiding technical description, and professional minutiae) be concisely explained and clearly understood, as matter necessarily introductory to what we proceed to inculcate, upon the palpable consistency of constant and moderate exercise for the establishment of health and promotion of condition.

I believe it has been before said, in either this or the former volume, that the aliment, after sufficient mastication in the act of chewing, is passed to the stomach, where it undergoes a regular fermentation (in general termed digestion) producing a certain quantum of chyle, in proportion to the nutritive property of the aliment so retained; this chyle, in its process of nature, (which has been before accurately explained) becomes wonderfully subservient to all the purposes of life and support in its general contribution to the source of circulation, and the various secretions; while the grosser parts (from which the nutritious property is extracted in their progress through the stomach and intestinal canal) are thrown off from the body by excrementitious evacuations.
This is a concise abstract of Nature's operation; as necessary to constitute sufficient information to comprehend our present purpose of explicit animadversion upon the great advantage of bodily motion, so far as it shall appear conducive to the preservation of health. Enough is consequently advanced to gratify every competent idea; and afford ample conviction, that should the body be permitted to receive, and continue to accumulate in the frame, more aliment than can be absorbed into the circulation, and carried off by the different emunctories in a certain portion of time; over repletion, disquietude, and ultimately disease, acute or chronic, must be the inevitable consequence.

The system and effect are too palpably clear to be all mistaken in even a theoretic survey of the process; for when the blood-vessels become overloaded with an accumulated retention of perspirable matter, and the stomach and intestines preternaturally extended by indurated excrement (all which should be occasionally carried off by exercise) indisposition must arise in a greater
or less degree, so soon as the repletion produces oppression, that the struggling efforts of nature are unable to subdue.

These unembellished facts are too plain and striking to require much time from the writer, or patience from the reader, for farther investigation or comprehension: concluding, therefore, this part of the animal mechanism is perfectly understood, I shall proceed to an explanation of the active causes of such disorders as originate in impurities of the blood, occasioned by want of motion and consequent evacuation.

It is therefore necessary we take a survey of a horse brought from the stable in a state of plenitude after temporary inactivity, when we find the body too full and overloaded to make his first efforts with any degree of ease or pleasure; every one not totally absorbed in a state of stupefaction or natural illiteracy, must have observed the unremitting attempts and strainings of the animal to throw off the superfluous burthen, by repeated evacuations, so soon as brought
into action. If at all hurried before the carcase is in some degree relieved from its accumulated contents, you perceive a wheezing or difficulty of respiration, occasioned by the pressure of the stomach thus loaded, upon the lobes of the lungs, restraining in their natural elasticity for the purposes of expansion and contraction.

In this state also, if his pace is extended beyond a walk, you find him break into a more violent perspiration than a horse in proper condition and regular exercise would display in a long journey, continued at the same rate, without intermission. These are all indications of nature not to be mistaken or denied by those at all connected or conversant with the subject before us, and sufficiently demonstrate the resulting effects of continuing to overload the system with a greater quantity of food than there is proportional exercise to carry off.

Perspiration (that is, the gradual emission, physically termed insensible, as not being profuse to perception) will, even in gentle exercise, take from the superflux of
the blood, what the necessary evacuations of dung and urine take from the accumulated contents of the intestines; which suffered to remain in an abundant and preternatural proportion, must, by its compulsive retention, acquire a degree of putrid or acrimonious morbidity inevitably producing disease. These morbid attacks act differently upon different subjects, according to their state or tendency, at the time of the blood or body's assuming a corrupt or infectious influence; displaying itself in such way as is most applicable to the constitutional predominance of disease in the horse previous to the least trait of discovery.

I shall, in compliance with my promise in the introductory part of this work, forbear to lead the reader farther into a tedious train of remote medical researches, but refer him to the different disquisitions of the former volume for any gratification he may wish to obtain; letting it suffice to observe, that from such original cause may arise the various distressing disquietudes so repeatedly enumerated, as swelled legs, cracked
heels, grease, asthmatic cough, fret, strangury, farcy, fever, convulsions, or in fact any of the numerous diseases to which horses are so constantly liable.

These causes of the various diseases, so perfectly clear, not only to every scientific investigator but every rational observer, are what have, from time immemorial, in the stabularian dialect, passed under the undefined denomination of humours, with the numerous tribe of equestrian dependents, from the first stud-groom of the first sporting nobleman, to the most illiterate stable-boy in the kingdom; without a single professional exertion of respectability, to wipe away the abstruse, ignorant subterfuge, of attributing the generality of disorders to the effect of humours, without any perspicuous attempt to explain, in their different publications, what they have universally taken the liberty to condemn.

I am exceedingly sorry to say (and say it I do, not from any intentional opposition or disrespect to the writers) that the more I compare former literary opinions with ex-
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perinental practice, the less reason I find to be satisfied with what they ventured to promulgate; particularly upon the subject of *humours*; which in all my inquiries and minute investigations, I could never find systematically explained, at least to encounter the eye of professional inspection.

Bracken, who for years was considered as a prodigy of Veterinarian instruction, after condemning the farriers' frequent use, and the convenient subterfuge of the word, makes many efforts to go through an elaborate explanation, that he says, "the ignorance and stupidity of the vulgar are inadequate to;" but, very unluckily, after attacking the subject *in nine different ways*, at least in as many different places, he as repeatedly digresses from the point, without ever coming into the probability of an explanatory conclusion.

Bartlet, in his usual condescending style of imitation, (or rather compilation,) affords *six pages* of duodecimo, replete with technical abstrusity, collected from the remote allusions and eccentric remarks of his
learned predecessor; beginning with a promise of unlimited explanation, and almost immediately taking leave with the following apology, that "what ought to be understood by the word humours, would take up more time than the brevity we have prescribed ourselves will admit on."

Taking no more time from the reader than is necessary to explain what has been already introduced, and to justify what is to follow, upon the hackneyed subject of humours, I advert to such professional remarks as have arisen from attentive observation, with occasional oblique references to the opinions of those who have gone before us, fraught with temporary popularity; having for such introduction no motive but an eager and acknowledged desire to establish the truth, by a proper and incontrovertible criterion of practical investigation.

Admitting, therefore, the repletion arising from a superflux of alimentary nutriment, (not carried off by those gradual excretions promoted by moderate exercise in gentle motion) to constitute what has so long passed
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under the vague denomination of *humours*, without a fear of being controverted by any respectable opponent, I shall proceed to the proper mode of rectification in such case, and the degree of distinction to be ascertained, when some of the diseases before-mentioned proceed from a different cause.

To effect this, it is first necessary to observe, that when such repletion becomes perceptible, and is *immediately* counteracted by regular and daily increasing exercise, it may, probably, (if the horse is in no confirmed state of foulness), be again absorbed into the circulation, and carried off without the assistance of extra evacuations promoted by medicine. But it should be always held in remembrance, that such exercise must be, in the first instances, not only of great gentleness but long duration; using no violence or speedy exertions, till the body is, by gradual perseverance, perfectly unloaded, and the carcase and extremities have recovered their original form and pliability; when the exercise may be increased to a greater degree of action, that the super-
fluous and offending matter, thus absorbed, may transpire by the most natural effort of perspiration.

To promote which, with the greater safety and facility, bleeding should precede, in proportion to size, strength, and condition, that the real state of the blood should be the more clearly ascertained; as may be found particularly explained in various parts of the former volume, where it is absolutely necessary its predominant appearance should undergo critical examination. But in this conscientious recommendation, I am unavoidably drawn into additional remarks upon the opinions of others; to demonstrate the inconsistency of theirs, as a necessary prelude to the justice and establishment of my own. And I must confess it gives me some concern, that I am under the necessity of differing, in a single opinion, from authority so very respectable, and judgment so truly professional, as His Majesty's Farrier for Scotland, whose elegant publications entitle him to universal applause for the great pains he has taken to elucidate and improve a system that
has for ages remained in an acknowledged state of barbarity and ignorance.

Mr. Clarke, in his "Observations on Blood-letting," says, "It is difficult to fix any precise standard how we may judge either of the healthy or morbid state of the blood in horses when cold." This is an opinion so directly opposite to what I have frequently advanced upon former occasions, (with reasons at large for inspecting it in such state), that my silence upon the passage alluded to would bear so much the appearance of pusillanimity, or professional ignorance, that I gladly avail myself of the present opportunity to subjoin a few words in support of the opinion formerly maintained; but with the most unsullied respect for a writer of so much perspicuity and eminence, whose abilities I hold in the greatest estimation.

It may, as Mr. Clarke seems to think, "be difficult to fix any precise standard to discover the exact state of the blood when cold;" but I doubt not his candour, upon due deliberation, will admit the certainty
of distinguishing its property, or predominant tendency, much better in that condition, than a state of liquidity as just received from the vein. If that certainty is admitted (as I flatter myself it will not, upon reflection, be respectably denied), it must undoubtedly prove much more eligible and satisfactory to obtain professional prognostics in part, than not to acquire any information at all. This being a position beyond the power of confutation, it is only necessary to add a single remark arising from daily practice, long experience, and accurate observation, upon the certainty of ascertaining from a minute examination of the blood when cold, the proportion of crassamentum, serum, size, viscosity, probable inflammation or acrimony it contains; from all which, surely diagnostics may be rationally formed to regulate future proceedings; at least, so I constantly find it in the course of my own practice: and until such inspection, by any deception, should convince me of its uncertainty and inutility, I shall not be readily induced to alter an opinion founded upon practical conviction; though I must
acknowledge there is no publication upon these subjects extant, to whose dictates I should more cheerfully become a convert, than the productions of the very author whose opinion, in one instance, I am compelled to oppose.

It is so perfectly in point to adopt the vulgarism of "killing two birds with one stone," that I cannot resist the temptation, and present opportunity, to introduce a few words upon an inconsistent passage in Bracken, that equally clashes with an opinion of mine frequently introduced in my former volume, where the operation of Bleeding, or the state of the blood, necessarily became matter of recommendation. In p. 111 of his Second Volume, he says, "the blood becomes viscid, poor, and dispirited." This passage is so strangely sequestered from comprehension, so ridiculously replete with paradoxical obscurity, and so directly contrary to my own observations, founded in practice, and long since communicated under the sanction of inviolate veracity, that I cannot permit such a profusion of professional
Contrarieties to pass current upon the public, without obtruding a few words to elucidate, or rather expose the mystery.

To establish the credit and justify the reputation of the "Stable Directory," as well as to obtain the approbation of those who at no time condemn without inspection, or applaud without reason, I have never advanced an opinion, or reported a fact, but what has been founded upon principles of incontrovertible information or acknowledged utility. It has been my invariable study to enlighten, not to perplex; what has been too much the system of other writers upon similar subjects, may be more properly collected from a revision of their productions, than the pen of a competitor. But I will venture to affirm, if any part of my observations had contained so many absurd contrarieties, or tedious and inapplicable digressions, as the elaborate volumes of Bracken; the tenth edition of the former volume, or the title-page of the second could never have met the light, in the present enlightened scene of equestrian inquiry and literary improve-
ment. On the contrary, had I prostituted my judgment, or my pen, to so unscientific a declaration as the blood's being "viscid, poor, and dispirited," the united force of menstrual criticism would have irrevocably doomed me and my opinions to the lowest region of oblivion.

How, at the same time, blood can be "viscid and poor," or the two words of a direct contrary meaning become so conveniently synonimous, I am at a loss to learn; but perfectly anxious that the professional consistency, the systematic uniformity of my assertions, may be arraigned and brought to issue with opinions so directly opposite, I find it unavoidably necessary to solicit, from every impartial investigator, a comparative view of what has been advanced on either side respecting the blood, when he will be enabled to decide whose system approaches nearest to truth supported by reason.

To justify and corroborate my remarks upon Mr. Clarke's idea of "not discovering the true state of the blood when cold," I must beg to repeat the very words of my
opinion previously given to the public in the former volume, class the third, under the head "Farcy," where will be found the following description, necessarily again submitted to the disquisition of every enlightened reader.

"In respect to cure, upon the very earliest appearance, take away blood in quantity as before described; and after so doing, attend minutely to the quality, which circumstances will enable you to form a very decisive judgment, how soon and to what proportion the subject will bear this evacuation, should it again be necessary; for according to the extra proportion of the Crassamentum, or Coagulum, and the size, (or gelatinized substance upon the surface), with the disproportion of serum, or watery part, it may be very readily ascertained how much the blood is certainly above or below the standard of mediocrity, necessary for the absolute preservation of health."

This is the opinion originally held forth in my first publication, and with so firm an adherence to truth, founded upon experience,
that I never (particularly after so much additional practice and investigation) can condescend to change my opinion, and admit its uncertainty, in compliment to the unsupported *ipse dixit* of any pen whatever; and that I may stand totally exculpated from the charge of *publishing* an opinion so contrary to the respectable authority of Mr. Clarke, I must beg to observe, that my opinion had not only the *priority* of his in publication, but had been in circulation full two years before Mr. Clarke's treatise came into my possession.

We come now to the *judicious* declaration of Bracken, respecting the blood that he calls "viscid, poor, and dispirited;" to correct which unaccountable professional slip, the above quotation will, in a certain degree, contribute; particularly when I submit it to recollection, that in many parts of my former volume, (appropriated entirely to medical researches), I have represented *viscid, sizey* blood to be the resulting effect of too much plenitude arising from alimentary repletion, with a want of proper exercise; while, on the contrary, I have described too
great a portion of serum to constitute an impoverished blood in being deprived of its due proportion of Crassamentum; as before recited.

To renew and corroborate which, I must be permitted to recommend to the retrospective attention of those anxious to distinguish between the specious delusion of theory and the establishment of fact, my observations in the same class, under the article of "mange," where it will be found I have defined the poverty of the blood in the following explanatory passage.

"For the blood being, by this barren contribution, robbed of what it was by nature intended to receive, becomes impoverished, even to a degree of incredibility (by those unacquainted with the system of repletion and circulation); it loses its tenacity and balsamic adhesive quality, degenerating to an acrid serous vapour, that acquires malignity by its preternatural separation from its original corrector."

These explanations are so physically correct, so perfectly clear, and so evidently
adapted to every comprehension, that I am satisfied to rest the certainty of its process, and my own professional reputation, upon the arbitrative decision of any impartial investigator. And that this comparative process may be brought to a speedy termination, I shall only beg leave to observe, if Mr. Clarke's hypothesis, "that no discovery can be made from the blood when cold," is a fact, or the "viscid, poor, and dispirited blood" of Bracken, can be defined one and the same thing, divested of paradoxical complication, and such eccentric opinions are founded in truth, and can be supported by incontrovertible facts; my assertions, however scientific, however established by time, and confirmed by experience, must inevitably fall unsupported to the ground, unworthy the future attention of those by whose approbation and applause I have been so highly honoured.

Having endeavoured to rescue from public prejudice any hasty decisions that might be made upon such clashing opinions undefined; we return to the operation of bleeding, recommended previous to the constant exer-
cise, and with that bleeding an accurate examination of the blood when cold; and this upon the basis of my former opinion again repeated, that should the crassamentum (or coagulum) be proportionally greater in quantity to the serum (or watery part) than the serum to the coagulum, I should not hesitate a moment to pronounce such horse to be above himself in condition, more particularly if the blood has acquired a viscid tenacity perceptible upon its surface.

When I say above himself in condition, I wish to be understood, he is in the very state we have already described, viz the whole frame is overloaded by a super-abundance of nutriment, not carried off by exercise; and the impurities thus collected, to have no reference to latent disease, but merely the effect of such superflux suspended in the constitution, producing a temporary stagnation of what I have already defined humours to be, for want of gradual motion and consequent evacuations. This being the exact state of a horse labouring under plethora, and its concomitants from fulness only, I should immediately adopt the use of a mash each night,
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composed of malt and bran, equal parts, merely to soften the indurated contents of the intestines, and promote their more expeditious discharge during the gradual exercise in the following days; exciting the vessels to an increased secretion of urine, by the interposition of two ounces of nitre, thoroughly dissolved in the water of each morning, when horses will in general drink it with a greater degree of avidity. This plan regularly persevered in for six or eight days, with daily increasing exercise and good substantial dressings in the stable (more particularly patient rubbing of the legs downwards) may be reasonably expected to carry off the repletion, in part, or all, according to the state and condition of the horse, or the time of its accumulation.

On the contrary, should the blood in five or six hours after it is taken away be found to contain but a small portion of crassamentum, in proportion to the much greater of serum; and such coagulum to be of a florid healthy appearance, I could not doubt even for a moment but such swellings of the legs, cracks, grease, defluxions of the
eyes (or any other complaints usually arising from such cause), may be the effect of an acrimonious, impoverished, and diseased state of the blood; for the due correcting of which, proper remedies may be selected from the former volume of this work, under the different classes and heads to which they are the most applicable.

Defluxions of the eyes arising from whatever cause, whether the repletion already defined, that by its accumulation distends the finer vessels in proportion as the larger are overloaded, and in such retention acquires tendency to disease; from such external injuries as bites and blows; or a relaxed, defective, or paralytic affection of the internal organs, they are all in general denominated humours, without distinction, and physically treated accordingly. Hence arises a very predominant and almost universal error, for want of judicious discrimination in paying proper attention to the state of the blood; the difference and property of which have been so accurately and repeatedly described, that there is no opening left to admit the plea of ignorance in any one case where it is entitled to inspection.
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If a threatened disorder in the eye is supposed to be the effect of repletion and resulting *viscidity*, some judgment may be formed from a minute examination of the blood, which will bear resemblance to the state accurately explained when the horse is too much *above himself in condition*, and the vessels more or less overcharged with impurities. Exclusive of a sole dependence upon which prognostic much information may be collected from external appearance; the eyes are full, heavy, and dull, with an apparent tendency to inflammation in the lids above and below, and exceedingly turbid in the centre; displaying in such state a perpetual drowsiness, his eyes being frequently closed when standing in the stable undisturbed and seemingly unperceived, but without the least discharge tending to discover the original cause of complaint.

On the contrary, when arising from an impoverished and acrimonious state of the blood, the eyes become upon the first attack full and inflamed; almost immediately discharging a sharp scalding serum, that is incessantly rolling down the cheeks, and in its
passage (by its constant heat and irritation) frequently occasions excoriation; the eye gradually contracting and sinking in its orbit, in proportion to the length and inveteracy of disease. This defluxion is so very opposite in cause and effect, and requires a system of treatment so very different to the case just described, as arising from a viscosity in the blood, (constituting humour of a distinct kind) that a nicer judgment is necessary than is generally exerted in such discrimination.

In cases where one only is affected, in either of the ways before described, it may with a great degree of reason be attributed to external injury, and the resulting pain, inflammation, or discharge, so far dependent upon the original cause as to be merely symptomatic; unless from the great irritability and exquisite sensation of the part, some of the humours of the eye should be so severely injured as to occasion its loss; a circumstance that is too frequently known to happen by an accidental blow, but undoubtedly many more by those wilfully aimed and fatally executed.
As I have before observed, one grand error has formerly arisen, and is still continued by all the advocates for, and invincible followers of Ancient Farriery, to treat "the humours that have fallen into the eyes" (making use of their own language) exactly in the same way, whether they proceed from any of the causes just recited, or the long list of possibilities that might be added to the catalogue. It is really in reflection a dreadful consideration, that experience enables me to proclaim so serious a fact, and with variety of proofs to establish the certainty, that more horses are deprived of their eyes and rendered totally blind, by the unbounded ignorance, quackery, and self-sufficiency of some, with the confidence and affected medical knowledge of others, than any bodily disease or local defect to which the frame is subject in the course of nature.

It is a matter of no small concern to those who wish to see a rapid improvement in the medical management of this useful animal, to find in cases of consequence, upon every inquiry to discover the cause and what methods
have been taken to relieve, all the information must be derived from interrogatories to the servant; who is in general possessed of all the mystery, and the master (however valuable the horse) is frequently found to know little or nothing at all of the matter. The groom's judgment is in general so perfectly infallible, that it would be absolute presumption in his employer to inquire into the cause of complaint or method of cure; yet upon accurate investigation of these extensive abilities, we find very slender cause for the unlimited confidence and implicit opinion of the master. If inquiry is made whether the horse has been bled, and we are answered he has, we are already arrived at the ultimatum of information; for what quantity was taken away, or what quality it was when cold, must remain in its former obscurity; one general answer suffices for every question; and with a blush of conscious stupidity, we are told the horse was "bled on the dunghill." By this specimen of enlightened information, every additional suggestion may be fairly supposed equally conclusive and satisfactory.
However, to avoid further digression in the present instance, and come to a palpable demonstration of an assertion just made, I shall very concisely introduce, from the multiplicity that have occurred, two recent cases only, as directly applicable to our present purpose of corroboration; and it is rather remarkable they should both happen on the same day, and within a very short time of this representation going to press, the horses being the property of persons of the first fashion, and each of them sent upwards of twenty miles for my opinion.

The first was a hunter of high qualifications and considerable estimation; upon accurate examination I found him in the exact state I have described when labouring under a defluxion of the eyes, (arising from a diseased and acrimonious state of the blood) the discharge from which, in its long continuance and severity, had "fretted channels in his cheeks;" the eyes were so very much perished that they were absolutely contracted in their orbs, the frame weak and emaciated, displaying a spectacle with very slender and discouraging hopes of rectification.
Anxious to obtain every possible information upon so extraordinary and unpromising a case, I commenced my inquiry with caution, and continued it with precision, to the attainment of every particular step that had been taken for his relief; and doubt not but every reader will be as much surprised in the perusal, as I must have been in the recital, when he is informed, that the horse had been in this gradually increasing state for two months; with the additional mortification to the parties, that every method adopted for his improvement had evidently contributed to his disadvantage.

Every degree of admiration, however naturally excited by the force of this reflection, will as naturally subside when the communication of the messenger and the state of the horse have undergone a little deliberative retrospection. In the first instance, his keep was so reduced as barely to subsist nature; he had undergone five bleedings (without the least reference to either quantity or quality), three doses of strong mercurial physic, two ounces of nitre a day from the origin of the complaint; and lastly, to render complete 2
system of inconsistencies, a rowel had been inserted, as if the whole process had been intentionally calculated to increase the cause and inveteracy of disease. From the ill effects of this case (which is critically accurate and authentic) may be derived a lesson of the greatest utility to those who, perfectly happy in the vortex of personal confidence and self-sufficiency, so frequently become the dupes of their own imaginary superiority and indiscretion.

If the cause had been inflammatory, arising from the visible effect of plenitude, viscosity, or gross impurities in the habit, the various evacuations might have been rotationally adopted; and justified upon the principles of rational practice and medical consistency; but unfortunately, in the present instance whatever tended to reduce the system and dissolve the crassamentum of the blood, inevitably increased the very evil they were endeavouring to mitigate. It was equally remarkable and extraordinary, that no one article was brought into use but what became additionally injurious to the cause it was intended to serve; all which might have
been prevented by the precaution of minutely inspecting, and properly comprehending, the crasis of the blood; the indispensable necessity of which, I am anxiously induced to hope, will acquire such weight with those who are adequate to the task of decision, that it will in future become a business of more general investigation.

The repeated bleedings, the reduction of aliment, the perpetual administration of nitre, (attenuating the blood that was before too serous and watery) the injudicious interposition of purges, and lastly, the insertion of the rowel to assist in the general devastation, certainly exceeds every idea that could have been formed of random quackery and bodily depredation; this is, however, no more than one representation of what is eternally carrying on in different places under the inspection of those, who are too illiterate to possess a consistent opinion of their own, and too impertinently conceived to solicit assistance from others.

Despairing of success by any relief that could be obtained from medicine, I ordered
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the system to be immediately invigorated with increased supplies of food, that by forming the means of nutrition, the crassamentum of the blood might be augmented; assisting this with a pectoral cordial ball every morning, not more to enliven the circulation, than by warm and gentle stimulation to restore the tone of the stomach and intestines, totally debilitated by the injudicious administration of mercurial cathartics, and the long and improper use of the nitre. These desirable points being obtained, I recommended, at the end of six or seven days, the fair trial of a course of the advertised Alterative Powders, to gradually obtund the acrimonious particles of the blood, with the external application of the Vegeto Mineral, properly proportioned to allay the irritation; but I must confess, without any great hopes of succeeding in parts of the frame so very remote from the active power of medicine.

The other was the case of a coach horse, little less singular in its mode of treatment; as no one step taken seemed to be at all regulated by any well-founded in-
tention of utility. The eyes (one more particularly) had been some months in a state of failure and fluctuation, alternately producing hope and despair; when, after undergoing every experiment at home without even a probability of success, he was consigned to my inspection, with a desire that I would be very minute in my instructions, which should be implicitly obeyed. Upon examination, I discovered the defect to have taken its seat in the humours of the eye, with no external inflammation attending, nor any other predominant trait than a dull cloudy aspect of the entire orb; displaying a pearly tint upon the outer edge of the cornea, surrounded by the tunica sclerotis, indicating the great probability of film and opacity, constituting in its gradual termination total blindness.

This horse, I found upon inquiry, had been treated in a way nearly similar to what we have just described; for, having been repeatedly bled and purged, he had been subsisted upon hot mashes, and furnished with four ounces of nitre a day in
his water for weeks together; had received the farrier's operative contribution of a rowel; and, to sum up the total of empirical speculation, and to verify the vulgar adage of "the more cooks," &c. the messenger (who was the commanding officer of the stabularian department) confidentially entrusted me with a secret remedy of his own he had privately adopted; the propriety and safety of which application, he did not at all doubt but I should applaud, as it was, in general, a perfect cure for bad eyes of every kind; and was no more than "two ounces of blue vitriol dissolved in a quart of spring water, with which the eyes were to be well washed every night and morning." Whatever may be my inclination, however highly I may be again disposed to animadvert upon these acts of desperation or madness, (for so I must be permitted to term them) I shall here drop the curtain upon the invincible ignorance and cruelty of this practice; referring the reader to various parts of the former volume, where he will be amply furnished with observations at large, perfectly applicable to the mode of treat-
ment so ridiculously adapted to the cases in question.

Not entertaining the least doubt but upon these representations, by much the greater part of the judicious and enlightened world will perfectly coincide with me in an opinion not to be eradicated; that numbers of horses annually lose not only their eyes but their lives, by the dreadful effects of unbounded ignorance and confidence, that, it is to be lamented, too frequently act in conjunction, to the palpable prejudice of undiscerning credulity. Considering this a fact too substantial to be shaken by speculative or inexperienced opinions, it becomes, for the completion of our purpose, absolutely necessary we advert to the mischiefs so frequently occasioned by the fashionable and indiscriminate use of nitre, in consequence of the general encomiums of former writers, before its properties were so critically ascertained; which added to the pecuniary ease of acquisition, has brought the article into too great a degree of constant use, in almost every case, without a relative consideration to its medical property, the cause
or symptoms of disease, its injurious tendency in some cases, or evident destruction in others, as in the former of the two just described.

That the frequent use and abuse of nitre may not only be better understood, but more perfectly retained in memory; as well as to establish the propriety of its use in some cases, and to confirm the justice of my assertion respecting its prejudicial effects in others; I must be under the necessity of introducing the repetition of a few lines descriptive of its properties, so particularly enlarged upon in my former volume, where it may be found by reference to the index. In animadversion upon the unlimited eulogiums of Bartlet, who has, without proper discrimination, recommended its frequent use to "three or four ounces three times a day," I have said,

"He urges the administration of it to attenuate and thin the dense sily blood during the effect of inflammatory fever: this property of attenuation being allowed, what must be the natural conclusion and consequence
of giving it in such large proportions? Why, every professional man, knowing the mode by which it must inevitably affect the circulation, would naturally expect it to dissolve the very crassamentum of the blood, and reduce it to an absolute serum or aqueous vapour."

Admitting this representation of its analysed properties to stand incontroverted, what must prove its evident effects upon the crasis of the blood, already too much impoverished for "the standard of mediocrity necessary to the preservation of health?" and how distressingly erroneous must have been its introduction and continuance, in the former case of the two we have recited! to elucidate its destructive tendency in which, the present repetition of its description is particularly applied.

It is absolutely astonishing how very much time, assisted by the torrent of popular impression, may pervert the best intentions to the worst of purposes; this has been so truly the case in the frequent prostitution of this medicine, that little need be introduced to
insure its credibility. Nitre is the general arcanum for every ill, while one-half of those who prescribe, and the other half who give it, may be equally strangers to its effects or mode of operation. If a horse is attacked with cold from an obstruction of the pores, that has thrown the perspirable matter upon the eyes, lungs, or glandular parts, what is the established remedy? Nitre! Inflammatory fever ensues: what follows? Nitre! Swelled legs, cracked heels, or grease? Nitre! Bad eyes (from whatever cause)? Nitre! In fact, such is the predominant rage of fashionable phrenzy, that should any case arise, bearing in experience no pathognomonic symptoms to ascertain the certainty or probable affinity of disease, its origin or termination, Nitre, with sagacious grooms and condescending farriers, must become the grand specific; to which infatuation, I am much inclined to believe Bartlet's unbounded partiality, and its echo from one conjurer to another, has very much contributed.

A chain of attentive observations, collected in the course of long experience, has fully
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justified me in a former opinion, that numerous injuries are sustained, and ills inflicted upon horses of gentlemen, by the hazardous experiments of grooms and servants; who piquing themselves upon heterogeneous and self-planned compositions or obsolete prescriptions, increase danger or promote destruction without detection. And what renders the business a matter of more serious consideration, is the unaccountable obstinacy, pride, and stabularian consequence (of all other the most disgusting) annexed to their affected knowledge and physical penetration. Too ignorant to be convinced, and too rude to become subservient, expostulation or explanation can hold no weight in the scale of conversation; consequently no reformation can be expected in such infernal system of domestic deception and destructive quackery, unless gentlemen, for the promotion of their own interest and the safety of their studs, will condescend to exert their authority, and abolish a custom, in the encouragement or permission of which they are so materially injured. To the establishment of this fact, a numerous catalogue of most substantial proofs are within my own
knowledge, was their communication of the least utility in confirming an assertion that will, I believe, be readily admitted by all the world without exception.

From such medical remarks as unavoidably branch directly from the subject, we return to exercise; the great importance of which cannot be too perfectly understood, or regularly persevered in for the preservation of health. Having, I believe, properly defined the physical effects of gradual motion, so far as it appertains to the animal economy in secretion and excretion (with its consequent advantages in air and exercise) it becomes necessary to introduce such general rules as establish the basis of regular exercise, although the time and manner must ever be regulated by the temper and caprice of the parties, season of the year, situation, weather, and other contingencies not to be governed by the privilege of the pen, or the power of the press.

The apology for, or rather burlesque upon, the exercise of horses (or more properly invalids) in the livery-stables of London
is evidently calculated to complete the measure of misery so fully explained in our last chapter, particularly in the winter season, that it is necessarily a matter of previous consideration to such instructions as we may hereafter introduce under this head. The poor animals I now allude to, seem to exist as an almost different species to those enjoying the inexpressible advantages of *country air*, *strong exercise*, and *rural management*. Here you perceive all spirit, animation, and vigour, with both the horses and their attendants; in the metropolis, bodily infirmities and debilitation with one; *idleness, deception, sloth, and dejection* with the other. In fact, the causes and effects have been so perfectly clear in the gantlet of personal inspection and pecuniary experience, when the prevalence of fashion (or rather folly) influenced me to *keep two in such situation*, that no inducement whatever should prevail on me to leave a horse of the least value open to the inconveniences of such state for twenty-four hours; perfectly convinced he would have every probable chance of sustaining greater injuries than might be obliterated in twice
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twenty-four days. The more we investigate this business, the less satisfaction it will afford to the parties more immediately interested in the explanation; particularly to those whose situations in life, or professional avocations, leave them without an alternative.

After taking a retrospective view of the "Stabling" already described, let it be remembered, that what they call exercise depends entirely upon the inclination and convenience of the motley crew to whom the management of the yard, and superintendance of the horses, are intrusted; these are a sort, in general, selected as the greatest adepts in falsehood and imposition, best adapted to the convenient purposes of the master, and the purified principles of a stable-yard proficiency. When such exercise is, however, corresponding with the inclination and convenience of the parties we describe, observe in its manner how little it is calculated to promote the very purposes for which it is intended.

The horse is brought in general from the
evaporating steams of the most volatile salts, with the perspirative pores all open, parching with thirst, to a large open trough of cold water (with little respect to season), where he is permitted to satiate the appetite, unrestrained by judgment or fear of consequence; till chilled by the frigidity of the element, the porous system becomes instantly collapsed, and you perceive by attention, the tail almost immediately clung to the hind quarters; a violent trembling and bodily agitation succeeds, and the perspirative matter thus obstructed in its very act of fluctuation (through every part of the frame) lays the foundation of various ills, that, however they might have been avoided in the first instance, cannot be prevented in the last.

This ceremony is succeeded by one of two others equally prejudicial to the frame in general, however its ill effects may not prove immediately discernible; but remain dormant some short space of time in the habit before it is displayed in one of the many diseases so repeatedly described in different parts of the last and present chap-
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sters. For so soon as the horse has been thus permitted to glut himself with an immoderate quantity of the cold water before mentioned, he is directly consigned to his stall, where its injurious effects are presently visible in a severe rigor, or violent fit of shaking, not unlike the painful paroxysm of an intermittent; producing an almost instantaneous contraction of the cutaneous passages, and "staring of the coat" (as it is called), when we observe

"Each particular hair to stand on end"
"Like quills upon the fretful porcupine."

The alternative to this practice is so thoroughly contemptible, that it is absolutely difficult to decide which is the more destructive or dangerous of the two; for if the plan above described is not adopted, but at times admits of variation, it is directly in the following way; the horse thus watered is immediately mounted by one of the juvenile ragamuffins, who constantly give daily attendance at those receptacles, to obtain a proficiency in the arts of riding, cruelty, and persecution. Two or three of the horses at
a time, and in this state, are put in a course of exercise, and woeful exercise it certainly is with a witness; for without the least previous gentle walking, to expedite the gradual evacuation of excrements so long retained for want of motion, they are instantly trotted, galloped, and perpetually turned at each end of a short ride, in such scene of incessant confusion for a length of time without remission. The stomach and intestines being overloaded with their contents, the horse is totally inadequate to rapidity of motion without great bodily distress; a few minutes therefore put him into a wonderful degree of perspiration; when evidently labouring under a difficulty of respiration and disquietude, he is returned tottering to the stable, and there left to grow "cool at leisure;" laying, in another way, the foundation of those diseases resulting from a collapse of the porous system, and stagnation of perspirable matter, too substantial to be resorbed into the circulation.

Taking leave for the present of stable discipline, so truly despicable that farther de-
scription might be considered a prostitution of both time and paper, we necessarily return to the gradations of exercise best adapted to the different degrees of horses, according to their various states of condition. Many calculations have been made upon the possible labour and continued exertions of this species, and we are by no means ignorant of their great and almost incredible execution, when brought (for the decision of bets) into trials of severity upon the turf or road, both in speed and duration.

The distinction to be made in the present instance, is only the line between what is to be considered as work, and what as the salutary intervention of exercise; opinions (so near as speculative attention can form a degree of consistency) admit that horses of moderate qualifications and moderately supported, will constantly travel or journey in their accustomed employment, from sixteen to twenty miles every day, through the year, without the least inconvenience or bodily debilitation, more than what naturally arises from the increasing age of the subject. This, however, being fixed as a kind of conditional
standard, or general criterion, cannot be supposed to be held critically correct with all horses, without distinction; as there are many that will consequently bear much more labour and fatigue, from greater bodily strength, inherent spirit, or constitutional stamina, than others that fall very far short in constant work and execution, from a want of those perfections so truly valuable in horses of the former description.

As I have before said, exercise, in all its particulars of manner, distance, and duration, must be entirely regulated by contingent reflections upon the health, state, and condition, of the subject; so it must be perfectly clear that the recommendation of certain exercise to horses in a high state of health and condition, cannot be supposed to extend to those under physic, or in different states of, or recovery from, disease; such must unavoidably receive judicious regulations from the parties concerned; as the kind of daily exercise we now have in contemplation, only appertains to horses in health, the preservation of which is the present object of con-
sideration. All the observations under this head, having been introduced to demonstrate the utility of exercise in general, and the ills that certainly arise from the want of it, more than to lay down specific rules for the daily exercise of particular horses; such instructions will be found included under the management of Hunters and Road Horses, when we come to enlarge upon those different heads.

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HAS been to the credulous and illiterate of past times, exactly what the fascinating infatuation of animal magnetism proves to the dupes of the present; like humours, it has been played upon by most writers in rotation, without an explanatory line in its favour to produce satisfactory proof of its mechanical process or established utility. Bracken, who hardly ever gave cause of complaint for abridging his subject, but generally most condescendingly spun it (by a variety of branches) to an almost indivisible thread, deviated in this instance from his
usual custom; and after introducing the subject with a certain degree of dignity annexed to its importance, by telling us, "he once thought not to have made a particular chapter upon rowelling, he begins and concludes that very chapter, of so much consequence, in the single duodecimo page 321, of his first volume. In this page, and upon this business, I had very much wished to have enlarged my own ideas, and improved my judgment; more particularly upon the abstruse effects of a subject, whose personal or literary advocates have been hitherto enabled to advance but little in professional support of their favourite operation.

To obtain satisfactory information and systematic knowledge upon the efficacy of rowels, when judiciously inserted, I have been for years studiously industrious to better my opinion by the most inquisitive attention to every attempt at definition, from those who were remarkable for their extensive practice to those who were no less singular for their illiteracy: in anxious hope that time, or circumstance, might contribute more to a gratification of my wish than
my expectation. To avoid troubling the reader with tedious or unnecessary quotations, I shall let it suffice to introduce such abbreviations only as become perfectly applicable to our future remarks upon the subject before us.

Bracken justly observes, "Rowelling is the common resource of Farriers in general; amongst whom, he could never find one that could give a satisfactory account of the use or abuse: but they all tell you, a rowel is to draw off the bad or corrupt humours from the blood; and this is to cure almost every disorder, according to their way of reasoning." This assertion is so strictly true, that I will cheerfully consent to its confirmation, upon the experimental inquiries of the last twenty years; and declare I never could acquire from the Vulcanian professors, a more technical or enlightened description of the operative effects, than the "poor epitome" he acknowledges to have received.

In this communication there is nothing very extraordinary; but it is not so in what is to follow, and is worthy observation. In the same page, and almost the next line, he tells
us, "it is good in a great many diseases:" and instantly says; "The horse might as well, nay better, lose as much blood every day as he does matter by the rowel; for it is as certainly blood as that in the veins, barring the colour, which makes no essential difference; and he is very much of opinion, several cures are wholly attributed to rowelling, when rest and patience are the principal instruments or agents that perform it.

Is there any one reader who will not be greatly surprized, and as highly entertained, when he is informed, that the writer, who has recommended the use of rowels for the cure of various diseases, in compliance with the force of that very custom he condemns, should in the same page, and comparatively with the same breath, instantly reprobate the practice, as absolutely drawing so much blood from the veins; possessing at the same time so great a versatility of literary genius, so perfect a pantomimic transposition of words and opinions, that we find him (p. 85.) prescribing "bleeding, purging, and rowelling in several places at once, for one rowel is of little avail for many reasons: and these should
continue running a considerable time, at least a fortnight or three weeks.” In page 99, he believes they may be useful in many disorders, “provided there be made a sufficient number of them;” but as to the parts of the body, whether behind the ears, in the breast, or under the horse’s belly, he thinks it is much the same thing; “for in reality, they are no more than adding a number of anus’s or fundaments, so that nature may meet with them in several parts of the body, and not be put to the trouble of going the more tedious and common round of circulation in order for a discharge of excrement or dung.”

Can it be possibly necessary for me to offer a single line in apology for the introduction of assertions so exceedingly opposite from the same pen; or a refinement of thought and sublimity of language in the latter, not to be exceeded by any hypothetical reasoning or fertility of invention ever issued from the press? The idea of artificial fundaments, to save nature the trouble of going the more tedious and common road by the anus, is not only so truly great and inimitable; so very contrary to and so far surpassing the asser-
tion of Osmer, that "the works of the Divine Artist" had left no room for rectification; (see p. 153) that nothing on my part can be required to excite the risible emotions; though, I must confess, it is with the greatest reluctance so fair a temptation is relinquished, to play a little upon the retentive imperfections of one predecessor, and the methodistical enthusiasm of the other.

But notwithstanding the direct and repeated contradictions we find dispersed through the volume of Bracken, (probably occasioned by his long and inconsistent digressions) it must be acknowledged, with the strictest adherence to justice and merit, that no one succeeding writer has, since started a thought or broached an opinion upon the operation of rowelling, or its effects, but what has been an exact literal description, or oblique echo, of what originated with him upon the subject. For upon a minute examination of the various publications of different writers, we find that a very superficial investigation, and no additional explanation, has been condescendingly bestowed upon a process that is even now held in the highest
estimation, by those advocates for ancient practice, who can communicate no scientific or professional description of its operative effect upon the constitution; or by what physical means the improvement is to be obtained, that they so confidently and conscientiously recommend upon every possible occasion.

The very few lines introduced under this head, by even the most prolific authors, possess not the least ray of novelty or instruction, but are direct imitations of what proceeded from Bracken, beginning with the customary remark, "that rowels are in general use, but little understood;" "that they are artificial vents between the skin and the flesh;" "that they act by revulsion and derivation;" carrying off the redundant humours from the vessels by depletion.

These few passages contain in purport the whole that has been at all communicated through the medium of the press, upon an operation so indiscriminately recommended in almost every disease without
exception; notwithstanding it is of so much consequence in medical management, that it becomes matter of admiration, how the enlightened part of the world can be so frequently made the dupes of a most consummate ignorance, without summoning to their assistance an opinion of their own, to justify the consistency or prevent the error of such proceeding. For my own part, after endeavouring most industriously for many years, to fathom the depth of a farrier's intellectual and professional abilities, without being enabled to place any part to their credit account; and constantly drawing a mental comparison between the good they might possibly do, and the mischief they would certainly occasion, I have long since found it necessary to decline every dependence upon either; feeling myself perfectly justified in recommending it most heartily to every reader possessing the least attachment to the species; never to suffer a medicine to be given, or an operation to be performed, before the expected process of the former, and the intentional effect of the latter, are previously explained to his entire satisfaction.
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This I am the more readily induced to do, by the incessant insertion of rowels and administration of drinks, by parties so confessedly ignorant they can never assign the least reason for the operative success of one, or the expected medical relief from the other. It is not long since I became an accidental spectator to a case of great danger and almost immediate dissolution, when the horse was in the slings nearly exhausted, with only a few hours to live; and was consequently very much surprized to hear a farrier of fashionable local eminence, earnestly recommend an attempt to proceed to the insertion of a multiplicity of rowels, (that were however not permitted by the owner); when the horse was inevitably doomed to death long before the rowels could have taken any other effect, than in their consequent inflammation, (previous to maturation) to have increased his misery and rendered his last moments the more excruciating. However, if the owner had consented, the operations would have been performed, and the reward expected, consequently some purpose answered.
I considered myself exceedingly lucky, in so favourable an opportunity, to acquire something personally satisfactory upon the operative process and probable effect of rowels upon the frame and habit, from one who had so confidently recommended their immediate use in a case of so much emergency; and really expected, from the extensive practice of the party, and the general acknowledgment of his practical abilities, that I should have been in a proportional degree gratified; but sorry I am to confess, after every direct attack, oblique insinuation, and cross examination, he was so well fortified in his entrenchments, that I could derive no greater degree of information than "they were the likeliest things to do him good.

This, among many other recommendations of rowelling, upon foundations equally ridiculous, brings to my mind another instance of the indiscriminate use of rowels, with no other reason on earth than a self-interested reference to the pecuniary compensation annexed to the ceremony of operation. A few weeks since, an intimate friend
calling upon me one morning, informed me, he had met with an unlucky circumstance; for having unexpectedly sold his horse on the Saturday at Reading, without any previous intention of so doing, he was by agreement to be delivered on the Monday morning; at which time the purchaser discovering a violent inflammation and discharge from one of the eyes, (which was not in that condition at the time of purchase) he objected to receiving him; but its being concluded the temporary effect of a *bite, blow, or cold*, he at length agreed to take him away with the privilege of returning him at any time *within a week*, if such appearance was not entirely removed. This not happening, the horse was returned; and my friend had then left him in the hands of the *smith* (or *farrier*), who had that moment taken away two quarts of blood, and was, when he came away, just going to put in a *rowel* below the breast, to draw off the humour that was settled in the eye; that he had also recommended the use of *nitre* and *sulphur*: and as he had *plenty at home*, he should give him an ounce of each, night and morning.
The rapid accumulation and combination of remedies naturally excited some expostulation, and influenced me to ask whether there were any predominant reasons (exclusive of the interseted recommendation of the operator) that induced him so soon to permit the insertion of the rowel, before he had waited even twenty-four hours, to observe whether any advantage had been derived from the bleeding, which was certainly the first and best step that could have been taken? Finding also, upon minute inquiry, that there was a great probability of its having been occasioned by a bite or blow among other horses, when replaced in the stable, between the time of his having been agreed for and brought away; I prevailed on him to postpone the rowel, (which he had but just time to do, as the incision was made before his return) relinquish his nitrous, sulphureous intention for the present, and leave his horse in my stable; which having cheerfully complied with, the eye was perfectly sound and clear in a few days, with no other assistance than a slight washing twice a day with a sponge, plentifully impregnated with cold spring water.
This circumstance, of very little consequence in itself, is introduced to corroborate the assertion, that rowels are frequently and injudiciously brought into practice, without reason in the operator, or reflection in the owner; who, generally alarmed upon every slight occasion, seizes the first twig of consolation, without giving the matter such consideration as would enable him to recollect every probable remedy should have reason for its foundation; upon the prospect of which he would certainly be, in most cases, as capable of deciding as his scientific instructor. But what renders the recital of so trivial a business applicable to our present purpose is, the expeditious cure that must inevitably have been attributed to the rowel, with no small portion of collateral merit to those useful auxiliaries, the sulphur and nitre, had they been (luckily for the adviser) concerned in a work, that nature would so frequently perform by her own efforts, if not incessantly counteracted by those who neither comprehend her economy, nor condescend to consult her indications.
Having introduced what became absolutely unavoidable, to demonstrate the frequent absurdity (from long standing, and invincible custom) of applying rowels in many cases, without the least well-founded reason for their use; it becomes necessary to discover, by scientific inquiry, what can be advanced in proof of the supposed utility, that has for ages rendered them the professional (or political) rage of every class of equestrian doctors without distinction. Bracken, as I have before observed, says, he attributed much of the virtue of rowelling to the good effects of rest and patience; and I am not a little vain that we fall into a direct coincidence of opinion upon so principal a part of the subject.

Previous to the intended investigation of their operative process and effects, I cannot but express my disappointment in not finding something more satisfactory from the very intelligent and much enlightened pen of Mr. Clarke, to whose professional merits I shall ever be one of the first to subscribe; though unluckily upon this head, he has not de-
scanted with his wonted perspicuity, but very much contracted his usual portion of information; not condescending to bestow a chapter of more than five short pages, merely to explain the mechanical part of the operation, the places proper for insertion, an insinuation of the probable danger, and lastly, as every writer has done before, boldly asserted their universal excellence, without a single substantial proof, upon which their reputed efficacy can be judiciously founded.

"Rowels (says he) are of great use in carrying off rheums or defluxions from the eyes; in great swellings of the glands, &c. about the throat and jaws, which threaten a suffocation; or when the head seems particularly affected, as in the vertigo, or staggers, apoplexy, &c. &c.; in recent lameness; swellings of the legs and heels, attended with a discharge of thin ichorous matter, &c.; in large and sudden swellings in any part of the body; or when extravasations of the fluids have taken place from blows, bruises, &c. or when a horse has had a severe fall, &c. and in a variety of other
cases, which will occur to the judicious practitioner."

Without indulging the least desire or intention to animadvert with severity upon the different writers who have thus rotationally represented the accumulated perfection of rowels, (that seem, in their progress for the last century, to have acquired, like the nostrums of the present day, the virtues of curing all diseases) it is very natural to conclude, that the above list, in each of which they are said to be "of great use," with the repeated introduction of "et cæteras," and the variety of "other cases submitted to the judicious practitioner," that there can be but very few, or in fact, none, to which they are not, in the opinions of some, perfectly applicable in one way or another, perhaps in no one more than the self-evident consolation, if it does no good, it may do no harm! it will at any rate support the appearance of business! If nature effects her own purpose and promotes a cure, the rowel will be entitled to a portion of credit, and the ope-
rator to no small share of professional reputation.

These are privileges against the power of which there can be no appeal; but if we look into the operative process of rowels with the eye of accuracy, and advert to their origin, we shall find they were introduced at a period much less enlightened; when the great efficacy of Alteratives was but little if at all known or established to any degree of certainty, more particularly to those who are generally entrusted with the medical superintendence of horses; that however expert or judicious they may prove in the operative parts of Farriery, must feel themselves exceedingly mortified at knowing nothing of medicines, their origin, preparations, combinations, properties, or effects.

This universal deficiency, so generally admitted, to which the major part of their professional errors may be justly attributed, now bids fair to be rescued from its disgraceful state of barbarism, (under which stigma it has so long laboured) by a plan
that is soon to be submitted to Parliament by the Odiham Agriculture Society, who have already made public (and solicited subscriptions for the promotion of) their very laudable intention of sending a certain number of youths annually to France for Veterinary Education; though it perhaps reflects no great degree of credit upon our own nation, that a still more laudable plan could not have been adopted, by laying the foundation-stone of such institution in this kingdom; where, by the means of instruction being local and more extensive, the advantages must certainly become the sooner general, than under the restraints of the present proposition. For the very limited number (I believe four or six) that they intend sending annually, under the uncertainty of pecuniary contribution from the purses of individuals, affords every reason to suppose, upon the most moderate computation, that it must be at least a century before the good effect of so desirable an improvement can be universally experienced. But as every step to general reformation must have obstacles of much magnitude to sur-
mount, under the consolatory adage of "better late than never,' every member of the community must wish it the most uninterrupted success.

Returning to the operative part of our subject, and its salutary effects upon the constitution, it may be remembered, that rowels have been strenuously recommended by advocates of every denomination, to draw off the corrupt or diseased humours from the blood, leaving the remainder in a state of purification: this, however, has never been roundly and boldly asserted as a fact not to be disputed, but founded originally in conjecture, and pusillanimously reiterated accordingly. But for the moment, and better promotion of disquisition and the discovery of truth, let us admit the absurdity; out of which will evidently arise a question to establish the fallacy of opinion founded in error, and fostered by ignorance: viz. Whether any professional writer, or scientific investigator, will stand forth and say, the operative effect of a rowel is equally applicable to the difference of disease, arising from either a viscid tena-
city, or an acrimonious and impoverished state of the blood?

For the preceding quotation from Clarke (which is in fact a quotation from all the rest) evidently recommends it in a variety of disorders resulting from each of the two; and should such system possess the happy influence of extracting (secundum artem) the foundation of diseases clearly proceeding from properties in the blood so directly opposite to each other, and such wonderful efficacy can be substantially corroborated; I shall cheerfully become a convert to the prevalent opinion of the Vulcanian fraternity, and join in their unlimited representation of general utility. But till better and more professional allegations are produced, to justify the indiscriminate hold they have so long retained, (particularly in country practice,) I shall conscientiously forbear to contribute a single encomium upon the great and almost infallible virtues they have been so universally and erroneously supposed to possess.
All opinions have not only agreed, but experience has established the fact, that the matter discharged from the rowels, is, as Bracken has first observed, "as certainly blood as that in the veins, barring the colour." This is re-asserted by every succeeding author, and can admit of no contrariety of opinion tending to cavil or controversy; being a matter professionally fixed beyond the possibility of either. What inference then is consequently to be drawn from this admission? Why, that every part of the circulation, both in quantity and quality, contributes equally to that very discharge so ridiculously supposed to consist of the diseased portion only; when the insertion has been as erroneously fixed upon or near to some particular part, to be intentionally relieved by the partial power of such artificial evacuation; constituting a second blunder upon the palpable foundation of the former. For it must prove a disgraceful prostitution of even common comprehension, to indulge the least idea, that a larger portion of crassamentum or serum can individually undergo a greater change or recti-
fication in separation and extravasation than the other.

It being therefore proved nothing more or less (divested of technical terms and ambiguous reasoning) than a gradual depletion of the blood-vessels, divested of its sanguinary appearance, and becoming matter by the natural process of extravasation and rarefaction) let us decisively pronounce what such constant evacuation can be productive of in its effects; I believe I may venture to pronounce every professor of physic or farriery will perfectly agree with me, in confirming it nothing more than a certain mode of reducing the habit by drawing off a greater portion of blood in every twenty-four hours, than is generated by the nutritive property of the given quantity of aliment, allowed for subsistence in the same space of time; though it is, in all cases, ridiculously conceived, that by reducing the bodily strength, you infallibly subdue the predominance of disease also.

We now arrive at the very line of distinction necessary to be drawn in all cases,
where a rowel is, or can be supposed to become at all adequate to the task it is assigned. For instance, in cases arising from causes threatening inflammation, or such gross impurities as are evidently the effect of a crude and viscid state of the blood, (it being first properly ascertained) they have most certainly much in their favour upon the well-founded maxim before quoted, "if they do no good, they may do no harm." It is certainly no bad plan in sporting to obtain as many points as possible in your favour; but as I will by no means recommend to the practice of others, what I would cautiously avoid in my own; I must confess they should never be brought into immediate use in stables under my superintendance, till the more rational and mild methods of Evacuants and Diuretics (according to the nature, duration, and severity of the case) had been tried without probability or indications of success. And this idea of procrastination is held forth only upon what I term a very sufficient foundation; for what man living, in possession of free agency, and the happy power of reflection, would, after proper delibera-
tion, consent to perforate the hide of his horse, and stand the doubtful chances of complicated disquietude; a lucky formation and fortunate flow of matter; an ill-conditioned wound, inveterate ulcer, or prominent cicatrix, constituting an irreparable blemish, when it can be so readily avoided?

But, admitting, in compliment to ancient practice, their utility to be obvious in the inflammatory or viscid cases before recited; let us make a fair and candid inquiry into the list of Mr. Clarke's, not long since quoted, (which is, in fact, Bracken's, Bartlet's, and Osmer's also) and openly acknowledge where it will be proper to coalesce, and where dissent from such opinions; that their great and indiscriminate merit may with propriety come before that public tribunal, to whose decisive arbitration every literary disquisitionist must ultimately submit.

That the subject (and of importance it certainly is) may meet the eye and attract the judgment of every unbiassed investiga-
tor with all possible clearness; it shall be perfectly divested of every ambiguity and remote consideration, by re-stating singly the cases in which the different authors have so lavishly recommended their use; admitting the propriety of their introduction where their good effects become probable upon professional reasoning or condemning the adoption where I feel myself justified in supporting a contrary opinion.

We are first told, "Rowels are of great use in carrying off rheums or deflections of the eyes;" but as no professional proofs have been adduced, or cases authenticated, by any author whatever, to confirm this opinion, it is very natural to wish for information, whether this "use" has been ascertained in effect, with or without the assistance of cathartics, diuretics, or alteratives, one of which, in these cases, is generally called in to their assistance: but as the effects of such medicines are not externally perceptible, their proportional services are buried in oblivion, (as not being brought totally to proof) and the glory of the victory, if obtained, is attri-
buted to rowelling, as a favourite species of practice, not to be violated by the rude and uncultivated dictates of modern improvement. I must confess, in the cases we now speak of, I should by no means too hastily recommend their insertion; but proceeding with a proper degree of consistency, according to the apparent cause from a state of the blood, prefer a course of diuretics or alteratives, (as the case might require) and reserve the operation of rowelling as my last resource, when every other method had failed of the expected success.

"In great swellings of the glands, &c. about the throat and jaws, which threaten a suffocation." This is a recommendation so directly contrary to every systematic and scientific proceeding, that I shall confine both my surprise and remarks merely to a professional explanation; and the introduction of my own opinion, in opposition to theirs. If the swellings were so alarming as to "threaten suffocation," and afforded no hope of speedy maturation, by topical applications, (which must ever prove the most
eligible and consistent method of relief) surely immediate, repeated, and occasional discharges of blood must contribute, in many ways, to a removal of the danger apprehended, in causing some degree of revulsion by depletion; which will undoubtedly, by relieving the circulation, reduce the described stricture upon the parts, and render such proceeding very far preferable to the certain hazard and tedious expectation of at least three days, for the bare chance of very slowly counteracting what "suffocation" might prevent; long before one, or a multiplicity of bowels, could arrive at a proper degree of suppuration. And this is the very predominant reason why I think they are by no means to be relied on in acute cases of danger and emergency, so much as repeated bleedings, and such evacuations as become more speedily effectual upon the frame and constitution.

"When the head seems particularly affected, as in the vertigo or staggers, apoplexy" &c. &c.—In these cases, after proper bleedings (which must precede every other consideration) a proper examination of the blood,
and a necessary removal of intestinal obstructions, if they should be found requisite; I cannot have the least objection to the insertion of a rowel, or rowels, provided the patient (in either case) can be prevailed upon to live three or four days, to try the effect of the experiment; and this I admit upon a recommendation in my former volume, that "increasing appearances of danger must justify exertions of alacrity and fortitude:" Although I must confess my apprehension that either of the above cases (unless early counteracted by the judicious interposition of other administrations) must gain ground too rapidly upon the system, to undergo a sudden change of improvement, by means so very tardy in the effects of their operation.

"In recent lameness."—Why in recent lameness, and before any of the milder methods are introduced, I am at a loss to conceive; but upon presumption that every other probable remedy is set at defiance, for the more applicable introduction of rest, I start not the most trifling objection, convinced it is the only plea that can be
offered for the *inapplicable introduction* of the rowel.

"Swelling of the legs and heels, attended with a discharge of thin ichorous matter," &c.—I imagine, in such case, the rowel is meant to be inserted after a non-submission to the entire classes of *alteratives* and *diuretics*; whose efficacious powers must be too well established by those who have experienced their excellent properties, to be entirely rejected, without such trial as they are justly entitled to by their rank in experimental practice.

"In large and sudden swellings in any part of the body."—This is a recommendation so vague, loose, and indefinite, that it will hardly admit of construction or determination. As "large and sudden swellings" may arise from various causes requiring very different modes of treatment, it is natural to conclude, (indeed to prove by practical demonstration) that sudden appearances must frequently justify much more sudden means of counteraction, than patiently waiting, *day after day*, for the expected and precarious
discharge of a rowel, that, after all the sus-
pense, may probably terminate unfavourably, to the loss of the subject and mortification of the owner.

"When extravasations of the fluids have taken place from blows, bruises," &c.—Here I cannot hesitate a moment to acquiesce in the proposition, provided the insertion can conveniently take place immediately upon or close to the part affected: if that cannot be done, I object to the attempt; as the “extravasated fluids” must be absorbed into the circulation before they can attain the place of discharge. If which can be accomplished, they may then be carried off by different evacuants, without recourse to such means; but if I perfectly comprehend the allusion, it is supposed to convey an idea of "extravasated fluids" become stagnant by length of time, and not to be resorbed into the circulation by any probable means whatever. In which case the rowel may be adopted with propriety, provided it is inserted under the advantages I have just described; that is, directly upon, or immediately contiguous to, the seat of disease.
"When a horse has had a severe fall, &c., and in a variety of other cases which will occur to the judicious practitioner."—This proposition covers such a wonderful scope of possibility, and includes such a variety of latitude for the inquirer, that it is by far too unlimited in my comprehension to admit a tedious enumeration of remarks applicable to even half the cases that may be brought into the scale of imaginary probability. This will forcibly affect the judgment of every reader, if he condescends for a few minutes only to recollect that the ways a horse may be affected by a "severe fall" are so very numerous, that the advice here given (in so extensive a degree) must prove conditionally dependent upon, and be regulated entirely by, the opinion of those to whom the superintendance of such cases becomes subject, rendering every further remark upon this passage extraneous and unnecessary.

After the strictest attention to, and investigation of this system, (anciently adopted and transmitted, like domestic property, or professional implements of bellows, anvil, hammer, and vice, from sire to son) I feel
impartially influenced to declare myself a very slender advocate for their continuance in practice upon the basis of general utility. There may be some few cases, and those few very confined in number, where, from a non-submission to the dictates of a more rational application, experiments may be made by the credulous, of their so universal reputation; but I am induced most heartily to believe, such alternative must be adopted much more upon the construction of hope, than the too flattering prospect of expectation.

For my own part, voluntarily embarked in a conditional trust of honour with the public, for the promotion of equestrian improvements by every rational and scientific means that can be advanced upon the face of well-founded opinion or practical experience, it is impossible for me to acquiesce in the recommendation of their insertion, in the variety of indiscriminate cases before recited; from which I have withheld my approbation upon the firmest conviction, that no systematic substantiated reasons have ever been promulgated, demonstrating the ope-
rative process upon the animal economy, from which the reported good effects are supposed to be produced.

I believe I have before hinted their being originally adopted in times of greater obscurity; when the minds and manners were not only much less enlightened, but the almost incredible property and power of medicine not then discovered and brought palpably home, as it now is, to the most obstinate incredulity. In the remote age of this invention, the volume of medical improvement might be justly considered in its infancy, emerging from the early efforts of antiquity; from which it has continued in gradual refinement to its present period of professional splendor, under the indefatigable auspices of those whose literary additions to the works of science will perpetuate their memories very far beyond any effusions that can possibly fall from the grateful pen of humble admiration.

It must therefore suffice, in additional confirmation of the improvement we applaud, to observe, that even in private practice
amongst the human species, those analogous operations, issues and setons, in the course of the last forty or fifty years are comparatively obliterated bearing no kind of proportion in common use, being but very seldom either advised or adopted, but where the parties, from an invincible personal or pecuniary aversion to medicine, cannot be prevailed upon to undergo such course as may evidently repair the constitution, to a certain partial consumption of the purse.

After every observation I have been able to deduce from theory, every remark I could collect in practice, and every information to be derived from those Vulcanian Veterinarians I have had the honor to consult; after the analyzation of its physical process upon the frame; its being immediately and equally fed from the fountain of circulation and support; a proper investigation and exposure of the ridiculous idea of partially drawing off corrupt or diseased particles from the blood, that the animal may "live the purer with the other half;" and lastly, the more contemptible propagation of their being found applicable to all diseases, without a
single professional proof manfully and scientifically demonstrated, that they are absolutely necessary or infallible in one; it can create no admiration that I feel myself justified in offering to the world an opinion, very little subservient to the superficial decisions of those who have preceded me upon this subject.

Under the combined weight of these considerations, and so far as they entitle me to offer judgment, I dare venture to pronounce and promulgate such belief, that there are only a very few cases in which they are either individually necessary or useful; having it at all in their effects, the power to produce any such change in, or improvement upon, the constitution; but what may be more consistently (and to a greater certainty) produced by judicious interposition of evacuants, diuretics, alteratives, or such other class of medicines, as upon accurate investigation of the cause, and reference to symptoms, may be found corresponding with the case and its explanatory parts, in our former volume, more particularly adapted to medical disquisition and the cure of disease.
The cases to which they may be in some degree adapted, bearing professional traits in their favour, are, partial swellings of some duration, originally occasioned by extravasated fluids become too viscid by stagnation to be resorbed into the circulation; cutaneous diseases not speedily submitting to the course of medicines adapted to their peculiar class; inveterate lameness of long standing in the shoulders or ligamentary parts, by the retention of inflammatory matter first fixed there by the improper and too free use of spirituous applications; and asthmatic complaints upon a confirmation of their non-submission to conditional bleedings, a moderate use of nitre, and such course of pectoral detergents as will be found recommended under that head. In each of which, I should not hesitate a moment to urge the propriety of inserting the rowel as near the cause of complaint as possible; that the flux of matter (though collected from the circulation) might flow directly from, or as contiguous to the seat as circumstances will permit; and that such local insertion may contribute assistance to whatever utility they possess, in unloading to a certainty
the neighbouring vessels concerned in the cases we have just described. The advantage naturally resulting from such precaution becoming too evidently obvious to require further anatomical description or physical disquisition; the minutiae of which, (so far as it appertains to the operation in question) having been largely and accurately explained in the definition of humours, under the last article of exercise, and the present upon rowelling, cannot stand in the least need of additional elucidation to render the whole perfectly intelligible to every comprehension.

HUNTERS.

THE particular management of horses passing under this denomination will appear to many matter of so little consequence, that it must create surprise how any thing new can be introduced upon a subject they conceive so universally and perfectly understood. However such opinion may be established in the contracted minds.
of those who exist only in error, and never condescend to sanction the most promising ray of improvement, the great number of valuable horses that have lost their lives, either in or immediately after the chase, in the two last seasons only, with his Majesty's, his Royal Highness the Prince of Wales's, Lord Barrymore's, and Captain Parker's hounds, are demonstrative proofs of \textit{inability} in the grooms, or \textit{indiscretion} in the riders; as well as collateral corroboration that the system of perfection is not yet attained, even in the first hunting stables of fashion and eminence.

Without presuming to arraign, in the present instance, the judgment of \textit{one}, or the prudence of the \textit{other}, I shall proceed to lay down such rules for the selection of hunters, and the minute particulars of their management, as have for a series of more than twenty years enabled me to enjoy the pleasures of the chase with a multiplicity of the fleetest and most popular packs in different parts of the kingdom; without one of those unlucky contingencies that so frequently throw less thinking or less expe-
enced sportsmen in the back ground of the picture with mortification and disgrace.

It should be indelible in the mind of every juvenile and recent sportsman, that to bring a horse into the field out of condition, incurs instantaneous suspicion, if not contempt; the curiosity (not to say insulting indifference) of every spectator is excited, who fortunately excels in the figure or qualifications of his steed, and the superiority of his equipments. And this is not at all to be wondered at, when those entirely unacquainted with the fact are informed, that as much emulation is perceptible in the display of a sporting apparatus, as in the exulting splendor of a birth-day appearance in the vicinity of St. James's: not only the Riders but their Horses, are fraught with the infectious spirit of rivalship; and impatiently wait the moment, that inspires each with the vigour of general contention.

Horses imperfect in their appearance, with fulness of legs, foulness in the coat, cracks in the heels, or poverty in the frame, are immediately surveyed with the eye of atten-
tentative inspection; this *oblique* but *accurate* survey as certainly terminates to the discredit of the master as the prejudice of the servant, leaving no favourable impression of their stable management at home, or equestrian prudence in the field.

External deficiency is not the only inconvenience arising from improper condition; the concomitant ills resulting from it are not unfrequently attended with the most serious consequences. Horses for the very severe and strong chases with *Stag or Fox* should have both the *blood* and *body* regulated to the highest degree of purity and perfection; such system of information may be readily acquired by proper attention to the necessary inculcation and judicious observation, previous to the commencement of the season. This fact, founded upon the criterion of experience, naturally leads us into an inquiry what those preparations are, and the necessity for their introduction; these we shall consequently advert to, but not without an oblique remembrance of, and reference to, those Cynical cavilists who (apprehending no danger till they feel it) set *physic at defiance*; and
never submit to acknowledge its utility, till the total loss of one horse and an irreparable injury to another, demonstrate the absurdity of their ill-founded objections; compulsively adding them in rotation to the annually increasing list of converts to a rational systematic mode of stabularian improvement.

Such obstinate non-compliance with the justified dictates of safety resulting from experience, can arise only from a total want of thought, or knowledge of the animal economy; by which every secretion, evacuation, motion and labour is regulated, or action controlled. From the recurring force of this reflection, let every Sportsman whose mind is at all open to the rays of refinement (and who has not, like Tony Lumpkin, imbibed his entire stock of penetration from the apron-string of a Mrs. Hardcastle, conducting his whole affairs by "the rule of Thumb,"') consider the absolute necessity of bestowing some little occasional attention to the indications of Nature; the direct process of aliment and digestion; with its subsequent source of nutrition; enabling himself to ascertain (at least with some degree of precision) the state
of his own horses in sickness or health; to discover their necessities, and prescribe the remedies, without a degrading dependence upon the accumulated ignorance and affected consequence of every illiterate groom, ostler, or stable-boy; who, it is universally known, proudly possess obsolete receipts for every possible disease to which the horse is liable, (without its containing perhaps one applicable ingredient) and will valiantly vouch for the infallibility of its virtues, though it is ten to one he is totally unacquainted with the articles of which it is composed, and still more probably has not ability to read the very farrago he so confidently recommends.

This evil has originally arisen, and been increased in its growth by too implicit, or rather too indolent a submission of masters in general, to the indiscreet (not to add sometimes infernal) and ridiculous propositions of these people, upon whose destructive affectation of knowledge I have already so repeatedly expatiated under different heads; but am by practical observations as often brought to a renewal of the subject, to place every gen-
tleman or sportsman on his guard against their incessant obtrusions of medical judgment; having within the last few days heard a most illiterate puppy of the class described, propose the insinuation of lump sugar for a defect in the eye, without a single reason to assign for the support of his recommendation, but that "it was like enough to do it good."

This idea is too sublime and expanded for a single remark in animadversion; but surely every proprietor of horses must find it greatly conducive to a promotion of his own ease and interest, if he would condescend to pay such attention to this subject, as might undoubtedly contribute a proportion of confidence to his additional knowledge; and totally exculpate him from the mortifying predicament of appealing to the barren capacity of his servant in a matter of magnitude, whose understanding or instructions he would not submit to consult, or even condescend to hear, upon much more inferior occasions.

There has always existed a diversity of
opinions respecting the propriety of purging horses previous to the commencement of the hunting season; and this as I have before hinted, has been one of the long-standing dishes of contention between the rights and the wrongs; it will be therefore expected (by those impartial investigators who are not blinded by the invincible prejudice, but open to the conviction arising from reason) that something should now be advanced to justify or condemn, what from not professionally understanding the operative process of, or its effect upon the frame, has hitherto suspended their opinions, not knowing with justice which method to avoid, which to pursue.

That the matter may, however, be brought nearer the criterion of decision, by being more clearly explained, I shall endeavour (without indulging a wish to attract unnecessarily the attention of any reader from what he may perceive an object of greater importance) to convey such description of its necessity, its operation upon the blood, and salutary effects upon the constitution, as I am induced to believe will prevent the consistency of purging being longer a matter of
controversy; but that upon certain and proper occasions, it will become universally adopted under the conditional regulations so accurately explained in our former volume of this work. Those instructions, however, appertaining more particularly to the composition of various forms, the act of administration, and the mode of action upon the intestinal contents, we advert now to the more remote consideration of its operative effects upon the entire system, in justification of its adoption previous to the annual exertions of violence, that so evidently increases the velocity of the blood.

It may be remembered, that in my former volume, under the instructions for getting horses into condition, I have recommended the operation of bleeding in a few days after being taken from grass; by saying, "a proportion may be taken away, according to the size, state, strength, and temperament of the horse, with due attention to the flesh he may have, or the impurities he may have imbibed with his pasture." This passage is so truly expressive, and conveys to the mind so much in so short a manner, that I have been in-
induced to repeat the very words; as directly conducive to the support of an assertion frequently brought forward, the great advantage of discovering the true state of the blood."

The reasons are not only exceedingly obvious, but have been in their respective parts so minutely explained, that there is barely room to urge the propriety and enforce the utility of what ought to be laid down as the almost fundamental rule of *physical rectification*; and, however abstruse such reasoning may appear to the unscientific and superficial part of the Vulcanian fraternity denominated *Farriers*, I hesitate not a moment to affirm, there are very many cases, in which I should be professionally induced to regulate the *physic* in both *quantity* and *quality*, by appearances accurately drawn from the state of the blood only.

What! (says the surprized and divided reader) when His Majesty's Farrier for Scotland has confidently assured us, and under the honourable sanction of royal appointment, that no discovery can be made from
the blood in any state whatever! That "blood drawn from a horse who is evidently disordered, will sometimes have the same appearance when cold, as that drawn from a horse in health." And hey presto! vice versa! "On the other hand, blood drawn from a horse in health will sometimes have all the appearance of that drawn from one labouring under the most dangerous disease." All this Mr. Clarke may "most potently believe," yet "I hold it wrong to have it thus set down;" it bears so great an affinity to the ambiguous putting off of Hamlet to his inquisitive companions when he seriously assures,

"There's ne'er a villain dwelling in all Denmark,
But he's an arrant knave."

However, that jarring opinions may be the more easily reconciled, I will venture to conclude for this very judicious and enlightened writer, that he intended to have said, or wished it to be understood, That the cases in which the blood of diseased horses bore the appearance of horses in health, were
those very few in which the state of the blood is not symptomatically affected by the disease; as flatulent or inflammatory colic, strangury, and worms. But the better to exculpate myself from the accusation or even unjust suspicion of indulging the shadow of inclination to arraign the authority or sport with the judgment I so very much respect; let us charitably adopt all alternative, and suppose, what is not only possible but probable, that as the horses in that country differ so very materially from ours, (as those can testify who have visited the spot, and recollect their appearance) why may not the fluids partake of the contrast? and their properties not being so easily or accurately analysed as in the more fertile regions of the south, the line of distinction we may naturally conclude is circumscribed by the vermicular boundary of the Tweed, constituting other diversities of equal admiration.

From this digression, so unavoidably necessary to justify my former recommendation of Bleeding, under proper restrictions, we return to the consideration of
Purging; upon the very salutary and judicious interposition of which I have already given my decided opinion as to its general utility, though I do not mean to assert myself an advocate for its indiscriminate administration, without due deference to the cause and condition of the subject. I wish by no means to be considered an invariable friend to unnecessary evacuations; perfectly convinced they are only absolutely requisite under the weight of injudicious accumulation. I therefore beg no misconstruction may be put upon the thesis I advance, which is, that evacuations become not only proper but indispensable, when a horse is so much above himself in condition, that he evidently displays the advancing progress and ill effects of repletion (arising from full feed and irregular exercise) in the variety of ways so repeatedly described; not only under other heads in this, but different parts of the former volume, where the state of the blood necessarily became the subject of disquisition.

From what has been so fully advanced
upon the article of nutrition, circulation, evacuation, and exercise, it must be perfectly and systematically clear to every comprehension; that a horse too plethoric in habit, too much loaded with flesh, too viscid in the state of his blood, or too little accustomed to exercise, can never be brought into such strong exertions as the chase, without a very great probability of exciting inflammation, that may terminate in different degrees of disease, danger, and disquietude. Admitting therefore its indispensable necessity with horses of the above description, it must be taken into the aggregate, that although great inconveniences and distressing circumstances may possibly arise from the want of precaution in not bringing such preventatives into use, where the frame is replete with impurities; it can by no means follow that by the omission, with horses in any tolerable condition, the probable consequence becomes inevitable.

To draw the line of distinction between subjects rendering it a matter of necessity with one, or prudence and prevention only
with another; it must be candidly acknowledged, that instances frequently occur where horses, perfectly clean, healthy, and without any visible cause to suspect foulness in the body or impurity in the blood, have, by proper attention to stable management, good feeding, and regular exercise, been brought into the field in no degraded condition, and gone through the season with a moderate degree of perfection. Though this should not be attempted till an attentive observation to the state of the coat, eyes, legs, heels, the wind in brushing gallops, and the quality or appearance of the perspirative matter in the act of transpiration, may justify a reliance upon the faith of experiments; as latent impurities or gross viscidities may remain dormant in the constitution, till roused into action by effects too numerous and extensive to admit of reiterated explanation, without deviating too largely from the subject it is our present purpose to pursue.

Having introduced remarks that were unavoidable to demonstrate the consistency of carrying off such superflux as may consti-
tute a preternatural weight upon the animal economy, by encumbering the infinity of finer vessels so exquisitely concerned in secretion and circulation, throwing the more noble parts of the machine into disorder; we proceed to explain the operative process and effects of Cathartic Evacuants upon the general system; by which physical operation, nature becomes gradually relieved from the plethoric burthen of repletion, affecting even the most distant parts of the extremities, by means so universally known and repeatedly described.

Purging, in its common and superficial acceptation with the unenlightened multitude, is considered merely as a ready and convenient mode of expelling a load of accumulated contents from the stomach, or excrements from the intestines; without a relative consideration, or single idea of its most remote and salutary influence upon those parts of the frame, that are in general estimation supposed to be very little concerned in the operation or its effects.
To elucidate this matter, and render it perfectly comprehensible, with as little reference as possible to abstruse reasoning or anatomical disquisition) let it be understood, that the internal coat of the stomach is so plentifully portioned with branches from the nervous system, that it may with great propriety be termed the joint seat of irritability; for, exclusive of the acting stimulus of the cathartic medicines upon the extreme sensibility of the nerves, so innumerable dispersed in their different ramifications, they act also by irritation upon the mouths of the lacteals and lymphatics, exciting a continued and proportional emission of their contents into the intestinal canal, so long as the stimulative properties of the medicine may have power to act; during which such absorption of lymph, and the regurgitation of chyle, intermixes with, and is carried off by, the excrements.

By this constant stimulus upon the exquisite sensibility of the stomach and intestines, the vermicular motion is not only excited to a more frequent discharge of its contents, but its continual irritation of the vascular system
produces an increased secretion of lymph and chyle, which, in the process of absorption and contribution to the excrementitious expulsion is proportionally supplied (or the vessels replenished) from even the most distant part of the extremities; which evidently accounts for the visible advantages arising from a course of physic, when a horse labours under the inconveniences resulting from repletion; and is said, in the Vulcanian phraseology, to have the humours fallen into the legs, or fixed upon any particular part of the frame.

Thus much is introduced to render perfectly clear, what I term the mechanical process of purgation; by strictly attending to which it will evidently appear, that the weaker a cathartic is in its property, the less it will affect the fluids suspended in different parts of the frame; for its first stimulus acting upon the nervous system as the most irritable, the lymphatics and lacteals become only the secondary seat of provocation, and more proportionally acted upon as the physic is increased in its power of stimulation.

From this very necessary remark, I mean
to infer and wish it to be generally and incontrovertibly understood and held in remembrance, that a very moderate dose of physic will act in a great degree upon the irritability of the stomach and intestines only, exciting a discharge of their contents as before described; while its increased strength will, by its additional stimulus upon, and persevering irritation of the finer vessels, excite their regurgitative contribution to the general evacuation, so long as the irritating properties of the cathartic shall retain the power of acting upon the vascular system, which, differing so very much in different subjects, requires proper discrimination in the composition of purging medicines, consequently, should always be carefully adapted to the state, constitution, and bodily strength of the horse.

This naturally leads us to an inquiry of the different degrees of physic, as most applicable to the various occasions for which they are brought into use. It evidently appears by the above investigation, that the milder cathartics act superficially, merely to discharge the contents of the intestinal ca-
nal; and are therefore calculated as preventatives to the possible inconveniences of impending repletion; preservatives of health, or necessary preludes to the completion of perfect condition.

The same elucidation likewise demonstrates the consistency of increasing the proportions, or enlarging the doses, when more distant services are expected by calling the remote powers into action, for the purposes so particularly explained; for instance, in great repletion of the vessels, fulness of the carcase, heaviness of the head and eyes, swelling and tension of the legs, and such other causes as will be hereafter explained. Gentle cathartics, acting merely as observable laxatives, can never be expected to reach the seat of these complaints; such brisk purges only can be adopted with propriety, as will, by their continued stimulus, come into contact with, and additionally act upon, the very interstices of the stomach and intestines, after the excrementitious superflux is thrown off: exciting, by such means, the lymphatics and lacteals to disgorge some portion of their extra contents, (distinguished from time im-
memorial by the appellation of humours) to be ultimately carried off with the remaining efforts of intestinal expulsion.

If any farther explanation can be at all required, to render this process more intelligible to the dullest comprehensions, I must beg permission to recommend such reader to a retrospective recollection of his own sensations towards the concluding operations of an emetic, or cathartic; when I believe it will immediately occur to his remembrance, that the irritation of the vessels was much more severe and effectual, proved by the repeated strainings) than in the preceding discharges when the contents were expelled with much greater ease to the patient, though less efficacy upon the frame.

As I have just hinted, there are other disorders, or rather advanced stages, of those last described, (and for which "brisk purges" are recommended), that require a still more peculiar mode of counteraction; as horses subject to, or labouring under, inveterate cracks in the heels; oosing indications of, or palpable, grease; cutaneous eruptions; vas-
cular knots, or tubercles, the evident effects of plenitude; worms, or fluctuating pains in the limbs, occasioning alternate lameness in one part or another. In all which cases, it is to be observed, horses should never have their exercise or labour increased, to the least degree of violent exertion, without first undergoing evacuations of such kind, as become immediately applicable to the case in question.

For my own part, I feel myself powerfully influenced to recommend the early administration of mercurial purges, accurately proportioned to the state of the subject and prevalence or duration of disease! and this upon the experimental basis of minute attention to their singular effects upon the constitutions of horses, in a variety of instances that perfectly justify me in communicating established proofs of their superior excellence, not only in the different cases just recited, but in many others, that it would be foreign to our present purpose to enumerate.

To prevent a perpetual obtrusion of tech-
nical mystery, or medical disquisition, by enlarging upon the means of the mercurial particles entering into contact with the blood; its power of attenuation, gradual dissolution of the fluids and gentle stimulation of the solids, which must at all times hang heavy upon the mind of the unscientific inquirer) we must let our abbreviated allusion suffice, as a more satisfactory mode of intelligent information, than a tedious chain of physical definition, that, it may be thought, has been already introduced by much too often.

In this tribute to the almost incredible effects derived from the judicious and salutary interposition of mercurial cathartics, I beg to disclaim every idea of patronizing such compositions, prepared from the prescriptive scraps of antiquity, in the possession of every bellows-blower in the kingdom; not more in respect to the probable disproportion and certain danger of their ingredients, than the absurd, improper, and indiscriminate mode of introduction. Of these preparations, as of the various nostrums and quack medicines of the present day, I hold
the same uniform and invariable opinion; that the public are eternally pestered with innumerable advertisements, announcing the miraculous cures (Nature has performed), but not a single word of the many thousands such medicines have destroyed; so true it is, "dead men tell no tales."

Having gone through what I conceive a duty incumbent, respecting the operation of physic and its effects upon the frame, to elucidate, as much as circumstances would admit, a subject that has been hitherto considered as sufficient matter to justify and support a contrariety of opinions, I must, after giving it such professional explanation as my slender abilities were adequate to, submit the propriety of the practice, under conditional regulations, to the decision of those who may do me the honour of minutely investigating, what has been necessarily advanced for general consideration; begging permission to observe, that particular instructions for the management of horses under the operation of physic, may be found in the former volume under that head; the present pages having been dedicated entirely to the ope-
rative process and its effects upon the constitution, for the purpose of universal, or rather common, comprehension.

That task having been at length performed, we take our leave of the dry and unentertaining study of medical abstrusity, and proceed to such part of our plan as will prove more entertaining and acceptable to those who may condescend to consult us for either amusement or information. I have promised under the present head, rules for the selection of Hunters, and some useful hints for their management in the stable and chase. In respect to the former, such descriptive parts as constitute uniformity and the points of perfection, will be found so accurately delineated in the early pages of our former volume, that its repetition would bear too much the appearance of literary imposition; from which accusation, it has been our earnest endeavour, in every page, to stand clearly exculpated.

Upon the subject of selection there can therefore be but little to introduce beyond the necessity of adhering in choice, as much
as possible, to those that are well-bred, or, in other words, such as come the nearest in pedigree, symmetry, fashion, and apparent strength to those in constant use for the turf, bearing the denomination and figure of blood horses, as most adequate in speed and durability (termed bottom) to long and severe chases with fleet hounds, or in deep countries; under which horses of an inferior description so frequently sink for want of that constitutional stamen or inherent fortitude, that horses of high pedigrees are so eminently known to possess.

From this established and incontrovertible fact, we are naturally induced to introduce a few oblique remarks upon the very necessary qualification of "Bone;" so fashionably and eternally echoed and transmitted (in equestrian inspection) from one affected puppy to another, that they seem to have anticipated, or rather premeditated, the inexpressible pleasure of discovering what they call "a want of bone" in the horses of others, that they unluckily seldom or ever perceive in their own. These curious observers (mere pretenders to judgment) never condescend to
investigate causes or effects farther than at first sight they affect the superficies of their very shallow comprehension; from whence arises the prevalent reflection upon the want of bone, so exceedingly common, and so frequently ill-founded, that at the time of examination, the subject so disparaged is sometimes loaded like a cart-horse. From this total ignorance of the anatomical conformation has originated the erroneous conjecture of fixing the basis of strength in the bony structure only, without a contingent reference or relative consideration to the muscular appendages, that, in fact, constitute the very main-spring of strength and action.

We are not at all disinclined to admit that the greater the fulcrum or mechanical centre of support, the more powerful should be the component parts to constitute the accumulation of strength; though this, like many other rules supposed to be general, is liable to frequent exception. Of this there are distinct proofs among the different degrees of horses, in the particular purposes for which they are bred, or afterwards become
appropriate to; for instance, horses bred with strength for *draft*, or with speed for the *chase*, are so directly opposite in some part of their *shape*, and the whole of their *requisites*, that what constitutes perfections for the one, displays an absolute deficiency for the other.

Hence arises the inconsistency of bringing cross-bred heavy horses into the chase, where their own weight, and want of action, lay the foundation of their deficiency: for in hard or long running they become inevitably exhausted, and frequently fall victims to the imprudent perseverance of their riders. Those juvenile or inattentive sportsmen, whose experience has been exceedingly limited, or observations confined, may not yet be perfectly convinced that *Blood Horses* (notwithstanding the popular clamour of their deficiency in bone) will exceed in *speed*, *strength*, and *bottom*, whatever horses of an opposite description may be brought into the field; and of this fact I am so exceedingly well convinced by experimental observation and unremitting attention, that in a long chase
with fleet hounds, running breast high, and across a country, nothing but horses three parts or thorough bred, can ever lay by the side of them.

In addition also to this truth, let us encounter the full force of another notion equally ridiculous, and well calculated for those who hunt in theory, and enjoy the chase upon paper; of a blood horse not having bone and strength sufficient to cover a deep and dirty country;" when every sportsman of experience, who has made the trial impartially, will join with me in the assertion, that horses of that description absolutely possess the strength (in their great power of action and pliability) to pass over such country, with very slight impression and no great labour; when it is a matter not to be controverted, that a strong heavy horse not only sinks deep with his own weight at every stroke, but extricates himself with the utmost difficulty, leaving his rider in the pleasing predicament of soon inquiring "which way the hounds are gone?" with the greater gratification of possessing a horse of bone and strength sufficient to carry him
"AFTER any pack of hounds in the kingdom." Having before bid adieu to medical mystery and anatomical description, we do not mean to renew the subject by a comparative detail of muscles and tendons, with their appertaining considerations; but leave every reader to make up his own mind upon the qualifications and kind of horse most applicable to his idea of the chase, and intention of riding with or after the hounds; proceeding to a communication of such remarks as, properly attended to, may be productive of their different degrees of utility.

It may be remembered, that the different subjects of physic, exercise, and condition have all been separately considered, and their advantages accurately explained; as may be perceived by application to the index of either volume for information upon any particular head. We now consequently arrive at the commencement of the hunting season, when, meeting in the field, every countenance betrays a heart elate with the general effusion of joy that is to ensue. Previous to farther animadversion upon which
it becomes necessary to remark, that the extreme degree of perfection, and high condition I have hitherto recommended, and allude to in my future instructions for stable management, and by no means intended to be generally extended to horses in common use with harriers; whose offices of service are so exceedingly different to the very strong and severe chases with stag or fox, that they may naturally be understood to be always sufficiently prepared with a very inferior treatment.

Lest such gentlemen, who from situation, inclination, advanced age, or bodily debilitation, are attached to the frigidity of hare hunting, should feel the dignity of their pack, and the splendor of their retinue, degraded by what they may erroneously conceive an oblique insinuation of contempt; I must beg to submit to the criterion of their own decision, the almost incredible difference between the exertions and duration of the two. Horses that become the necessary appendage to harriers, undergo such sudden changes in their sport, not more in the frequent dull and tedious attendance upon the
hounds when trailing to find in the cold and chilling dreary fog of a severe winter's morning, than the alternate contrasts in the chase, arising from those checks in heading, turning, doubling, and squatting,' that constitute first a burst to promote perspiration, then a "fault" to suppress it.

This is so very opposite to the violent and continued exertions of a chase with either stag or fox, in the present improved breed and fleetness of hounds, that I only mean to convey an idea of the probable hazard of having a horse kept in too high a style for a chase so subject to fluctuation in the different degrees of heat and cold, that a horse in perfect condition must have great good fortune, or an excellent constitution, not to feel the ill effects of long attendance upon harriers, at least in those countries where the scarcity of game admits of much lost time between killing and finding. For my own part, however repugnant the opinion may prove to one class of sportsmen, I feel myself justified in declaring, no consideration whatever should influence me to dance attendance upon har-
hriers with a horse of great value and tolerable perfection, unless a certainty of expeditiously finding, and incessant running, might induce me to exercise a horse on the intermediate days, as a prelude to the chase with either of the other two.

Considering, therefore, the management we allude to, as appertaining more particularly to horses of high qualifications, we advert, as before mentioned, to the commencement of the season; when, at the place of meeting, every sportsman feels eager for the sport, and replete with emulation. That we may omit no instruction or advice, however minute, that can at all contribute to the pleasure or safety of the chase, let it be held in remembrance, the frame (or rather the stomach) should never be loaded when entering into immediate action. The portions of hay and water should be administered with a very sparing hand, for the last twelve or sixteen hours preceding the chase; to which end hay should be restricted in quantity more on that night than any other, his evening and morning feeds of corn being increased in

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proportion to the deficiency in the other part of his aliment. On the morning of hunting he should be dressed and fed early; having his head strapped up till saddled for the field, to prevent (if a coarse feeding horse) his making the clean straw a necessary substitute for the artificial scarcity of hay.

The day preceding which, every judicious or experienced sportsman arranges all his affairs to prevent the least probability of delay, disappointment, or interruption to his sport, by accurately ascertaining the adequate state of his horse and the safety of his apparatus. He descends to an attentive survey of the feet and the clinches of the shoes; thereby avoiding the distressing dilemma of compulsively exploring a smith’s shop, in a strange country, during the heat and happiness of the chase, by the inexpressible mortification of casting a shoe: a circumstance that will seldom or never happen under the occasional inspection of the smith, who will most certainly never forget the proper or accustomed time of examination; provided he is retained upon the principle of mutual conve-
nience, so particularly explained in 138, and the following pages.

Proper attention should be paid to the form of the saddle and the state of its stuffing, to prevent even the possibility of the tree coming into injurious contact with the wither; or the probability of warbles, by the indentation or friction of the girth buckles, in a long or severe chase. The girth-web for hunting should be what is termed "spring web" in preference, for the advantage of its additional elasticity; the harsh, tight-wove web very frequently occasioning a laceration of the integument, known by the name of "bowel-galled." If due respect was also paid to the probable durability of the stirrup-leathers it might certainly render superfluous the paltry display of a new belt round the body of a gentleman, indicating a safe resource for a broken leather; a piece of equestrian ostentation never practised by sportsmen of established reputation, who are universally known to be too substantially provided, in so material a part of their equipments, to stand the most distant chance of an accident, that would not only retard their
progress, but inevitably throw them out before they could repair their loss, if the hounds were then crossing a country.

If horses have not six or eight miles to the hounds on the morning of hunting, they should be walked at least an hour, or hour and half, before they appear at the place of meeting; the consistency of their having sufficient time to unload the frame by frequency of evacuation, has been so fully explained under the article of exercise, and its palpable utility must be so forcibly striking to every person, at all convinced of its effects, that it cannot possibly require any additional elucidation.

Supposing ourselves arrived at that unsullied seat of unanimity the place appointed, whether throwing into covent for a Fox, or turning out the Deer; every sportsman will acknowledge it may be justly deemed the critical moment, when the powers of exhilaration nearly exceed the limits of prescription, and we “most wonder how our reason holds.” This is the crisis that too frequently deprives the juvenile rider (in
his initiation) of the degree of prudence so exceedingly necessary in the early part of the chase; particularly at the beginning of the season, when they are so little inured to exertions of violence and fatigue. The first burst, with either deer or fox, is generally severe, and not unfrequently of long duration, in which too much tenderness cannot be bestowed upon the very fountain-head of your pleasure; from whose perfections and perseverance only you can derive your enjoyment of the chase. It is therefore perfectly right to have it ever in remembrance, that the more moderately a horse is exerted in the early part of the day, the greater probability you insure of seeing the end of it, with the pleasing consolation of ease to your horse, and no bad compliment to your own reputation; for it is a well-known fact, that there are hundreds in a season, who, from an impatient desire and eager impetuosity to see too much of the beginning, seldom or never know much of the conclusion, promoting by indiscretion the very means of their mortification and disgrace.
Moderation in the chase, and steady attention to the leading hounds, will constantly prevent considerable difficulty to the rider, as well as the horse; this is a matter, however, more "devoutly to be wished," than at all to be expected. It is equally natural to conclude, that most of those adherents attached to and enjoying the chase, would regulate the speed of their horses by the depth of the ground they go over; observation daily convinces us it is not so, and that there are very numerous exceptions to such necessary and laudable circumstances.

Experience constantly affords us demonstrative proof, that nothing so much exhausts the bodily strength, reduces the speed, and exhausts the wind, as strong and repeated leaps in any, but particularly in deep countries: this reflection ought surely to convince young or unthinking riders, that superfluous leaps, and unnecessary difficulties, should never be boastingly encountered, to display an affectation of equestrian courage, or pragmatic consequence; for they immediately (in the mind of every prudent
and humane observer) appear so many incontrovertible proofs of his ignorance or indiscretion. These heroes on horseback require to be emphatically informed, that such voluntary acts of oppression invariably operate to the prejudice of the performer, however he may be sanctioned by situation or favoured by fortune, proving unluckily abortive of the original design; for what is so evidently intended to promote admiration is as certainly productive of indifference and contempt.

Another act of folly and indiscretion is equally calculated to excite the disgust and indignation of every established sportsman in the field; that ridiculous vanity of trying the speed and oppressing the spirit of your horse, in racing with every sympathetic competitor; and it would be very extraordinary in so numerous a company, if one fool was long deprived of the pleasure of finding a companion. At the conclusion of the chase, whether the death of a fox or the taking of the deer, numerous temptations present themselves to the young and inexperienced sportsman, even in the infancy
of his initiation; while encountering the various propositions of the company, sus-
pended in opinion between the prevalence of inclination and power of consistency.

Previous to the remarks I proceed to make, it is not inapplicable to introduce one obser-
vation relative to a termination of the distinct chases I have just had occasion to mention; for though the former must be candidly ac-
knowledged proportionally severe in its course, it is by no means comparative in its duration. His Majesty's Red Deer, under
the acknowledged excellence of their present establishment, exceed in the length of their runs all former remembrance, and almost every conception of those unacquainted with the subject; from three to four hours may be can-
didly considered the average of each chase, with deer in high condition; at the conclu-
sion of which it is no uncommon circumstance to be twenty, five-and-twenty, or thirty miles from home, or the place of turning out.

This is the period when every imprudent or impatient rider should exert his judgment to discover the state of his horse and regulate
his proceedings accordingly: horses are never so perfectly at ease as in their own stables, which they should attain with all possible convenience. There are numbers who (without at all adverting to the length of the chase, or their distance from home,) may be constantly observed eagerly enquiring the nearest way to the first house of public accommodation, making what converts they can by example; where, without a reference to contingencies, horses in such state are rashly consigned to the unsullied care and incessant attention to the immaculate ostler, (if the premises are enabled to produce one) when they are ordered to be "well cleaned," "properly fed," and "sufficiently watered." This important trust (for such it certainly is, when thoroughly investigated) is thus delegated to an inferior power, that is perhaps in five minutes unavoidably compelled to abandon it, and accept of a second and third, which may be no more in his power to execute. Thus the commission is going on, while the happy inadvertent owners are gratifying their appetites and drowning their cares in all the luxuries of the mansion; indulging their vanity in a recital of their personal exploits, and
an alternate description of the difficulties they had surmounted in the severities of the chase.

To those in the laudable habits of a different practice, animadversion upon the danger becomes superfluous; but as there are those, whom it is impossible to convince of their errors till repentance comes too late, it may prove no unseasonable admonition to declare, from this kind of treatment only, I have been witness to repeated instances where the horses have never been brought again out of the stable, but in woeful procession to the Collar Makers, who had purchased their hides.

The stripping of a horse to dress him in a comfortless stable, with every pore of the frame relaxed to its utmost extension, and the additional happy introduction of a pail of cold water (as most applicable to the convenience of the ostler or his deputy) has been the destruction of more horses in different ways, than ever suffered by the longest and most terrible runs when rode with discretion. So much has been repeatedly in-
introduced upon the repulsion of perspirative matter from the surface to the different parts of the frame, that not a single line can be required in elucidation of so clear a part of the subject.

Steady and attentive observance has, years since, convinced me of the inconsistency of approaching a house of this kind in the general hurry and confusion, with any hope of obtaining the requisite attendance your horse may stand in need of; a diffident applicant may prove his hour unnoticed, and his gentle requests unanswered, while those fortunately possessed of unbounded confidence and fashionable effrontery may probably succeed in their application. It is therefore much more commendable to pass gently on with your horse to a house whose present engagements are not so numerous, which may generally be found in a few miles of your way homeward: here you become so much the object of attention, that you almost obtain in anticipation what you could not before acquire by the most humble entreaty. This answers your purpose perhaps in another respect, as your horse will have become cool and proper for
what attention you find it necessary to bestow; for no horse whatever, after a severe run, should be placed in a stable, or suffered to stand still, till the increased velocity of the blood and the consequent perspiration had gradually subsided to its former temperance.

When your place of temporary convenience is obtained, let it be only thirty or forty minutes at most, for the following purposes of evacuation and nutrition; see that the stable, and the stall in that stable, are made as near the warmth of your own as circumstances will permit; let the bridle be taken off, a handful of sweet hay thrown before him, the girths slackened, and the saddle just loosened only from the back, to which it may adhere closely by the long-continued perspiration; let a sheet (or such substitute as the place affords) be thrown over his hind quarters, and the litter be plentifully spread under his belly, to excite a salutary discharge of urine, (by this time much wanted) observing that he stales without difficulty, and displays no signs of strangury: if so, they must be attended to in the manner described in the former volume, should nature be tardy in her
own relief, and the violence of symptoms increase.

Procrastinate any wants of your own, and make up the deficiencies of the day in the extra comforts of the evening; this will insure you the exquisite sensation arising from an act of justice and humanity. Depend upon no pompous instructions for the doubtful supply of warm water necessary to your purpose or intention; divest yourself of the rank folly of false consequence, and attend to the immediate procuration; examine its proper warmth, and be yourself the trusty superintendant, unless the favours of fortune and the fidelity of your servant have luckily placed you above the necessity of personal attendance. So soon as he has staled, let his head be well rubbed with part of a soft hay-band, and thoroughly cleansed with the brush; draw his ears repeatedly through the hands, all which will prove perfectly refreshing. The legs should also be well rubbed down with double wisps, to prevent an obstruction of the pores, or stiffness from accumulated dirt and perspiration.
This done, let a moderate feed of the best corn your local granary affords, be thrown into the manger, and the door of the stable immediately closed. Having thus conscientiously discharged the incumbent office of grateful protection, embrace the few minutes you have to spare, in obtaining for yourself what little refreshment nature stands in need of. Let no inducement whatever from more unthinking companions attract your attention from the state of your horse to the circulation of the bottle; if once you suffer your sober judgment to relax from what should be the invariable maxim of your perseverance, you know not where the indiscretion ends; one single step of deviation from the line of prudence and propriety frequently introduces a thousand more to promote contrition.

Upon ample demonstration, that every horse, supported in a domestic style, has as fervent an attachment to his own stall as his master to his own bed, and will most cheerfully encounter (if necessary) much additional fatigue to attain it; there is no doubt but it is highly commendable to bridle him
so soon as his corn is finished, and take him gently home, provided the distance is not too great to prevent a comfort truly desirable to both the horse and his rider. In this recommendation I feel myself perfectly justified, not only upon the experimental advantage of frequently taking my horse (in the way I have described) upwards of twenty miles to his own stall, which has been my invariable practice for more than twenty years, but the flattering gratification to observe many of my friends as regularly follow the example.

No infectious solicitations, that so constantly seduce others to an immediate participation of table comforts, ever have the most trifling weight in the scale of my determination; dedicated entirely to the safety of my horse, no moment is unnecessarily wasted till he is "rewarded according to his deserts," and safely lodged in his own stable, beyond the probable reach of danger; where, upon his arrival, (whether after a long or short return from either a severe or moderate chase) the mode of management is critically the same; his legs and feet are not-
only instantly washed with warm water, but in so doing, the necessary inspection made, whether the most trifling injuries have been sustained by over-reaches, stubs, or in lacerations between hair and hoof: while this is doing a portion of hay is thrown before him and immediately after a pail of water, slightly warm, to allay the violent thirst always occasioned by long and severe chases. The usual ceremony of dressing, feeding, oiling, stopping, and other minutiae of the stable is then gone through; too systematically and generally understood to require a single line of explanation.

A perseverance in this rigidity of stable discipline and attention, unbiased by the persuasion or example of others, will always insure you the superiority of condition in the field; under the pleasing sensation of your horse being at home, and completely taken care of; when others, less considerate or less humane, are commencing a wretched journey of ten, fifteen, or twenty miles in a dreary winter’s evening; or, what is nearly upon a parallel of inconsistency, permit them to remain in a strange
(and perhaps cold and uncomfortable) stable, to be badly fed and worse looked after. But let it be either one or the other, resulting consequences are much the same; the porous system is affected in a greater or less degree, the coat becomes rough and unhealthy, bearing the appearance of hide-bound, and the perspirative matter thus compulsively returned upon the circulation without absorption, must evidently soon appear to affect the eyes, lungs, or glandular parts, to the certain hazard of blindness, asthma, broken wind, or some one of the contingent ills so repeatedly alluded to in various parts of this, as well as our former volume.

Respecting the article of feeding, various opinions are entertained, and perhaps no small number of those regulated by pecuniary considerations; it is, however, universally admitted, that hunters require a more extraordinary support than many horses of different denominations; but the particular reason why extra support becomes so immediately necessary, is a matter but little understood by those not much
subject to abstruse reasoning or remote conviction.

It has been repeatedly proved under the article of Exercise and its effects, that a want of action (when properly supplied with food) overloads not only the frame with aliment, but the circulation with a superflux of nutrition; it must therefore evidently appear, by parity of reasoning, that great and constant exertions in the chase must necessarily exhaust the fluids by perspiration, as the contents of the intestines by evacuation; and unless the system is sufficiently supplied with nutritious, restorative and healthy aliment (the best in its kind) for the due support of these frequent discharges, impoverished blood, loss of flesh, dejected spirit; and bodily debilitation, must prove the inevitable consequence.

After the most attentive observation I have been able to bestow for a number of years cultivating an anxious desire to discover the proper criterion of support and gratification for horses of this description, who
HUNTERS.

are fair feeders, and do their work well, I could never find that a less portion than seven pecks or two bushels of corn, and two trusses (one hundred weight) of hay, per week, would keep them up to a proper degree of strength and appearance. This is the least quantity of either, that any horse of my own consumes in the hunting season; which allowance will constitute some entertainment, in contrast with the weekly subsistence of those metropolitan stables, so particularly alluded to in page 199 of the work before us. In this calculation, the reader must be informed, there is no conditional reference or allusion to horses of weak appetites, that are off their food with every trifling exertion, or extra fatigue; they are by no means entitled to a stall in the stable of an experienced sportsman, who, when such accidentally fall into his possession, will undoubtedly soon extricate himself from the incumbrance, without the least necessity for my recommendation.

WATER is so equally and essentially requisite to the very existence of life, and
performance of every function, that it becomes entitled to a proper degree of consideration; but knowing (from the very nature of the inquiry) how little attention would be paid to a tedious and desultory diffusion of matter, upon the different kinds of water, their properties, the mineral particles they contain, the distinct strata through which they run, and become impregnated as they pass, with their probable or possible effects, upon the constitutions of horses would lead us again into a very extensive and unentertaining field of physical disquisition, that we wish by no means to renew, unless it could tend to enlighten the subject, or improve the judgment: in an attempt to succeed effectually in either, Bracken must be eventually cited to justify one assertion, Clarke to demonstrate another; the sum total of all which could amount only to an accumulation of mere conjecture respecting stone, gravel, and strangury, without any thing being positively ascertained, by a catalogue of conditional suppositions, founded upon the various properties of different
waters, according to the soils through which they run, or from whence they are extracted.

In fact, such accurate investigation has been made by Mr. Clarke of this subject, that it absolutely precludes every possibility of introducing a single line in addition, without the appearance of plagiarism; but with due deference to his good intent, and true physical distinction, I cannot but conceive, that so general a description of the different kinds of water will afford but little satisfaction to those who are inevitably compelled to abide by the local properties of their own country, without the bare possibility of an alternative.

Taking this circumstance into consideration, I think it can be only necessary to take up the subject upon a general ground; merely to introduce such few remarks upon the quantity and quality of water, as are evidently most applicable to the state, condition and purpose of those horses, whose situation, circumstances, or fluctuations of
weather render their watering in the stable a business totally unavoidable.

I have, in different parts of my former volume, said, what then became applicable upon this subject; but we now proceed a few steps further, in elucidation of any deficiency; and the more particularly as our remarks constitute a link of continuity to the present chain of instruction. It can never have escaped the attention of the most superficial observer, what a wonderful change is almost instantaneously produced in the appearance and sensations of a horse, by a gratification of thirst in well or pump water, but more particularly if given in the stable cold and in the winter season. In most horses a violent shivering and staring of the coat immediately succeed, and continue more or less without intermission: those constantly supplied in this manner having always a coat nearly of two colours (that is one half standing on end, and the other part smooth), displaying a scurfy, dusty hue at the bottom, evidently the effect of a repeated collapse of the porous system and frequent obstruction of insensible perspiration.
To prevent, by every possible means, the hazard of such inconvenience as must evidently ensue from treatment so very improper, horses should invariably, when the seasons and the state of those seasons will permit, be watered abroad at either pond or pool of soft and well-sheltered water; as greatly preferable to the harsh and chilling frigidity of those we have described. But even in this mode, a horse should never be permitted to glut himself to the least degree of satiety; for having no regulator but appetite, no guide but inclination, they very frequently (under management of the inadvertent and inconsiderate) drink to an excess, occasioning the most excruciating pain, and no trifling degree of danger and disquietude. Six or seven quarts need never be exceeded to horses of this class at one time, and that as regularly divided in respect to the equal arrangement of time as circumstances will permit; to be repeated twice in twenty-four hours, at nearly the distance of twelve from each other, to avoid the frequent folly of having water twice in about eight hours, remaining sixteen without.
When the severity of the weather, as rain, frost, or snow, prevents horses of this description from being watered in such way, the only prudent alternative (to avoid every inconvenience) is to furnish them with soft water from such receptacles in the stable, either in its natural state, or with the chill taken off, as the season and circumstances may require; letting the subject almost immediately undergo a brisk brushing over for a quarter of an hour or more, to enliven the circulation, and prevent the disagreeable sensations of rigor and the effect of obstructed perspiration.

It now becomes necessary we revert once more to the subject of exercise; upon the utility of which we have already enlarged, under its distinct head, and, from its numerous advantages and indispensable necessity, cannot, in fact, be afraid of introducing too much: it is the very fountain of health, appetite, and invigoration, without which a horse can never be adequate to the purpose intended. Proper exercise for horses denominated hunters, and appropriated to no other use, should
be almost invariable respecting manner, length of time and distance; though it must be universally known such circumstances become greatly dependent upon the season of the year, the state of the weather, the severity of the preceding chase, and the condition of the horse.

Under such certain and unavoidable fluctuation, conditional instructions only can be admitted; subject as they must ever remain to the contingencies of inevitable diversification. Horses on the intervening days, during the first and last weeks of each season, when the days are long and seasons mild, should be taken out twice a day; for instance, from eight to nine in the morning, and from four to five in the afternoon; giving them their proper portion of water at such pond or pool of soft water as is most remarkable for its salubrious properties in the neighbourhood of residence. Let the exercise be moderate, and equally divided before and after the water; remembering, as already observed, to regulate the length and strength of the exercise by the condition of the horse.
If he is of high spirit, and so much above his work that he increases in flesh, indicating the least display of foulness from repletion, let his exercise be proportionably extended; on the contrary, if the subject is of slender constitution, lax habit, light in the carcase, and weak appetite, the digestive powers must consequently be deficient, and proceedings regulated accordingly; becoming entirely dependent upon circumstances, and judicious superintendance.

In what I term the four centrical months of the hunting season, when the days are exceedingly short, and the weather severe, the mode of exercise must be varied, and rendered subservient to the changes that occur: taking them out at such times as may be found most convenient under difficulties that frequently arise. The rule, however, best adapted to general practice in favourable weather, is to let them have their exercise at once, and that in the middle of the day, between, or from, the hours of eleven to one; equally avoiding the chilling fogs of the morning, and damps of the evening; having it always in remembrance, that when pre-
vented (by the continuance of incessant rain, or deep fall of snow upon the ground) from taking them out at all, their dressings are increased, and patiently persevered in, to enliven the circulation, promote the secretions and evacuations, as the only substitute for the more substantial advantage of regular exercise.

It is a case too frequently observed, and indeed almost generally known, that the horses of gentlemen are sometimes unluckily subject, in all weathers, to a part of their exercise at the door of an obscure alehouse; for however hospitable may be the mansion of the master, still the prevalence of "damned custom" has rendered it so predominant, it is in a certain degree fashionable with those faithful and trusty servants, who, possessing neither innate principle, nor personal gratitude, render the most valuable property of their employers dangerously subservient to the paltry inconsistency and gratification of their own inclinations.

Having omitted, upon the subject of diseased eyes, to introduce a matter of opinion
that should have appeared with more propriety under the article of "shoeing," and frequent ill usage of smiths, I am induced to submit it to consideration before I take leave of the subject before us. It is wha have ever thought a too unjustifiable and great exertion of strength, in the use and twist of the twitch, when a horse is put into that excruciating state of coercion for shoeing, or any other operation. In this extremity of pain and humiliation, the eyes are frequently observed agitated, even to the expulsion of tears, from the great irritability and greater stimulation of the nervous system; this is so seldom regulated by the salutary interposition of judgment, humanity, and discretion, that I shall ever retain doubts, from the observation I have made, whether various defects in the eyes, or a paralytic state of the optic nerves, may not be very commonly produced by such means, when attributed to more remote causes.
ROAD HORSES

ARE those in general performing the most laborious work, and many of them enjoying the least accurate attention of any in the kingdom. It is, in fact, matter of surprise, that a part of the species constituting the very basis and support of inland commerce, the only means of expeditious travelling, and the advantages of general convenience in business and pleasure, should be so cruelly neglected, or indifferently treated, as may be plainly perceived (without the eyes of Argus) in almost every inn and a variety of private stables in every part of England.

Under this description come by much the greater part of all the horses in constant use; as it includes carriage horses of every kind, roadsters, and hacks, whether of gentlemen, tradesmen, or travellers (commonly called riders); all of which constitute an infinity, as well in the metropolis, as every part of the country. A very great proportion
of these derive so little support from the _ocular inspection_ and _personal_ care of their riders or drivers, that if the secret interposition of Providence did not influence a greater degree of assistance in their favour, than those generally do, who should be their protectors, more poverty and bodily destruction must inevitably ensue.

Rules for selecting horses in purchase are so plainly inculcated in the early part of the former volume, that they claim no part of our present attention: management, with such hints only as appertain to the tuition of young and inexperienced travellers, will form the sum total of arrangement under this head. It would prove matter of astonishment to those not intimately acquainted with the general state, condition, and accommodation of horses, what labour they execute, the incredible difficulties they surmount, the incessant fatigue they patiently endure, and the little they subsist on in the hands of hundreds, who feel no passion but gain, no pride but insensibility.

The horses passing under the denomina-
tion of road horses are so exceedingly numerous of the different kinds, that a distinct mode of treatment for each particular sort would be extending the subject to a length beyond the wish and expectation of every reader. Such selection may therefore be made from the general advice, as the inquirer may find most applicable to the state of his horse and the purpose of his appropriation; though the instructions may be considered as more consistently adapted to saddle and light carriage horses, than those employed in heavy machines) road waggons, and the inferior vehicles in constant use.

Previous to further embarkation upon that part of the subject, it may not prove inapplicable to take an oblique survey of those public receptacles known by the appellation of inns; originally intended and admirably calculated for the convenience and accommodation of travellers, but unfortunately, like many other institutions of general utility, perverted to the worst of purposes; having become so numerous (for the advantage of their licensed contribution to government) that they find it convenient to practise every
degree of imposition and every species of adulteration, upon the plausible plea of state-necessity and self-preservation.

Of these houses there are in fact but two distinct kinds that fall within the necessary circumspection and remembrance of the traveller; for they are generally in the opposite extreme: the accommodations of one class are hospitable, generous, humane and conscientious; the other, execrable to every excitement of indignation. While the former are exerting every nerve to acquire subsistence and obtain approbation, with honesty and unsullied reputation; the latter are deriving indiscriminate support by every degree of deception without doors, and every species of pecuniary oppression within. Servants, it is a maxim, soon acquire the virtues or vices of their employers, if they indulge a wish to retain their situations; and upon the truth of that ancient adage, "Birds of a feather flock together," where you find the wish to please predominant in the master or mistress, you immediately observe sympathetic assiduity in their dependents; and this remark will hold good, with very few excep-
tions, in almost every inn from Yarmouth in Norfolk, to the Land's End in Cornwall.

Under this established truth, it is also an additional fact, that while the very respectable class, whose integrity I applaud, and whose assiduity the public perceive and protect, are obtaining the very best corn and hay that can be consumed upon the premises without respect to the price of purchase; not more from a desire to promote their hourly increasing reputation, than to gratify the happy sensation of inherent probity; the latter are constantly procuring the hay and corn only, that can be purchased at the very lowest price, without a relative consideration to quality, conscience, or reputation.

Happy for the owners, much more happy for the fatigued and dejected horses, if either possess the good fortune or sagacity to discover the internal comforts by external appearance; nor can I conceive it would be bad policy in the very great numbers who constantly travel, if they were to obtain by petition to parliament a legal injunction, that the sign without should be strictly emble-
matic of the treatment within; and these not corresponding, should be punished with the loss of licence, upon respectable information. As it is, influenced by the power of external purity, we enter the gates of "an Angel," and in a few minutes repentantly perceive we have been induced to encounter a Devil. Where we are taught to expect meekness from "the Lamb," we frequently find the ferocity of a Lion. At the "head of a King," we meet accommodations for a Cobbler. At a "Castle," the manners of a Cottage. At the "Rose," we are surrounded with Thorns; and at the "White Raven" we discover a Rook.

Returning, however, from a slight digression to the subject in agitation, I must confess, ostlers are a very useful body of men individually considered; but long experience and attentive observation have rendered it an invariable rule with me, to adopt the good old maxim of "never trusting them farther than I can see them;" and this upon the recollection of a false manger having been discovered at a principal inn in the town of my nativity, in the days of juvenility; and the
corresponding declaration of a legerdemain adventurer (at that time most applicably in exhibition) whose salutary caution I have ever retained: "Look sharp, for if your eyes are not quicker than my hands, I shall certainly deceive you." This is a species of deception so constantly practised, and so happily enjoyed by the performers, that I make it an invariable rule (by personal attendance) to shield myself from the mortifying reflection of so much imposition upon my pocket or my understanding.

It should be considered that road horses of every denomination are, from their constant work and great utility, entitled to a proportional degree of care and attention with the most valuable horses in the kingdom; for though it is by no means necessary (but evidently improper) they should be in the same high state of condition as horses appropriated to the higher spheres of racing and hunting, yet there is a certain systematic uniformity in their mode of treatment, that, regularly adhered to, will prove equally advantageous with one class, as the almost unbounded circumspection so earnestly recommended with the other.
For instance, very warm stables and a profusion of body cloths are to be avoided, with horses that are necessarily destined to enter a variety upon the road in constant travelling; encountering the extremes of heat and cold, the indifference of aliment, the various kinds of water, and different modes of treatment. Many of these, although not in the immediate need of such large portions of nutrition as those in the habit of more violent exertions; yet they are entitled to all the useful minutiae of stable discipline, that so clearly contribute to the preservation of health, in horses of a superior description.

Horses coming under the denomination of road horses, or common hacks, in occasional excursions and diurnal domestic employment, will support themselves in good state (with moderate gentle work) upon three feeds of corn; on the contrary, horses of every kind, in constant work and exertions of magnitude, (as incessant journeying, or travelling post) must be supplied, at least, with a peck of corn a day. Large and strong carriage horses in perpetual work
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will require considerably more, or become emaciated by loss of flesh in frequent perspiration. These rules are offered as a kind of general standard; they must, however, remain subject to the conditional regulations of those who become individually interested in the event.

There are numerous causes to be assigned, why horses constantly used in travelling (particularly in the winter) and subject to all the vicissitudes of different stabling upon the roads, mostly bear the appearance of invalids, and look so very different from those kept under a systematic and invariable mode of management in private stables. The degrees of deception, and various ills they have to encounter in many inns, are absolutely incredible to those unacquainted with the arts in fashionable practice: the destructive negligence of ostlers, the badness of hay, the hardness of pump water, and what is still more to be lamented, the scarcity of corn, render it a matter of astonishment how they are enabled to perform journeys of such an amazing extent as they are perpetually destined to.
By way of prelude to the instructions I conceive requisite to form the mind of every young and inexperienced traveller, it cannot be considered inapplicable to strengthen the inculcation by a short recital of an introductory fact that not long since occurred in the neighbourhood of my present residence, where a farmer enjoyed his moiety of land at a very easy rent, under an excellent landlord, and no immoderate oppression from parochial taxes; and though he was universally known to be an honest, industrious man, yet repeated harvests produced nothing but additional deficiencies: in short, circumstances became annually more and more contracted, till dire necessity compelled him to relinquish both land and habitation, without having it in his power to accuse Providence of severity, or himself of neglect.

He was soon succeeded, at an advanced rent, by a man who was equally honest, sober, and industrious with himself; who continued plodding on under the happy consolation of finding every harvest produce additional gain and accumulation of profit.
As fame is seldom erroneous in this particular, his predecessor, hearing of his success, under a considerable advance of rent, took the liberty of calling upon him with a blunt but honest apology for asking so impertinent a question; but it was, to be informed how he, who had the farm at a much easier rent, could not even pay that rent and subsist his family with all his care and economy; while his successor was not only evidently doing this, but daily increasing his stock from the superflux?" When the other replied, that the whole art of his success and improvement of the premises consisted in nothing more than an invariable adherence to two words and their consequence; that when his predecessor held the farm, a too implicit confidence in and reliance upon his servants led him into unexpected and invisible losses. You, says he, always ordered your dependents to "Go" and do this, that, or the other; my plan is the very same as yours in every other respect but this; from the first hour of my coming into the farm it has been my constant maxim to say, "Let's go;" the effect of which has evidently occasioned the very
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wide difference between your circumstances and mine.

There certainly can be no doubt but the farmer's excellent maxim should be adopted by all those who rely too much upon the affected diligence of ostlers, and pretended fidelity of servants, without a single consistent reflection upon the cause of their approaching every day nearer to poverty. For my own part, I am not at all ashamed to acknowledge, if my horses are in higher condition as to external appearance, stronger in the chase, or more respectable upon the road than my neighbour's, it is only to be attributed to the admirable admonition of "Let's go," under which incredible advantage of personal superintendence I become security for the certain execution of my own orders.

This to the inattentive or inconsiderate may savour too strong of rigidity, and seem striking too much at the characters of servants in general; however, the more prudent and discriminating will know in what degree to admit the exception, concluding there may be some entitled to a
proper extension of confidence; though taken in the aggregate, the proportion is so exceedingly inferior, that well-bought experience amply justifies me in the opinion, that the greater number of dependants there are retained in any one family, (however small the scale, or extensive the establishment) the more the employer becomes the hourly prey of plunder and imposition.

Habituated to a belief of this fact, which it is beyond the power of either argument or sophistry to disprove, I have long held in retention two excellent maxims (originally from high authority) that constitute a useful trio, in conjunction with the emphatical precept of the farmer. That of “never putting off till to-morrow what can be done to-day;” or, “letting another do for you what you can do for yourself.” These rules conditionally adhered to, as much as circumstances, situation, and relative considerations will admit, would, I believe, have saved from ruin, thousands who have been depredated by the villainy of servants, and now lament, in the most distressing indigence, their former inadvertency.
These admonitions are introduced merely as a mirror worthy the accurate inspection and remembrance of those inconsistent beings, who, dismounting at the different inns upon a journey, give their consequential instructions to an ostler, or perhaps a stable boy, and never condescend even to look upon the poor animal again, till necessarily produced for the continuance of his journey, at the end of twelve, twenty-four, or eight-and-forty hours. This almost incredible insensibility and self-importance brings to memory the pomposity of a medical student fresh from the trammels of hospital attendances and lectures upon osteology; whose head was so replete with anatomical phraseology, that his mouth was never permitted to open but in a display of professional ability. For, riding into one of the principal inns, in the first town in the county, and alighting from a poney of small dimensions, he vociferously reiterated the appellation of "Ostler!"—"Sir!"—"Divest my horse of his integuments!"

Of the self-same dignity was poor Wignell, an inferior actor, but "stock
king," of Covent-garden Theatre for many years, whose stage-consequence became so habitual to him, he could never be divested of it in the most trifling occurrences of common life. At the conclusion of the winter season, when making his itinerant excursion to join a company in the country for the summer, he dismounted at an inn upon the road, and, ordering proper proportions of corn and water for the Bucephalus on which he rode, enjoyed himself most luxuriously upon the best to be produced. When satiated with good living, he deposited his pecuniary compensation, and, sallying forth, exclaimed most theatrically for the "Ostler;" who appearing, the guest approached him with his whip clenched in his hand, (in the manner of a truncheon, like the ghost in Hamlet,) still continuing to call upon the "Ostler." The ostler, recovering from the first surprise, ventured, after some trifling hesitation, to answer, but with doubt and dismay, "Sir!"—"When my steed has put a period to his provender, produce him." This was a thunder-stroke to a man little
read in scripture, and a stranger to heroics, particularly when accompanied with tragic emphasis and elocution. John, not knowing, and not being able to divine, the meaning of this majestic injunction, scratched his head, and, tremblingly, re-echoed, "Si-Si-R!"—"When my steed has put a period to his provender, produce him."—"Upon my soul, Sir, I don't know what you mean!"—"Why, you scoundrel! when my horse has eaten his corn, bring him out of the stable." Whether he had really been put in possession of any corn at all, was matter of no personal concern to poor Wignell, provided he had the immaculate assurance of the ostler, that it was all consumed; and this, it is much to be regretted, is the invariable custom of numbers, who, destitute of the finer feelings, and perfect strangers to the enlivening rays of humanity, are open to no other sensation than the predominant gratification of self-preservation.

Returning, however, to the management of Road Horses, whether on a journey of
continuance, or in their daily work at home, and resident in their own stables, the same care and attention are equally necessary; I have ever (feelingly) found, servants at home require the same circumspection and superintendence as ostlers abroad; and happy that man, if one there is, who through life has had well-founded reason to be of a different opinion; if so he is entitled to my best congratulations for possessing so valuable a novelty.

Horses of this description have every claim with others to the same regularity of stable-discipline; they should be at all times as equally prepared for a journey, as their superiors for the chase; the saddle has as great a right to be complete, and sit easy, and the shoes to be as firm as the first hunter's in the kingdom. They are at all times entitled to substantial dressing, good soft water, and proper exercise; their legs and heels to be well washed from dirt, and rubbed dry, in the winter season; their feet to be picked, stopped, and hoofs oiled, at all seasons of the year; and their hay and corn as
methodically given, and as good in its kind (if possible to be obtained, which in most inns it is not) as to those of superior qualifications. And these peculiar attentions become the more necessary, if the owner, from that innate monition that is an ornament to human nature, or the prevalence of fashion in external appearance, wishes him to move with pleasure to himself, and credit to his master.

There are various matters of general concern, that require a little animadversion; first, the indiscreet act of riding a horse to the end of his journey in a state of violent perspiration, to be then led about in the hands of an ostler, till he cools; and this at all times of the year, without the least respect to seasons. The absurdity is so palpable under the defined effect of obstructed perspiration, so repeatedly introduced, that an additional line is not required upon the subject; but that the inconsistency of such practice may more forcibly affect those who persevere only from inadvertency, and others who are sufficiently hum-
ble to imbibe instruction; let it be perfectly understood, that any man riding very fast, without a substantial reason, is never by the impartial spectator taken for a king or a conjurer.

But lest my unsupported opinion should have no weight with such highflying gentry, I beg to advance a sensible remark of a neighbouring friend (very recently made) who in a serious conversation, assured me, "he never saw a man gallop into or out of a town, but he was clearly convinced, the horse was not his own, or the rider was either a fool or a madman." To this very fair and candid inference, I am induced to add another corroboration of public opinion upon what they conceive the most striking proof of their courage and respectability. An old farmer, within three miles of my own residence, having dismissed a brother of the faculty who formerly attended his family, gave me this very concise reason for so doing: "I did not choose he should attend my family any longer, for he always rides so fast, I am sure he never thinks." Is it
possible, can it be hardly credible, that any rational composition, after giving these truths (that have fallen from old and experienced observers) a moment's reflection will ever lay himself open to the severity of sarcasms, or rather just contemptuous reproofs, that instantly constitute him a fool or a madman in the eyes of all the world? Under considerations of so much weight, I can have but little doubt that every random traveller, (not totally callous to the dictates of prudence and discretion) to whose rumination these hints may become subservient, will, in future, divest himself of his aërostatic furor; and conclude his stage or journey by such gradual declination of speed for the last two or three miles, as may bring his horse tolerably cool into the proper receptacle, without persevering in a public proof of folly, always productive of danger and certain contempt.

As it is so evidently proper to ride a horse very moderately at the conclusion of a journey, so it must prove equally necessary at the beginning. When a horse is brought
out of the stable with the stomach and intestines expanded with food and excrement, he cannot encounter rapid exertion without much difficulty and temporary inconvenience, till the intestinal accumulation is considerably reduced and carried off by repeated evacuations; the work of digestion should also be gradually effected to relieve the stomach, and take from the pressure that must inevitably fall upon the lobes of the lungs, (restraining their natural elasticity) under which the horse must move with a load of disquietude till such weight is progressively removed.

The certainty of this fact every reader of no more than common sagacity will discover, without further information from me; when I refer him to his recollection, for the great difficulty a horse encounters, when put into hasty action, after receiving his portion of food and water, either at morning, noon, or night. From this remark directly branches another, equally worthy the consideration of travellers; that is, the almost universal absurdity of giving, or rather ordering, their horses a pail of cold water (usually
in inn yards from the pump) in the morning, sometimes before, (which is ridiculous in the extreme) but generally immediately after they have swallowed their corn; upon an erroneous supposition, that upon such accumulated stuffing, they will be enabled to surmount all the difficulties of a long and fatiguing journey.

Upon the inconsistency of this practice, I beg to appeal only to the unprejudiced remembrance of those who have unthinkingly adopted it, whether horses thus loaded, do not travel for some miles with the greatest seeming labour and inconvenience. Admitting this position without a single exception, there cannot be a remaining doubt, but those horses, commencing their journey, almost immediately after the stomach becomes expanded with the accustomed portion of hay and corn, had with much more propriety proceed a few miles gently on the road, and take their water at a soft standing pond, or pool, when the frame (by preceding evacuations) is more adapted to receive it. But even in this alternative, proper discrimination is absolutely necessary; for horses, either on a journey or
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in common exercise, should never be permitted to drink at all in sharp shallow streams, that run over a rusty gravel, or through a black peaty soil; they are equally harsh, and seldom or never fail to have a severe effect upon the intestinal canal, in producing fret or colic in a greater or less degree, and setting the coat, by a sudden collapse of the cutaneous pores, in a few minutes after use.

To enumerate the minutiae of management, and bring it into a concise and single point of view, I heartily (and upon experimental proof of the advantage) recommend every person upon a journey, whether long or short, who takes up his temporary residence at inns, to make it his invariable rule to see (by either himself or servant) that his horses are dressed, fed, and watered; their heels washed, feet stopped, hoofs oiled, and his equipments, or apparatus, whether for riding or driving, examined as to their safety, every night or morning, if not at every stage; perhaps the latter may always prove the most eligible for those who will compound, at a very trifling degree of additional trouble,
to avoid the possibility of unexpected danger or disappointment.

To ensure the execution of all which, with the less reluctance on the part of your dependants, let it be ever predominant in the mind, "to do as you would be done unto;" liberality, judiciously exerted, is the best security for a cheerful execution of your wishes. It should be forcibly impressed upon the mind of every traveller, who wishes to become a guest of respectability, that "the labourer is worthy of his hire," and the hope of reward sweetens labour. Upon the ostler, the waiter, and the chambermaid, depends not only your comfort but your safety; and it is so completely in the junction of the trio, to render your armed chair easy, or replete with the thorns of disquietude, that it will be not only necessary you treat them with becoming civility, divested of the disgusting pride of personal ostentation; but take care to bestow such expressive marks of your approbation, as will sufficiently influence them to consider you, upon every future occasion, more the domestic friend than the casual stranger.
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In pecuniary compensations of this kind it is ridiculous to be on the penurious side of gratification; a single shilling very frequently, in their opinion, constitutes the line of distinction between "A Gentleman" and "A Blackguard;" then who would encounter

"The insolence of office, and the spurns
That patient merit of th' unworthy takes,"

when "a good name," with a profusion of adulation, may be purchased for so paltry a consideration? In short, although the expenses attendant upon the conveniences of such receptacles constitute a tax of enormity, yet, if you wish to insure your own comfort, with the safety of your horse, you have no alternative but to consider them debts of honour that must be paid.

Before we bid adieu to the subject of Road Horses, it cannot prove inapplicable to introduce a few remarks upon the inconsistency of washing the bodies of post and stage horses all over with cold water, so soon as they are taken out of their harness, when in the highest state of perspiration. This custom is
become so universal, that we perceive its adoption in almost every inn-yard of eminence through the kingdom: that I may, however, avoid the accusation of rashly condemning a practice so numerously supported, I shall only start such matters of opinion for due deliberation, as may more materially concern those interested in the consequence.

That is, whether it is possible to believe, after a moment's reflection, that a horse who has gone ten, fifteen, or twenty miles, with great exertion, and is brought in with the perspirable matter passing off in streams, can be completely plunged into a torrent of cold water, without at least the very great probability of destructive consequences, from instantaneously closing the cuticular pores, and inevitably locking up the whole mass of secreted perspirative matter in a state of temporary stagnation?

In this unnatural shock the constitution becomes the criterion of decision, the whole aspect depending entirely upon the state of the blood: if the horse should be luckily free from every trait of disease, and rather below than
above himself in condition, displaying a state of purity in appearance, Nature may, under such favourable circumstances, prove herself adequate to the task of absorption, and it may be again received into the circulation, no ill consequences becoming perceptible; but should the vessels have been before overloaded, and the blood in a state of viscosity, very great danger must inevitably ensue; for the perspirative matter, thus preternaturally thrown upon the circulation, after acquiring by its stagnation a proportional tenacity, must render the whole system liable to sudden inflammation upon increasing the blood's motion to the least degree of velocity.

To the persuasive force of these probable effects, I have long since become the greater convert, by attentively adverting to the great number of those horses that so suddenly drop dead upon the road, in the very next stage after having undergone such unnatural ablution. To the rational or scientific observer, the cause of these deaths does not require a momentary investigation; the system of circulation, derivation, repletion, and revulsion, are too well under-
stood to hesitate a moment in pronouncing such sudden deaths to be generally occasioned by the means already assigned: the physical process of which repulsion of perspirative matter, and its effects upon various habits, are too minutely explained under the heads of different diseases in many parts of our former volume, to render further disquisition in the least necessary.

For my own part, ever open to intellectual improvement, and constantly courting conviction, I most anxiously wish to be informed through the channel of systematic impartiality, what can be hoped, wished, or expected from a proceeding so entirely new; that cannot be more consistently obtained by the utmost extent of friction, properly persevered in, with the usual modes of wipping, brushing, and cleaning, as in general use in almost every stable of uniformity in the kingdom. Nor can I at all conceive, as every thing that can be required relative to condition, labour, and appearance, is to be effected by means divested of danger, why such unjustifiable modes need be brought into practice, without a single consistent idea to justify
their introduction for either improvement or utility.

Having formerly made some few observations upon the convenience of public repositories for the sale of horses by auction, I am induced, from a recent discovery, to add a single remark upon one of their local laws, indicative of great apparent probity in the proprietors of such receptacles, but replete with danger to those who consign valuable horses for sale, should the rules so made be preserved in. Since the publication of my former volume, a friend (upon my making an occasional journey to London) begged me to execute the commission of selling a sound five-year-old mare at one of the most fashionable repositories in the metropolis. Reaching London the day preceding the sale, and giving my instructions, I returned in the morning, and after amusing myself upon different parts of the premises, accidently approached the pulpit; upon which was fixed literary information, "That persons selling horses, warranted sound, on a Monday, were entitled to the money on Friday, and those so sold and warranted on a Thursday, might receive
payment on the following Monday; if, in the mean time, such horse or horses were not returned as unsound." The palpable absurdity of propositions so ridiculous and unjust instantly deranged all my premeditated plan of proceeding; for, upon re-considering my commission, and the conditions of sale, I found if the mare was sold at the hammer, I had not only to make a waiting job of four days in London for payment, but the chance of a lame mare at the expiration of that time instead of the money: for the purchaser, possessing the privilege of riding her for so long, might so do to any distance, or any degree of distress; and not approving her in every action, had only to confer the favour of a blow upon any particular part, to occasion temporary pain and limping, that might justify a return under the plea of unsoundness, rendering the seller a dupe to the force of credulity, and repositorial integrity.

Under the weight of indignation that naturally arose from serious reflections upon such an evident want of consistency in mutual conditions, that, we are naturally to conclude, should fix the standard of equity,
and prevent unfair preponderation in favour of either buyer or seller; I returned the mare to the owner without exposing her to sale, with an invariable determination, never to sell a horse of even ten pounds value, where the purchaser may not only possess the privilege, but sufficient time, to render him a complete cripple by hard riding or bad management, leaving me no consolation but my own acquiescence and extreme folly for repentance.

Taking into consideration the very tedious and expensive litigations that have been carried on in our courts of law, upon the subject of horses proving unsound some time after sale and delivery, I think it necessary (after proper reference to the definition of the word "sound," in the early part of the former volume) to introduce my own method of disposal, where I conceive the horse to be perfectly healthy and entirely sound at the moment of delivery.

A learned peer upon one bench may, under sanction of an eminent situation, and the advantage of coining a new law to answer
every particular purpose, dictatorially insinuate to a jury. "that a horse should continue sound for a certain number of days, weeks, or months, after the purchase;" and fix upon a stipulated sum for what he has condescended to term a "sound price;" ascertaining such opinion an invariable criterion for all future decisions at Westminster-Hall: or a worthy baron upon another, "that a man may lawfully correct his wife with a stick no bigger than his thumb." But however accurate such calculations may have been made by the very high and respectable authorities I allude to, they cannot be more free from casual exceptions, than the great infinity of rules where exceptions are always admitted.

However, as I confess myself one of those never implicity bound merely by matter of opinion, with an utter aversion to disposing of horses in Westminster-Hall, and experimentally convinced how very suddenly horses fall lame without a visible cause; as well as how frequently they are attacked with acute disease and rapidly carried off without any particular reason to be recollected, even from dissec-
tion; under the influence of these predominant facts, I have long since adopted a certain invariable mode of disposal that I conscientiously recommend, to prevent disgrace on one side, or dissatisfaction on the other.

My method is equally concise and decisive; if the horse is unequivocally sound, I am perfectly content to warrant him so, even upon oath, if required, to the hour of delivery, but not a single hour beyond it; for let it be held in memory, he is as liable to become lame, diseased, or a subject of dissolution, in that very hour, as in any other of his life. I am equally willing to show all his paces with hounds, or on the road, (according to his appropriation) but not mounted by a stranger, of whose qualifications in riding I know as little as he does of my horse in temper and action; and consequently, from a want of congeniality between the natural disposition of one, and corresponding pliability of the other, the horse might be shown to palpable disadvantage. For it may be relied on, and accepted as as a certain fact, that almost every horse will move
in another style, and display a very different figure, when crossed by one that he is accustomed to, who knows his tendencies, and the state of his mouth, than under the hands of one to whom he is totally unknown; all which they have natural sagacity to discover, in a much greater degree than is generally believed by those who have had but slender opportunities of attending to their perfections.

THE TURF,

THAT has totally dissipated some of the most splendid fortunes in a very few years, and left the possessors to lament, in indigence, the fatal effects of their credulity, and the folly of infection, is entitled to such few remarks as appertain to the prevalence of a fashion that has, within a very short space of years, involved not only numbers of the most eminent characters, but hundreds of inferior, in the general ruin. For the last half century this rage has been
so very predominant, that great numbers, even of the commercial world, could not withstand the force of temptation: to have a horse or two in training has been an object of the highest ambition, to the gratification of which, every other prospect or pursuit has been rendered subservient. The contagion has been in its effects so delusive, that lottery-office-keepers and pawnbrokers have been racing against the horses of peers of the realm, to the inevitable accumulation of debts, the defrauding of creditors, and the promoting of bankruptcies. This is not calculated to create surprise, when it is not only recollected in rumination, but confirmed by time and experience, that nothing but a fortune of immensity can stand against the enormous expense of breeding and training; the fluctuating uncertainty of the produce; and lastly, what is still more to be dreaded, the innate villany and studied deception of the subordinate classes, with whom your honour and property are eventually entrusted; and upon whose caprice, interest, villany, or integrity, you must unavoidably depend, to carry your purposes into execution.
However strange and unpromising this delineation may appear to the young and inexperienced sportsman, (who having no guile in his own disposition, does not suspect it in others) yet the projected viliianies are so numerous, and refined to so many different degrees of deception, that in the present state of sporting purification, it is almost impossible for any man to train and run a horse, or make a single bet upon their success, without falling into one of the innumerable plots that will be laid for his destruction. Exclusive of the experimental proofs we shall have occasion to introduce in corroboration of this remark, it may not be out of point to observe, that a late noble lord,* within my own memory, was so well convinced of this fact, that, when in the absolute possession of a stable of winners, he totally relinquished a pursuit of so much pleasure, and sold off his stud, rather than continue the standing prey of premeditated plunder; convinced by long and attentive experience, no moderate fortune or common sagacity could shield him from the joint rapacity of dependants, who were to parti-

* Onslow.
cipate in the constant depredation upon an individual.

To this prudent decision he was justly influenced by the eagerly expected return of his training groom from a summer expedition, with three running horses of some eminence, that had in their excursion of little more than four months, obtained possession of seven fifty-pound-plates. But after having received the different prizes, and discharged all contingent expenses, this faithful steward, by the dint of arithmetical proficiency, brought his master in debtor, upon the balance, upwards of fifty pounds. This imposition, or rather robbery, too palpable not to be discovered, his lordship with a degree of liberality, superior to personal altercation, immediately obliterated, and then declared his inflexible determination to discontinue both breeding and training; a resolution he steadily persevered in to the end of his life; nor has it been renewed by either of his successors, though there are in the family mansion, as excitements, several capital paintings of many of the first horses of
their time, that had been bred by their different predecessors.

This judicious resignation proved only a voluntary prelude to the wonderful annihilation of property that has compulsively followed with those of less prudence, penetration, or resolution; in corroboration of which, we are prevented by delicacy alone, from an enumeration of even the initials only of the names of many eminent and ennobled characters, (formerly possessed of princely fortunes) who now subsist merely upon the scanty savings from the wreck of indiscretion: stripped of the numerous stud and pompous appendages, to which their titles were blazoned forth in various lists, of "the famous high-bred running cattle," as well as the annual "Racing Calendar." Some few of the right honourable adventurers have escaped the "general ruin," and fortunately retain their possessions and undiminished studs; but they are so constantly contracting in number, that they serve only to establish the admitted exception to rules, in which we may
fairly infer their immense properties to have operated as preventatives.

This sport, that has for many years been so exceedingly prevalent, is at length declining very fast among the middle and inferior classes of people; and of this diminution the annual contribution of two guineas each to government is a sufficient proof, when it is known, that all the horses that run, paid, or received forfeit, in the united kingdom last year, did not exceed eight hundred; a number that does not much surpass the averaged half of horses supported in training some few years past; a circumstance that requires little further corroboration, than the numerous plates advertised in different parts, for the two or three last years, that were never run for, "for want of horses."

This falling off may be justly attributed to a combination of obstacles; the constantly increasing expense of training; the ministerial tax; the professional duplicity (or rather *family deception) of riders,

* Gamblers are known by the appellation of "The black legged family."
the heavy expenditure unavoidably attendant upon travelling from one seat of sport to another; the very great probability of accidents, or breaking down in running; with a long train of uncertainties, added to the infamous practices of the "black legged," fraternity, in perpetual intercourse and association with both trainers and riders; leaving the casual sportsman a very slender chance of winning one bet in ten, where any of this worthy society are concerned; which they generally are by some means, through the medium of occasional emissaries, mercenary agents, or stable dependants, in constant pay for the prostitution of every trust that has been implicitly reposed in them by their too credulous employers.

Such incontrovertible proofs may perhaps appear matters of mere conjecture and speculation to the young and inexperienced, who will undoubtedly believe with reluctance, what is so evidently calculated to discourage the predominance of inclination; and not having explored the regions of discovery, they may be induced to flatter themselves with an
opinion that such representation is a delusion intended much more to entertain than communicate instruction. However, that the business may be elucidated in such way as will prove most applicable to the nature of the case and the patience of the reader, it will be necessary to afford their practices such explanation as may render the facility of execution more familiar to the imagination of those, whose situations in life, or contracted opportunities, may have prevented their being at all informed upon the subject in agitation.

That these acts of villany may be the better understood, it becomes applicable to observe, that it is the persevering practice of the family, to have four, five, or six known good runners in their possession; though, for the convenience and greater certainty of public depredation, they pass as the distinct property of different members: but this is by no means the case, for they are as much the joint stock of the party, as is the stock in trade of the first firm in the city.

The speed and bottom of these horses are as accurately known to each individual of the brotherhood, and they are in general (with
out an unexpected accident, which sometimes happens) as well convinced before starting, whether they can beat their competitors, as if the race was absolutely determined.

This, however, is only the necessary groundwork of deception, upon which every part of the superstructure is to be raised: as they experimentally know how little money is to be got by winning, they seldom permit that to become an object of momentary consideration; and, being no slaves to the specious delusions of honour, generally make their market by the reverse, but more particularly where they are the least expected to lose; that is, they succeed best in their general depredations by losing, where their horses are the favourites, at high odds after a heat or two, when expected to win to a certainty, which they as prudently take care to prevent.

This business, to ensure success and emolument, is carried on by such a combination of villany, such a sympathetic chain of horrid machination, as it is much to be lamented could ever enter the minds of degenerate men for the purposes of destruction.
The various modes of practice and imposition are too numerous and extensive to admit of general explanation; the purport of the present *epitome* or contracted description being intended to operate merely as a guard to those, who are totally unacquainted with the *infamy* of the party, whose *merits* we mean to describe.

The principal (that is, the ostensible proprietor of the horse for the day) is to be found in the centre of the "*betting ring,"* previous to the starting of the horse, surrounded by the sporting multitude; amongst whom his emissaries place themselves to perform their destined parts in the acts of villany regularly carried on upon these occasions; but more particularly at all the meetings within thirty or forty miles of the metropolis. In this conspicuous situation he forms a variety of *pretended bets* with his confederates, in favour of his own horse; such bait the unthinking bystanders immediately swallow, and proceeding upon this show of confidence, *back him themselves*: these offers are immediately accepted to any amount by the emissaries before mentioned,
and is in fact no more than a palpable robbery; as the horse, it is already determined by the family, is not to win, and the money so betted is as certainly their own as if already decided.

This part of the business being transacted, a new scene of tergiversation becomes necessary: the horse being mounted, the rider is whispered by the nominal owner to win the first heat if he can; this it is frequently in his power to do easy, when he is consequently backed at still increased odds as the expected winner; all which proposed bets are instantly taken by the emissaries, or rather principles, in the firm: when, to show us the versatility of fortune, and the vicissitudes of the turf, he very unexpectedly becomes a loser, or perhaps runs out of the course, to the feigned disappointment and affected sorrow of the owner; who publicly declares he has lost so many "score pounds upon the race," whilst his confederates are individually engaged in collecting their certainties, previous to the casting up stock at the general rendezvous in the evening.
To this plan there is a direct alternative, if there should be no chance (from his being sufficiently a favourite) of laying on money in this way; they then take the longest odds they can obtain that he wins, and regulate or vary their betting by the event of each heat; winning if they can, or losing to a certainty, as best suits the bets they have laid; which is accurately known by a pecuniary consultation between the heats. From another degree of undiscoverable duplicity their greater emoluments arise: for instance, letting a horse of capital qualifications win and lose almost alternately at different places, as may be most applicable for the betting for the day; dependent entirely upon the state of public opinion, but to be ultimately decided by the latent villany of the parties more immediately concerned.

These, like other matters of magnitude, are not to be rendered infallible without the necessary agents; that, like the smaller wheels of a curious piece of mechanism, contribute their portion of power to give action to the whole. So true is the ancient adage, "birds of a feather flock together,"
that riders may be selected, who will prove inviolably faithful to the dictates of this party; that could not or would not reconcile an honourable attachment to the first noblemen in the kingdom. These are the infernal deceptions and acts of villany upon the turf, that have driven noblemen, gentlemen, and sportsmen of honour, from what are called country courses, to their asylum of Newmarket; where, by the exclusion of the family from their clubs, and their horses from their subscriptions, sweepstakes, and matches, they render themselves invulnerable to the often-envenomed shafts of the most premeditated, and in general well-executed, villany.

Without entering into a tedious description of the many possible means by which depredations are committed upon the property of individuals, whom fashion or inclination prompts to sport their money upon such occasions; yet, to render these villainous practices more familiar to the minds of those who may incredulously doubt the possibility of deceptions of this kind, instances must be adduced to establish the certainty, of
which there have been too many public proofs to require the specification of any particular fact for the purpose. It may suffice to observe, it is universally known such villanies have been repeatedly discovered; where the owners have been notoriously disqualified by advertisements from ever running their horses, and those riders from riding, at the place where they have been so justly stigmatized, and so properly held in the utmost contempt.

Upon so precar.ious a tenure does every sporting man of spirit retain his hope of success, that I will be bound to verify the assertion by innumerable instances, that no man living can breed, train, and run his horses to insure even a probability of emolument, by any honourable means whatever. Noblemen and gentlemen of immense fortunes, to whom it is an amusement, and who never know the want of annual receipts, in a repetition of thousands, may indulge themselves in a gratification of their predominant wishes, and feel no ill effects from a variety of losses, or perpetual expenditure.
It is not so with those of inferior property and situation; as may be plainly perceived in the great number who become rotationally infected with the experiment of training for one summer, but never repeat it. This is not at all to be wondered at, when we recollect, that after all the expense, trouble, and anxiety, you have exposed yourself to, for the very distant chance of obtaining a fifty-pound-plate or two, with various deductions, you are at last under the unavoidable necessity of resigning the bridle into the hands of a man, who may perhaps prove one of the greatest rascals among the groupe we have already described. For, when thus selected for so important a trust, it may so happen, you have never seen him before; nor may he ever see you again; on the contrary, he may be connected with a little host of colleagues upon the course, with whom he is perpetually concerned in acts of reciprocal kindness and joint deprecation.

From such dangerous delegation, you can form, upon reflection, no hope of success; unless your horse, by the rider's endeavour
to win, should prove productive of bets, best suit ing the convenience of the family. However, to render this perfectly clear, let us confirm the fact by a statement not to be misunderstood. Suppose the owner of a horse compensates a rider, that he engages from an idea of his superior ability, reputed integrity, or upon recommendation, with a promise of five guineas certain to ride according to instructions for each heat, and a conditional five or ten extra, if he wins. What can be the utmost emolument to him by winning? Why, as before stated, either ten or fifteen guineas! While, on the contrary, if the horse is of character and qualifications, and the odds run a little in his favour for the last heat; the industrious efforts of the rider’s confederates, who are taking those very odds laid upon the horse, (that it is already pre-determined shall lose) they accumulate and divide much larger sums to a certainty, without the chance of losing a single guinea.

I shall not descend to an enumeration of a variety of practices that render plunder
equally safe from detection; as giving a horse water in the night previous to the day of running; or throwing a mild cathartic or strong diuretic into the body, to produce indisposition, and prevent the possibility of a horse winning, when it is determined by the cabinet council, that it is for the general good he must lose. If any rational being, any generous unsuspecting sportsman, or any juvenile novice has the most slender doubt remaining of these practices, let me render the matter decisive, and bring it to a necessary conclusion, by a single question that will not require a moment's discussion in reply.

By what other means than those already described between the family and the riders, have the numbers that are well known, and that we constantly see in the height of business in every populous betting-ring, arisen to a state of opulence? What can have exalted men, who were bankrupts in trade: post-chaise drivers, hair-dressers, waiters, footmen, nay, the lowest class of gamblers, (that ab-
solutely raised contributions among the most wretched, by even the infamous practices of "pricking in the belt," and "hustling in the hat,") to their phaetons, horses in training, and conspicuous seats in the first fashionable betting stands, among the most eminent characters in the kingdom, but such acts of premeditated and deep-laid villany as no man living can be guarded against, if he embarks or ventures his property amongst a set of ruffians, that are not only a notorious pest to society, but a dangerous nuisance and obstruction to one of the noblest diversions our kingdom has to boast?

Under such numerous disadvantages, it must prove palpably clear to every observer, that none but sportsmen, with fortunes of the first magnitude, can conscientiously enjoy the pleasure of breeding, training, and running their horses, without the perpetual dread of approaching ruin: in fact, of this such a repetition of proofs have transpired within the last twenty years, that the least descriptive corroboration becomes totally unnecessary.
For my own part, I am decisively and experimentally convinced, no man in moderate circumstances, who cannot afford a daily prostitution of property for the incessant gratification of dependent sharks on one hand, and the perpetual supply of deceptive villains on the other, can ever expect to become the winner of match, plate, or sweepstakes, unless he happily possess the means and situation to go through the business of training under his own roof, and riding his own horse; or fixing firm reliance upon some faithful domestic, properly qualified, totally unconnected with the contaminating crew, whose conduct we have so accurately delineated, without an additional ray of exaggeration. But as my declaration of proof collected from experimental conviction, may not be generally accepted as sufficiently authentic, without some more powerful evidence than bare superficial assertion, I must beg permission to conclude these observations, upon the present state and various impositions of the turf, with the communication of a few personal occurrences, that I doubt not will contribute
some weight to the opinions I have submitted to public consideration.

In the summer of 1775, I ran a match of four miles, carrying twelve stone, with a gelding got by broomstick, against a mare, the property of a gentleman of considerable fortune in the county of Essex, for fifty guineas. His extensive property was conspicuous in an elegant mansion, a paddock of deer, a pack of harriers, and a liberal subscription to a neighbouring pack of fox-hounds. That we might be equally free from even a chance of the deception in riding I have just described, we trusted to our own abilities in jockeyship, for a decision in which I conceived our honour and property were equally concerned. The match however was decided against him with perfect ease, upon which he lost some considerable bets; but in the mortification of his disappointment, affecting to believe it was won with much difficulty, he proposed to run the same match on that day fortnight upon my consenting to give him five pounds, or, in other words, to reduce his weight to eleven stone nine. This was instantly acceded
to, and many bets made in consequence, among our neighbouring friends; but previous to the day of running, having accepted an invitation to his house, he there most honourably offered to pay me the five-and-twenty guineas, *before the race*, if "I would obligingly condescend to let him win." I have a firm and anxious hope, that every sportsman of integrity, whose feelings vibrate in unison with my own, and who reads this proposition with the indignation it is recited, will do me the justice to consider it more proper that he should conceive, than becoming in me to relate, the particulars of my behaviour upon such occasion. It must suffice to say, I rode over the course without a companion; and as the match was made *play or pay*, received the payment for my consolation. There are numerous and very powerful reasons why I forbear to make a single remark upon this business; leaving it entirely, with its infinity of annual similitudes, to the different impressions it may make upon the principles of the different readers to whom it will become subject.

*This was only a single attack, consequently*
parried with much greater ease than when assailed by an almost incredible combination of villany, in running a match for the same sum a few years since, upon one of the most populous and fashionable* courses in the kingdom. But having then as before, the same invariable opinion of the duplicity practised in training and riding, I had never permitted the mare out of my possession, or from under my own inspection from the hour she was matched to run; or intended her to be rode by any other person, than a lad of my own, that literally speaking I initiated in stable management, and trained with the mare for the purpose.

Thus entrenched by prudence, and fortified by experience, it was impossible for those concerned against me, either by their numerous emissaries, or industrious adherents, to obtain the requisite intelligence of trials, sweats, or, in fact, any necessary information, by which their intentional villany could be promoted with a probability of success. But as adventurers of this com-

* Ascot.
plexion are never disconcerted by trifling obstacles, it will create no small degree of surprise, to those at not all apprised of the various shifts, inventions, and schemes of villany in constant practice upon the turf, to be informed of the innumerable and remote contrivances, eternally adopted for the promotion of robbery and depredation upon others; as well as the execution of their intents upon me, which, however, very fortunately did not succeed.

On the day of running, having removed my mare from my own stable to a recluse and convenient house within two miles of the course; locked her up by five in the morning, and consigned my lad to his pillow, (to prevent either conversation or communication) I was almost immediately inquired for by a jockey, of some eminence, whose ability is held in tolerable estimation. Being just then in the act of taking breakfast, and the parlour door having been left a very little open, I could just distinguish the parties; and distinctly heard the inquiring rider say to his companion, "If he'll let me ride her, I'll do him, by G-d." "Nay,
then I have an eye upon you," was a quotation that struck me with the full force of the author. Luckily shielded with this confidence, I philosophically made my appearance; when this honest, worthy, immaculate type of turf integrity made an apology for the liberty of troubling me, "but he understood I had a mare to run that day; that the opposite party had not used him well in some previous concerns; he wished to be revenged, and with my permission he would ride the mare gratis, in which he would exert his greatest ability, and did not doubt but he should be able to beat them out of the world."

I was thankful to a degree of humiliation for the liberality of his offer, perfectly conscious of his kindness, and voluntary attention to my interest; but I was obstinately determined to stand or fall by the effect of my own management, under the additional disadvantage of a young and inexperienced rider.

Previous to the day of running, I had repeatedly and carefully instructed my own lad in every minutiae it became necessary to
have in constant remembrance; naturally concluding to what an infinity of attacks and deep-laid schemes he would be eternally open previous to the hour of starting. I had particularly cautioned him not to deliver a weight out of his pocket from the time of weighing to his return to the scale after the race, upon any account whatever; nor to pull up till he was considerably past the winning-post; nor to make even an effort to dismount till I led his horse up to the scale. All these very fortunately proved propitious precautions; for not one of the whole but was individually attacked with a well-supported hope and unremitting expectation, of rendering us dupes to an established course of villany, that it is to be regretted so frequently succeeds.

When just going to start, a real friend, or rather an honest man, who had that moment heard the secret transpire in a whisper, came and told him, they had weighed him ten stone four pounds, placing four pounds, in his pockets more than he was entitled to carry; advising him to ride up to the scale and insist upon being re-weighed; but adhering
closely to my instructions, he refused to dismount, or relinquish a single weight, and absolutely won his match with four pounds more than he should have carried. Fifty yards before he reached the winning-post, one of the party clamorously commanded him to pull up, saying, "the other would never overtake him; the moment I had his horse by the bridle leading him to the scale, another vociferously enjoined him "to get off, and not distress the mare;" either of which, not previously guarded against, but inadvertently complied with, must have inevitably lost the very considerable sum I had depending upon the event.

But to confirm beyond every shadow of doubt this horrid scene of deliberate villany and deception; while the mare was rubbing down at a small distance from the course, after winning the race and receiving the stakes, a person came and made inquiry, whether a jockey had not been with me that morning early, making an offer to ride my mare, gratis?" Upon my answering in the affirmative, he assured me I had a very narrow escape; for "he had sat the pre-
ceding evening in an adjoining room, divided only by a deal partition, and heard the entire plan formed by the party concerned; that if I consented to let him ride, my mare was to lose, and he was to be rewarded.”

However trifling or superfluous a recital of these circumstances may appear to the well-informed and long-experienced sportsman, they are no less necessary with the juvenile adventurer, to establish the existence of facts, and expose the various means of almost inexplicable *duplicit y, invention, and imposition*, by which the opulent, liberal, and inconsiderate are so frequently reduced to a state of repentant destruction. Their introduction will consequently serve to render incontrovertible the proof of such practices; and to demonstrate the *folly and danger* of encountering so great a complication of deliberate villany and systematic depredation, where there must ever remain so confused a prospect of extrication, with either *success or emolument*. Under the influence of such reflections as must naturally arise from a knowledge of, and retrospective allusion to, such incredible acts of
villany in constant practice, every reader will be enabled to decide, whether it can possibly tend to the promotion of his pleasure, interest, or safety, to suspend any part of his property by such doubtful dependencies. Conscious of no motive for the exposure of such abstruse deception and complicated destructive villany, but an anxious contribution to the general good, I am most earnestly induced to hope the purity of intention may lay some claim to the stamp of public approbation, however deficient my slender abilities may have proved in the execution.
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FINIS.

CURSORY ACCOUNT
OF THE
VARIOUS METHODS
OF
SHOEING HORSES,
HITHERTO PRACTISED;
WITH
INCIDENTAL OBSERVATIONS.

BY
WILLIAM MOORCROFT.

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TO THE

RIGHT HONOURABLE

FRANCIS AUGUSTUS

LORD HEATHFIELD,

BARON HEATHFIELD OF GIBRALTAR,

LIEUTENANT GENERAL IN HIS MAJESTY'S SERVICE,

AND COLONEL OF HIS MAJESTY'S TWENTIETH

REGIMENT OF LIGHT DRAGOONS.

My Lord,

That a large proportion of the horses in this country are rendered useless by diseases in their feet, long before the strength of their bodies becomes in any material degree impaired, is a fact of general notoriety.

The feet are certainly more exposed to wear than any other part of the body, and thence, are necessarily more subject to disease; yet lamenesses in these parts do not so much arise from the labour the horse undergoes, as from circumstances connected
with shoeing. To lessen materially the number of these accidents, is an object of perhaps more importance, than to discover the best manner of treating any particular disease to which the horse is incident; as the former occur every day, the latter, comparatively, seldom. This, therefore, must serve as an apology, for offering to the public, my opinions on Shoeing, rather than on any other branch of Veterinary Science.

It has been long observed, that certain shapes of shoes produced lameness more frequently than others; from which it follows, that there must exist certain principles as to the construction of the shoe, and as to the manner of its being applied to the foot, which, if carried generally into practice, would afford a more firm support to the weight of the body, and cause the foot to retain its natural figure and soundness, for a much longer time than is now found to be the case. In the following sheets, I have endeavoured briefly to shew what these principles
are; and in doing this, I have not been so desirous of displaying novelties of practice, as of bringing forwards what is of most utility. Hence it may seem, that in some instances, I have borrowed ideas from other writers; and this may be true, without my being conscious of it; as many of these ideas have taken root in my mind so deeply, as to render it impossible for me to distinguish such as were started by others, and have been confirmed or denied by my own experience, from such as have arisen from my own practice alone.

Whilst investigating the principles of Shoeing, I became aware, that although I might ascertain what shape or construction of shoe was best adapted for general use, it was indispensably necessary, at the same time, in order to its being generally introduced, that it should be in the power of the most indifferent workman to forge it, at least as easily as one of the most inartificial form. For if much skill was required to
manufacture such a shoe, it could obviously be only made by good workmen, and would necessarily be sold at a higher price, than one in the making of which less labour and skill were employed. And farther, it would naturally lead a workman, in all instances, to recommend and adopt such a shoe as he could make with the greatest ease and profit; and to decry such as it was beyond his power, or incompatible with his profit, to manufacture. Now, unfortunately, it appeared, that the shoe which afforded the prospect of becoming the most extensively useful, required much accuracy of workmanship, and was therefore liable to the objections just adduced.

The probable employment of such a shoe was so limited, as to promise little benefit to the public at large, or little advancement to this branch of science. It seemed essential, to reconcile the interest of the farrier with that of the public; and this appeared only attainable by improving the art of manufac-
turing the shoes. The great advantages derived from introducing machinery in lieu of manual exertion, in many of the mechanical arts, naturally led me to consider of a mode of applying it to this purpose.

And whatever my expenses, whatever my anxiety in making a great variety of experiments may have been, I feel myself already in some degree recompensed by the reflection, that I have prosecuted to the utmost of my power, a subject in the immediate walk of my profession, and which appears to involve a matter of some interest to society. However, I trust, that at a period not far distant, I shall be enabled to offer to the Public, better shoes than have usually been made, at a reasonable price, and that in such a way as will promote the interests of farriers in general. As a manufacturer of Horse-shoes, I hold it incumbent on me to recommend that principle of shoe, which my past experience has shewn to be the best:
and I disclaim any other merit, than that of having, by means of machinery, procured at an easy price, the use of an article which was not before easily attainable.

I should not discharge the duty I owe to the public, and to myself, were I not at this moment, to urge the necessity of attending to certain principles in shoeing, in order to guard, at any future time, against the attempts of persons to pass off shoes, of which the only recommendation may be their immediate cheapness. In this, I mean nothing personal. With regard to the shoes made by my machinery, I rest my expectations of the public opinion, both as to their form and other properties, on the result of public experience, being well assured, that the trial will be fair, and the verdict just.

In the prosecution of this plan, I have experienced much kindness and patronage from many gentlemen; but from your Lordship in particular, I have uniformly and unre-
mittingly received encouragement and support, to a degree of which I am unable to express my feelings.

I trust I shall be forgiven, when I add, that I am the more flattered by your Lordship's approbation, from a conviction, that the good opinion of one so eminently qualified to judge of the subject, will, in the eye of the world, give a sanction to the invention, which I could not have ventured to hope for from any exertions of my own. Allow me, therefore, to subscribe myself, with respect and gratitude,

My Lord,
Your Lordship's much obliged,
and obedient Servant,

WILLIAM MOORCROFT.

Oxford Street,
March 25, 1800.
CURSORY ACCOUNT, &c.

If a horse were to go without any defence to his feet, on the pavements or roads in this country, the outer parts of the foot would unavoidably be broken, worn, or otherwise injured in a very short time.

Shoeing is obviously intended to prevent these evils.

Experience, however, daily proves, that shoes occasion many alterations in the form of the hoof, and various diseases in parts within it, which do not occur when the foot is exposed to wear in its natural state: but, as it is admitted on all hands, that some coating or defence is absolutely necessary to guard this part from injury when a horse is worked, it becomes of importance to inquire what kind of shoe is best adapted to this purpose, and is of itself attended with the fewest inconveniences.

A review of the history of Horse-shoeing shews, that within the last hundred years, shoes
of a great variety of forms have been strongly recommended to the public at different times. Each of these has been tried by individuals; each has had a temporary success; each has had its partisans; but none have ever been generally adopted. From this variety in the forms of shoes it is evident, that the first principles of shoeing have never been established so as to place the subject beyond all dispute; and it is the object of the present treatise to lay before the public some plain facts, which may tend to demonstrate the comparative merits of the different methods of shoeing hitherto practised. To do this, it is not necessary either to enter into an anatomical detail of the structure and natural history of the internal parts of the foot, or into a minute description of the external parts; with the division of which, into crust, sole, bars, and frog, it is presumed every one interested in the subject is sufficiently acquainted: but it may not be improper to mention some of the general functions of those parts which form the bottom of the foot, and are more particularly connected with the subject of shoeing.

The crust constitutes the principal and constant support of the foot.

The sole ties the lower edge of the crust toge-
ther; by its upper part forming a strong arch it affords a firm basis to the bone of the foot, and by its strength it defends the sensible parts within the hoof.

The bars are ridges, which like buttresses strengthen the sole, tend to prevent the sides of the foot from coming too near each other, and form a support and defence to the foot joint. The frog is composed of horn, of a nature much softer and more elastic than the rest of the hoof. It is intended to support a part of the weight of the body, to break the shock when the foot strikes violently on hard ground, to act as a spring in raising it, to steady the foot in slippery ground, to relieve it from the pressure of the atmosphere in deep ground, and as a wedge to keep asunder the heels.

The whole of the hoof is lined by a substance which has a very acute sense of feeling, and which it is of the utmost importance to guard from injury.

The lower edge of the crust is the part most exposed to wear, and consequently most in need of artificial defence. The sole, and especially that portion of it which joins with the crust, is next most liable to be injured; but the frog and
bars would scarcely suffer at all were the foot to remain unshod.

The following is a section of a foot crosswise, shewing the relative thickness and situation of the crust, sole, and frog.

It must be admitted as a general fact, that the greatest part of the weight of the body is supported by the shoe; and it must be equally obvious, that this support will be the more effectual the greater the surface on which it rests.

It happens, however, that the parts of which the bottom of the foot is composed, cannot all bear the same degree of pressure without being injured; hence, therefore, it becomes necessary
to confine the bearing to those parts which are found capable of supporting the whole of the weight without injury, and to prevent any pressure from taking place on those which would be injured by it.

Now, long experience proves, that the sensible parts within the hoof do not suffer if the crust or wall have a proper bearing on the shoe; but that if the horny or outer sole bear upon the shoe in any considerable degree, then the sensible or inner sole being pinched between the iron and horny sole below, and the bone of the foot above, the horse is lamed. It must follow, therefore, that in proportion as a greater quantity of the crust is brought to bear flat on the shoe, the firmer the horse must stand; and the less likelihood there is of any pressure taking place between the sole and the shoe, the less chance will there be of his being lamed.

These principles ought to be kept constantly in view, and a shoe should be considered more or less perfect as it corresponds with them.
OF SHOES FOR THE FORE FEET.

Of the narrow Shoe, or Plate.

A flat shoe, of the exact breadth of the crust, and of a moderate thickness, would defend this part sufficiently as long as it lasted; but as it would wear out in a few days, or even in a few hours, when the friction happened to be violent, and as very frequent shoeing is expensive, as well as hurtful to the hoof itself, this kind of shoe is only fit for racing, or hunting on soft ground.

It becomes adviseable, therefore, for the sake of longer wear, that the surface of a shoe be made broader than what is absolutely necessary for the sake of support; and this additional surface should be disposed in such a way as may be least likely to produce inconvenience to the foot.
Of the Shoe with a flat upper Surface.

A shoe perfectly flat on its upper surface, such as is here represented, and broader than the crust, would in many cases press on part of the sole, if the sole were to be left entire; but, in order to prevent this, it has been recommended to cut away part of the sole itself, so as to form a hollow between it and the shoe. It can scarcely be doubted but that a cavity between the shoe and the sole is necessary, not only to prevent actual
pressure, but also to admit a picker to remove dirt, which if not taken away would produce the same effect as if the sole itself were to rest on the shoe.

But though by this means the crust is certainly brought to bear on the shoe in its whole extent, and pressure on the sole is avoided; yet cutting away the sole must necessarily weaken it, and by continually putting on the stretch the bands which tie the bone of the foot to the crust, and which sling or suspend it within the hoof, make them less capable of resisting the constant pressure downwards.

Indeed, when a flat shoe is applied to a foot of which the sole is much cut away every time of shoeing, it will frequently happen that the sole will gradually lose its natural hollowness, and becoming flat around, constitute what is usually termed a pumiced foot. But if a hollow or very sloping shoe be employed, the hollowness of the sole will become greater than natural, in consequence of this part being forced upwards by the crust pinching it on all sides, whilst the weight of the body squeezes the lower edge of the foot down the slope of the shoe. This practice of cutting away the horny sole likewise, by depriving the sensible sole of a portion of its na-
tural defence, renders it subject to be bruised or wounded by stones or other hard bodies.*

This figure shews the sole cut away as lately recommended, in order that the shoe with a flat upper surface, as here represented, may not come in

* Feet become *pumiced* also from general inflammation of these parts; this constitutes the disease which is usually called *founder*: they also become *contracted* from injuries done to the coffin joint. If these defects come on gradually and slowly, they may be considered as connected with the method of shoeing, and may to a certain degree be remedied; but if they come on rapidly, they may be attributed to the causes just mentioned, and, generally speaking, they do not admit of a complete cure. From want of knowing, or of attending to the different causes of these alterations, much disappointment and expense have occurred, and more especially in cases of contracted feet; when, after filing away the
contact with it. The lower surface of this shoe is hollow, and consequently on hard ground can only rest on its outer edge.

Of the common Shoe.

The shoe in common use has its upper surface hollow, or sloping, regularly from the outer crust, which has been recommended as a specific, blistering the coronet, steeping the feet in warm water for several hours a day for months together, and turning out afterwards in moist land, it has proved that although the contraction was removed the lameness continued.
to the inner edge, and was probably so formed originally, to avoid pressing on the sole when left with its full thickness; but though this slope may at first prevent any pressure on the sole, yet ultimately it produces many and serious mischiefs.

To give a general idea of the principal inconvenience arising from it, viz. contraction of the foot, it is necessary to observe that the hoof of a colt, which has never been shod, is nearly of a circular figure, and it may therefore be concluded that this form is best adapted to the different purposes of the foot. It is certain, however, that by far the greater number of the hoofs of horses which have been regularly shod for a considerable time, become longer from heel to toe, and narrower from side to side, but never shorter and broader.

The alteration of the lower part of the foot from a circular to an oval form, takes place gradually, and whilst it is going on, the thickness of the crust, in various parts, also undergoes a change; that is to say, at the toe it becomes much thicker than is natural, and, in a corresponding degree, thinner towards the quarters and the heels; and as this change always accompanies the lengthened state of the foot, it may be inferred that they both depend on the same causes.
When the foot has acquired an oval form, it is said to be contracted, although, in fact, there is no loss of crust, this substance being only improperly disposed.

The toe of the contracted foot is somewhat more pointed and sloping than it should be, the quarters are flatter and more upright, the sole more hollow, and the heels nearer together than they ought to be.

As in preparing the foot for the shoe the crust is generally cut rather sloping, so that its outer edge is left somewhat higher than that which joins the sole, and as the upper surface of the shoe slopes in an opposite direction, it is evident that only the outer edge of the crust can come in contact with the shoe, as is shewn below.
This bearing part is, indeed, able to support its proportion of the weight of the body, but it certainly is not capable of sustaining as much, with safety to itself, as if the whole of the crust were to rest on the shoe, and hence, from the excess of pressure, it is frequently crushed down and broken off. The shoe is usually put on so as to project a little beyond the crust, and the foot does in effect stand in the hollow of the shoe upon an edge, or narrow line, instead of being supported by a flat surface: and as the weight of the body reposes upon this narrow line of crust, which is in contact with the shoe, it naturally, and continually, tends to press the foot down the sloping surface of the shoe, into too small a compass, and thus this slope becomes the principal cause of oval and contracted feet.

The sloping surface of the two opposite branches of the shoe, acting like wedges upon the heels of the hoof, force them nearer together, and these are observed to be the parts of the foot which first give way to the pressure.

Whilst the contraction is going on in the outer part of the foot, the sensible parts within suffer more or less from compression; and hence lameness is a frequent attendant on contracted feet. The crust being forced inwards by the side
pressure at the heels, as just stated, and the sensible sole becoming therefore squeezed between that and the bar, is bruised, and blood oozing from it into the insensible sole, forms a red spot, which is called a corn.*

It may easily be imagined, that from the toe being longer than natural, the horse must be liable to strike it against irregular ground, and that, from the foot being narrower, he must stand unfirm; and it is well known, that horses having very long and narrow feet, are much disposed to trip and stumble.

From what has been before stated, as well as from a general view of the whole subject, it appears that a shoe ought to possess the following qualities.

It ought to be so strong, as to wear a reasonable time.

It ought to give to the crust all the support it can receive.

It ought not to alter the natural shape of the foot; and

It ought not to press at all on the sole, nor to injure any of the natural functions of the foot.

* Corns are likewise produced by the sole resting directly upon the shoe.
Of the Seated Shoe.

The shoe best calculated to answer the purposes just mentioned, is that so strongly recommended by Mr. Osmer and Mr. Clark. The upper surface of this shoe consists of two parts; an outer part, which is a perfect plane near the rim, corresponding with the breadth of the crust, and called the seat; and an inner part sloping from the seat, and distinguished by the name of the bevel.
The seat is obviously intended to support the crust in its whole extent, the bevel to lie off the sole; and this part being made more or less broad, according to the kind of work proposed to be done, will give the requisite strength to the shoe.

As the whole of the crust bears on the seat, it is less liable to be broken than when only a small part of it rests on the shoe. In consequence, likewise, of the crust resting on the flat seat, the weight of the body has a tendency to spread the foot wider in every direction, rather than to contract it, as has been observed to happen with the common shoe: and it has in fact been found, in various instances, that a foot contracted by the common shoe, and afterwards shod with the seated one, has become wider without the horse having been taken from his usual work; and again, that a foot being of a full size and proper form when first shod with the seated shoe, has retained the same size and form without the slightest alteration, as long as the seated shoe was used.*

* On the 19th of November, 1797, a charger belonging to Lord Heathfield, was shod on his fore feet with seated shoes, struck in dyes, after the manner by which money is coined. The same individual shoes have been worn ever
By the slope or bevel in the shoe, a cavity is formed between it and the sole, sufficient to admit a picker, and to prevent pressure on this part, without the sole itself being hollowed, and consequently weakened.

For if it be one of the functions of the horny sole to defend the sensible sole, of which, from its situation and nature, no one can doubt, it must be evident, that the more perfect it is left, the stronger it must necessarily be, and of course the more competent to perform its office.

The value of every practical object is best ascertained by experiments; and the results of the trials with various shoes, which have engaged the attention of the Author for several years past, have been decidedly in favour of the seated shoe. And, though he is not sanguine enough to sup-

since that period to the present day, the 25th of March, 1800. They have been removed regularly once every month, in order that the superfluous growth of the hoof might be taken away, but have never been altered in the slightest degree during this time except once, when it was found necessary to make each shoe a quarter of an inch wider at the heels, on account of the feet having spread so much, although they were of a very good proportion when the shoes were first put on. This case is brought forwards, not to prove the superior wear of these shoes, but to shew that this principle has produced all the advantages, which could be expected from any shoe.
pose, that this shoe will prevent lameness in every case, he is, nevertheless, warranted by experience to assert, that it will diminish its frequency.

As this shoe has been long known, it may appear extraordinary that it has not been more commonly employed; and this circumstance might lead to a suspicion, that either farriers in general are unacquainted with its real advantages, or that, though in theory it may appear preferable to all others, yet that in actual practice it does not maintain its superiority. Neither of these positions, however, is well founded, for the Author can, with confidence assert, as a general fact, that when a farrier is applied to for a pattern shoe of that figure, which from his judgment and experience he would most recommend, and for which, on such occasions, a much higher price is given, the seated shoe is in much the greater number of instances preferred to every other. This must be considered as a sufficient proof, that farriers are aware of its superiority, and the trials made by individuals have established its practical advantages beyond all doubt.

But it is not extraordinary, that a tradesman should endeavour to turn his labour to the greatest account, nor that the consumer of any article
should, in most cases, be seduced by cheapness.

The plain truth is, that a seated shoe cannot be made, in the way shoes are usually manufactured, at such a rate as to afford a reasonable profit at the common price of shoeing; while a sloping shoe requiring much less labour, can be sold to advantage at that price.

This circumstance, therefore, which no man conversant with the subject will venture to deny, explains sufficiently why farriers have adopted this shoe in general practice, in preference to all others, although it has never been recommended as the best.*

The use, therefore, of the flat shoe, with the practice of hollowing the sole, must be considered

* It has become a kind of fashion lately to declaim against the ignorance of farriers, and in no instance more than in what regards shoeing; yet, perhaps, more is urged against them in this respect than there is just cause for. It is not here meant to enter into a defence of many practices, relative to shoeing, which a more scientific inquiry, in latter times, has proved to be erroneous, nor to contend that there has not been much to censure in general; but justice impels the Author to remark, that he has sometimes met with farriers, who have possessed more real information than is to be found in the writings of those who have been so severe against them; and it must be remembered, that long continued practice and accumulated experience, furnish us with facts which no speculative disquisition or scientific research can afford.
as an acknowledgment of the propriety of the principles just laid down, with this difference only, that the means of avoiding pressure on the sole by the flat shoe, consist in cutting away part of the sole itself, whilst with the seated shoe part of the iron is removed, and the sole is left with its natural thickness, as appears from the following figure.

Of the lower Surface of the Shoe.

As a general principle, it must be acknowledged that the surface of the shoe, which is intended to bear on the ground, should be of such a form, as will afford the firmest tread.
Now a flat surface comes in contact with even and hard ground in more points than any other, and is therefore unquestionably the best: but to prevent a horse from slipping in soft and hilly ground, it is contended that the surface of the shoe should be rough; for hunting it has therefore been recommended that the lower surface be grooved, or that it be divided into two parts.

But the grooves soon fill up with dirt, and then this surface becomes flat, with the disadvantage of the shoe itself being weakened by the grooves.

And although when the surface is divided into two parts, like that next the foot, it certainly does afford a steady and firm tread in soft ground, yet the shoe is so much weakened by the bevel on both sides as to be very liable to be pressed against the sole; and should a horse so shod be ridden violently over stones or hard ground, the shoe would soon be worn thin by the friction being confined to the outer edge, and would break or become wider. In either case the nails would tear away with them the outer edge of the crust, and thus expose the sensible parts within the hoof to the risk of being injured at the next shoeing; and, at the same time, rob the foot of a portion of its natural support. A
narrow shoe with a flat surface will be found to possess more advantages for hunting than any other kind, and for common use a flat surface will also prove to be the best, both for security of tread and for wear.

Of Caulkings.

Formerly it was a general custom to use what were called caulkings, which were made by bending the ends of the shoe. These were intended to prevent the horse from slipping; and as at the time when they were first used the roads were not made of such hard materials as they are at present, the caulking sunk into the ground, and the bottom of the foot had a pretty equal bearing upon it. This practice, therefore, was not attended with the mischiefs which ensued when the public roads were made more solid and even.

For when the caulking cannot sink into the ground, they raise the heels so much as scarcely ever to allow the frog to touch it, and thus prevent that degree of friction and pressure which is essential for keeping this part in a healthy state; for if the perspirable matter be not rubbed
from off the frog occasionally, it becomes putrid, and dissolving the surface where it chiefly accumulates, produces what is called a running thrush, which leads to the destruction of the part.

And as when the frog is ulcerated and rotten, it can scarcely afford such resistance as is necessary to keep the heels at their original distance, even when the crust rests on a flat surface, it necessarily gives way more rapidly than a sound frog to the pressure of the weight of the body, forcing the heels towards each other down the sloping surface of the shoe in common use. In consequence, likewise, of the heels being thus raised, the weight is thrown forwards upon the toe, the knees are weakened, and the fetlock joints are strained.

From the improved state of the roads, caulkings have gradually become less general, and, at present, two on each shoe are used for heavy draught horses alone; for the lighter kind, one on each shoe is employed; whilst for saddle horses, which are intended to be worked on the road only, caulkings are scarcely ever made use of, and in fact are never necessary, unless, perhaps, in frosty weather.

But although it has been fully ascertained, that horses may be hunted with safety in some countries without caulkings, yet it is always safer
for the rider, and commonly so for the horse, to have recourse to them. When two caulkings are used on each shoe, the inner one frequently wounds or bruises the opposite leg, and it has therefore been found most advantageous to have one only, and that on the outer heel; and, although its use may now and then cause some inconvenience, yet no expedient has been hitherto adopted, which is equally effectual in preventing slipping, and which of itself produces fewer accidents.

The back part of the caulkings of the fore shoe, should not be made so as to stand square or straight from the upper surface, but to slope forward, and under the shoe, so as to render it less liable to be caught and pulled off by the toe of the hind shoe, either when the horse becomes somewhat tired, or when going in stiff and deep land.

Of the Tip, or Short Shoe.

More than two hundred years ago, it was a common practice to shoe the toes only of such feet as were contracted by improper shoeing, in order to cause the back part of the foot to expand by the weight of the body constantly pressing upon it;
and ever since that time, this method has occasionally been employed for the same purpose. But about the middle of the 18th century, the short shoe, tip or half-moon shoe, as it has been called by different writers, was strongly recommended for general use, under an idea that it would hinder feet from contracting, prevent corns, and other diseases, from taking place, and likewise give such a firmness of tread as to render caulking, in every circumstance, totally unnecessary. And, as contracted feet in many instances had become wider from the use of this shoe, employed as a means of cure, it did not seem unreasonable to conclude, that its constant use might put an end to contraction altogether. But, however this practice might be at first approved by men eminent in their profession in different countries, the experience of a few years shewed, that though in fact it did prevent feet from contracting, yet it also brought along with it many inconveniences which did not exist when the common shoe was employed. For, if a horse so shod was much used when the roads were wet, it happened frequently that the horn at the heels was rubbed away faster than it grew, and thus the sensible parts within the hoof becoming inflamed and sore, the animal
was lamed; and from the weight of the body likewise bearing too much on the back part of the leg, strains were often caused in the hind tendons, and in the fetlock joints, and especially in such horses as were used for hunting or racing. And again, that this kind of shoe also required to be removed much oftener than the common one, in order to prevent the ends of it from being forced into the hoof, and to preserve the even tread of the bottom part of the foot by frequently cutting down the toe, without which, the heels soon become too low and the toe too long. On the whole, therefore, the disadvantages of the short shoe so much overbalanced the advantages, as to cause it to be abandoned for general purposes. And although, at various times since that period, attempts have been made to bring this shoe into general use, they have uniformly failed, from the effects just mentioned constantly resulting, so that the tip is now seldom employed, except for feet under circumstances of disease.

Of the Thin-heeled Shoe.

On the failure of the tip, as a shoe for general use, it was insisted by some of those who had
entertained a full confidence in its success, that
to preserve the foot in a healthy state, little more
was necessary, than to allow the frog to come
in contact with the ground at every step; and
that this might uniformly happen, it was ad-
vised that the shoe should be thin at the heel,
and gradually thicken as it approached the toe,
where it should be three times as thick as at the
heel. By means of this shoe it was believed
that not only would the frog, when not diseased
or cut away, bear on the ground at every step,
but, that by the iron being carried up to the heel,
it would possess all the good qualities of the
short shoe, without any of its imperfections.
Few objections were made to the principles of
this shoe on its outset, on account of the plau-
sibility of the theory by which it was accom-
panied; but its application in a general way did
not completely justify the sanguine expectations
which were formed of its success. For it fre-
quently happens, when the shoe is very thin at
the heel, that this part is bent out of shape, or
broken, before the toe is half worn; and from
its thinness, it plays against the foot like a spring,
loosens the heel-nails, and is more subject to be
thrown off than the ordinary shoe. It has one
advantage over the short shoe, inasmuch as it
prevents the heel from being worn away faster than it grows; but the objection of the weight of the body being thrown too much on the back tendons, still remains. Much caution is likewise necessary in employing this shoe on horses which have been accustomed to thick-heeled ones, in order that the back parts of the leg may gradually accommodate themselves to bear the increase of weight which is cast on them. For if this shoe be put on a horse which has always worn a thick-heeled one, it will frequently produce lameness, by straining the back part of the leg on the first trial, and more especially if the horse be ridden or driven fast.

That the tendons may not therefore suffer from being unusually weighted, it is advised to thin the heel of the shoe by degrees, and to cut away a proportional quantity of crust from the toe, in order to bring about something like an equal bearing. But, though this expedient may in a degree answer the end when the toe is long, it affords no resource when it happens to be short.

And it is scarcely to be imagined, that any mode of shoeing is likely to become extensively useful, which requires so much nicety of management to ensure its success. If the frog
come in contact with the ground at every step, it certainly follows, that the heels will be pressed farther asunder if they be then contracted, and this circumstance will likewise prevent their getting too near each other. But, although the thin-heeled shoe does allow the frog to strike the ground more frequently than a thick-heeled one, and consequently is so far better calculated to answer the purposes just mentioned, yet its long continued use is attended with an inconvenience from which the thick-heeled shoe is exempt.

For as by the thinness of the heel the weight is thrown too much on the back part of the leg, it of course operates equally on the back part of the foot, so that the heels and back part of the frog sustain more pressure than the toe and the fore part of the frog; and this disproportion of weight causes the heels and the back part of the frog to shelve and slope, as it were, under the foot, instead of growing nearly straight downwards. And this shelving or sloping direction of the heels under the foot takes place gradually and regularly, notwithstanding the toe be cut down frequently. By this change in the line of direction of the heels, the back part of the limb is deprived of its natural support at the time it most wants it, that is to say, when the
weight becomes more than usually thrown upon it. And by the heels being in effect made thus low, the skin is often brought against the ground and bruised. And here it must be remarked, that it is extremely difficult to restore to feet the proper direction and depth of their heels, when they have once become low and sloping.

One of the most specious reasons for having the toe thick, arises out of the fact of the wear being generally greater there than in any other part of the shoe; but surely it cannot be sound economy, that the true tread of the horse's foot should be destroyed, and that the hind tendons of the leg should be subject to perpetual risk of being strained, for the purpose of saving the price of one or two sets of shoes in a year, even if there existed no other less dangerous expedient which might answer the same end.

Experience, however, the surest guide in practical matters, seems to have established as a general rule, that it is more advantageous to the tread of man, that his shoe should be at least as thick at the heel as at the toe; and a shoe-maker would materially risk the displeasure of his customers, were he, with a view to increase the size of the calf of the leg, or to prevent the toe from wearing out, to make no other shoes than
such as were three times as thick at the toe as at the heel.

Is it not likely that common sense would reject such practice as unnatural and absurd? And it may easily be imagined what would happen to foot soldiers, thus shod, on a march, when loaded with their accoutrements, or to an opera dancer, whilst exhibiting his agility on the stage. And certainly it is not straining the argument, to compare in this point of view, the foot of a horse with that of a man, as they both answer the same end, and of course must both suffer, more or less, from thus continually going up hill.—Such being the disadvantages arising from the use of the thin-heeled shoe, it may be suspected, that it is a profitable one to manufacture. The reverse of this is, however, the fact, provided the shoe be made according to the pattern laid down; that is to say, that the branches regularly swell from the heel, till they meet at the toe, which should be three times as thick as the heel. And this gradual swell is unquestionably the only means by which the whole surface of the thin-heeled shoe can be brought to bear at once upon hard ground; but it requires more labour to make this than any other kind of shoe. And accordingly, workmen have hit
upon two expedients for keeping up the name and counterfeiting the principle of this shoe, so as to save them much labour. The first consists in making the toe thick, and in sloping it off so rapidly on the quarters, that if the shoe be laid on a flat surface, it will be found to touch it only at the toe and at the heels. This kind of shoe may with greater propriety be called a thick-toed, than a thin-heeled shoe.

The second is still more simple, the shoe being made as nearly as possible of the same thickness throughout, except within about an inch of the heels, where it is bevelled off suddenly to a thin edge; and so in point of fact this shoe may be said to be thin-heeled, although in point of effect it is only a parallel shoe, robbed of a portion of its flat surface.

These are abuses of practice, and do not attach to the principle of the shoe just mentioned; but they afford a strong proof, that if the principle were ever so good, it would not be generally adopted, from the difficulty of applying it fairly to practice.
Of the Parallel Shoe.

A foot which has never been shod, in general rests upon the ground in such a manner, that every part of it supports its due proportion of the weight of the body; and it is of as much consequence to preserve this natural tread, as it is to guard the structure of the foot from immediate injury: for if a larger proportion of weight be thrown upon a part of the foot, than it has been accustomed to bear, it will necessarily suffer from overpressure; and a long continuance of this will not only injure the foot itself, but will communicate more or less of false bearing to the joints, will strain the bands which tie the ends of the bones together, and destroy that just balance of power which naturally exists betwixt the different sets of muscles, intended to move the limb in different directions.

Now it has been shewn, that the thick-heeled shoe throws the pressure of the weight too much on the fore part of the foot; and that the thin-heeled shoe causes it to act too much upon the back part of the foot. And as both these extremes have very frequently proved prejudicial,
and are consequently unfit for general use, it remains to examine, what effects would result from a shoe of the same thickness at the heel, as at the toe. Here it must be obvious, that with such a shoe, the tread of the foot must be in the same plane, as if it were without a shoe. And as it is of the utmost importance to retain this even tread, it is clear that this can be effected with ease and simplicity, by the application of the parallel shoe, without the least necessity for having recourse to the difficult and complicated plan of cutting away the foot, in some parts excessively, and of leaving it untouched in others, in order to adjust it to the thin-heeled shoe. And if it be most advantageous for the foot, that the frog should come in contact with the ground frequently, that sort of shoe will surely be in this respect the best, which will allow the whole surface of the frog to have a full and equal bearing on the ground, instead of the back-part resting much more considerably upon it than the fore-part, as must necessarily happen with the thin-heeled shoe.

Formerly it was imagined, that the frog was liable to be bruised and hurt, if it came much on the ground, and shoes were made thick at the heels, to prevent this happening; but latterly a contrary doctrine has been held, and it
has been maintained, that the frog cannot be brought too much against the ground; and the heels of the shoe have been accordingly thinned, to allow of this taking place at every step.

In practical matters which admit of much theory, it is no unusual circumstance to find, that a system, which for a time was considered excellent, shall all at once lose its ground, and be displaced by another, the very reverse, both as to principle and effect. And on a mature consideration of the subject, the best and simplest practice has been found frequently to lie between the two opposite systems.

Now it must be remembered, that the frog has several offices to perform; among which, that of breaking the force of the blow when the foot strikes violently against the ground, is one of the most important. And for the due performance of this function, its flexibility and spongy nature are most admirably calculated. But if, for want of pressure and cleanliness, the frog becomes very soft and ulcerated, it no longer is able to defend the sensible parts immediately above it, from being wounded and bruised.

And as on the other hand, from being exposed to too much pressure, it is found to acquire a degree of hardness, nearly equal to that of any other
part of the hoof, and as it gains this hardness by losing its spongy nature, it becomes of course less capable of breaking the blow, and of preventing the jar from being communicated to the parts above.

As therefore it appears, that the frog may become too soft or too hard, from too little or too much pressure, it follows, that pressure in some degree is necessary to keep it in health. And although it is scarcely possible to ascertain what degree is best suited to this end, and the discussion of this point would afford ground for much speculation, yet the knowledge of the inconveniencies which arise from the opposite extremes, has led to a practice equally distant from both. This consists in the surface of the frog, when the foot is just shod, not being left on a level with the lower surface of the shoe, but rather a sixth part, or a quarter of an inch short of it. And by attending to this simple rule, the frog has been found to remain sound, without becoming either very soft or very hard.*

* Although this rule cannot immediately be applied to all feet, yet it will admit of more general application, than at first sight may appear probable; and with proper management, might in time be adopted in almost every instance.
It may be urged against the parallel shoe, that it will wear out sooner at the toe than the thick-toed one, and this will certainly be the case; but may in part be remedied by leaving the toe solid, instead of making a groove or fuller mark round it, and may be entirely obviated, by steeling the fore part of the shoe of horses which wear much at the toe, or are constantly worked on a pavement.

Indeed it would be an excellent practice to steel all shoes; for by the toe being thus made harder than the rest, it would be prevented from being so readily rubbed away; and the waste would be nearly alike in every part, till the shoe was worn out.

The additional expence of steeling, is too trifling to be weighed against the advantage of the natural plane of tread being preserved to the last.

Of the Shoes for the Hind Feet.

From the circumstance of the sole of the hind feet being much more hollow than that of the fore feet, a shoe with a flat upper surface, may be generally applied.
Of preparing the Foot to receive a Shoe.

The present being a work which treats only of the general principles of Shoeing, such precise rules as may apply to every particular case, cannot be laid down, but such methods as, by their simplicity, lead to a practice the most safe and most generally applicable, will be pointed out. Whilst the foot remains unshod, the different parts which form its bottom, wear away, and are replaced by a new growth; but a shoe, by covering the crust, and a portion of the sole, prevents this wear. Hence, therefore, the crust and the sole grow faster than they wear; and as after a certain growth they lose their toughness, and add an unnecessary weight to the limb, it becomes proper to remove the useless portions, and at the same time to leave the others in such a state as to afford a firm attachment for the shoe, and the necessary defence to the parts within the hoof.

However simple these points may appear at first view, they have led to material difference in practice. For with some, it has been customary to thin the sole very much, to hollow, or rather scoop out the greatest part of the bars, to pare away and trim the frog into a given shape, which
habit has rendered pleasing, and as it were necessary, to the eye of the workman; and to separate the frog from the heels, by making a wide and deep notch between them.

The frequency of lameness in feet so treated, gave rise, with others, to the practice of lowering the crust only, and of leaving the superfluous growth of the sole and other parts, to perish and fall off.

This, although a better practice than the former, had yet its inconvenience; and latterly,
another plan has been recommended, which consists in cutting away much of the crust at the toe, and little at the heels; in hollowing the sole throughout its whole extent, but especially in the corner of the heel between the crust and the bars, and in leaving the frog and the bars to grow in full luxuriance.

This method is obviously brought forwards to suit the thin-heeled shoe; for the removal of a considerable portion of the sole and crust at the toe, affords, as it were, room for supplying
with iron the place of the horn taken away, and thus aims at giving the natural tread to the foot; which however it almost always fails of effecting, from it not being in general practicable to take away from the toe a quantity of horn, equal to the quantity of iron added; that is to say, three times as much from the toe, as from the heels, the difference recommended between the thickness of the toe and the heel of the shoe.

The mischiefs which spring from cutting away the sole, have before been pointed out; and the groove at the heels, from being open at one end, and closed at the other and on the sides, frequently admits and harbours gravel.

On the whole, therefore, though there is much ingenuity displayed in thus contriving and adapting expedients, in some measure, to prevent the evils which would otherwise have occurred from the frequent use of a shoe with a thick toe, and flat upper surface, yet as the natural tread is absolutely destroyed by such a shoe, it certainly would be safer and more simple, to preserve it by a shoe of moderate and equal thickness throughout; and instead of sacrificing part of the sole to the shoe, to keep the sole in its full
thickness, and to remove part of the iron.* It seems in theory, an easy matter to remove such parts as are become useless, and to leave such as are useful, untouched; but in point of fact, this is very difficult. This difficulty arises from there not existing any strong marks or lines, by which what is useless can be distinguished from what is useful; and therefore some dependence must necessarily be placed upon the judgment of the workman.

Since, therefore, there is not any line to point out the division between what ought to be taken away, and what ought to be left, it becomes necessary to look out for some other circumstance, which may serve as a guide in distinguishing them; and some important knowledge, in this respect, may be gained, by attending to the manner in which a foot, which has been long shod, is gradually disencumbered of its useless portions, when left to itself.

When the shoe is taken off, the crust will be found to have grown beyond the level of the sole, the surface of which will appear irregular,

* As this is a matter of great importance, the Author trusts he shall stand excused for having recurred to it more than once.
and marked with cracks in various directions, and the edges of the frog will generally be ragged.

Now, as the hoof continually grows, whether it be worn away or not; in the latter case, the newly-formed horn, pushes before it the outer part, which, when it has attained a certain distance from the vessels within the hoof, no longer receives any moisture from them, and thus becoming dry, loses its attachment with the living horn, and falls off. Thus, the dead portion of the crust gradually breaks down in small pieces, till it reaches the level of the tough and living sole. The sole separates in scales of an irregular form, but generally thick near the frog, and thinner as they approach the crust; and frequently the upper part of the bar comes away with that portion which it joins, leaving the top of the bar, which remains on a level with the remaining sole.

The old frog, in detaching itself from that underneath, does not observe a mode equally regular with the sole, as sometimes it separates in one continued layer, and at others, in small fragments; but in the latter case it has been usually undermined, by its perspirable matter having become putrid from being confined, and
dissolving, partially, both the old and new substance of the frog, where it happens to have lodged.

The business of the workman, at each time of shoeing, should be to imitate this natural operation, and therefore the Author recommends; That the crust be reduced to a level with the edge of the tough and living sole, and be left perfectly flat, in order to come in contact, in its whole extent, with the flat surface of the seated shoe; that the sole be made smooth, by taking away the dry and crumbly dead horn, which renders its surface irregular, but that none of the tough or solid horn be removed; keeping always in mind, that it is better for the foot to leave a little of what may be useless, than to take away the smallest portion of what is really useful.

That the bars be pared flat, so that their surface be left on a level with the sole; but that they be not thinned or scooped away, either on the side next the frog, or that adjoining the sole.

That the ragged edges of the frog be removed, but that none of the tough and living substance be taken away.

As the bars and the frog are more exposed to wear than the crust and the sole, they necessarily require less assistance from art, to free
them from their useless portions; and from the latter part, no more ought to be taken away than is necessary for rendering the surface smooth, and for preventing dirt from being harboured in the clefts.

Of the Nails.

Eight nails for each shoe are found to be enough for saddle and light draught horses; but for such as are employed in heavy draught, ten are required. A smaller number does not hold
the shoe sufficiently fast; and a greater number, by acting like so many wedges, weaken the hoof, and rather dispose the crust to break off, than give additional security.

The manner of disposing the nails, has differed considerably at different times. Some writers have directed four to be placed on each side of the foot, and the hindmost near the heel, leaving between the two rows of nails, a considerable space of the forepart of the foot without any.

The nails thus placed, certainly confined the foot at the sides and heels, left the toe at liberty, and assisted materially the effect of the sloping surface of the common shoe, in altering the form of the foot from a nearly round, to a lengthened figure.

Latterly, it has been strongly recommended, to place the nails principally at the fore part of the foot, in order to prevent the heels from being confined. And certainly this is a wiser practice than the former; but as the foot should rest on the shoe in the whole extent of the crust, it may be thought, that the best way of connecting them in every part alike, would be that of placing the nails at equal distances from each other, in the whole round of the shoe.
However, the objection to this is, that when the foot strikes the ground with considerable force, the back part of it becomes a little broader than when it is in the air, or when the foot is at rest. This spreading is not considerable, nor does it extend far along the sides of the foot, but it is sufficient to act upon the hindmost nails, when near the heels; hence arises the necessity for there being a greater distance between the last nail and the heel of the shoe, than between any two nails. Accordingly it may be laid down as a general rule, that the last nail should not be nearer the heel, than from two inches to an inch and a half.

Such a distance has been found sufficient to prevent the heels being confined, and not sufficiently great to allow the shoe to spring, and loosen the last nails, as frequently happens when they are farther distant from the heel.

All the nails should be at equal distances from each other, except the two in front, which should be a little wider apart than the rest: this, however, is not a matter of essential consequence; but it is of importance that there should not be any nail in the middle of the toe. For, generally, the action of the foot on the ground has a direct tendency to push the shoe, as it
were, backwards along the foot; and it sometimes happens that the shoe is actually thus displaced; in which case it necessarily follows, that the nail in the middle of the toe, must be driven immediately against the sensible parts behind it, whilst the rest of the nails in great measure follow the line of the crust, and so avoid doing mischief to the parts within.

The nail-holes on the upper surface of the shoe should come through the seat, close to the edge of the bevel, that the nails may have a proper and equal hold on every part of the crust, which will be shewn by the clenched ends being each equally distant from the shoe.

As the nail hole is always made with a taper and square-pointed punch, a nail with a head of the same form, will fit it better than one of any other shape.

The most general practice to prevent slipping in frosty weather, is what is called roughing; which is nothing more than making two caulking to each shoe. This is liable to the objections before stated, of throwing the weight too much on the toe, and of the inside caulking sometimes wounding the opposite leg. And it is farther objectionable, because the caulking soon wear down; as, in order that they may take
the necessary hold on the ground, they are made sharp and thin. They therefore require being frequently renewed; and hence it generally happens, that a horse which is much worked in frosty weather, has his feet more broken and injured, than in the common wear of many months.

To prevent the necessity of frequent removes, several expedients have been put in practice. Sometimes a few nails, of a larger size than the rest, have been so put in, that the heads stood considerably beyond the level of the shoe; but when these did not break off, as was often the case, they soon wore down.

At other times, nails with large heads, tapering to a point, were screwed into the web of the shoe. Of these, one was usually placed at the toe, and one at each heel. And by this contrivance of the screw, it was imagined, that the nails might be easily replaced when worn out. They are apt, however, to break off at the neck, and are too expensive for common use.

There is, notwithstanding, another plan, which, as far as it has been tried, justifies the Author in recommending it.
This consists in having nails with a lozenge head, or what may be called a double countersink, terminating in an edge, instead of coming to a point. This greater breadth of surface, prevents its being rubbed away as fast as a point; the thickness in the middle gives it strength; and the regular taper to the shank, causes it to apply exactly to the sides of the hole in the shoe, by which it is equally supported, and prevented from bending or breaking. There should be four nails to every shoe; that is to say, two in the forepart, and one at each heel.*

These nails are, in effect, so many caulkings, with the advantages of allowing a more level tread; of being easily replaced, by putting new nails in the old holes; and by being at a distance from the heel of the shoe, they are not so likely to hurt the opposite leg.

* The heads of these nails must be struck in tools, or dies; the four holes in the shoe must be made to correspond with the neck of the nail; and when the nail is driven, the workman must cover the head with a tool, which will receive its upper part, and prevent its being injured by the hammer.
In the greater number of treatises which have been written on Shoeing, it has been usual to state what weight the shoes, for horses employed in different kinds of work, should be; but all rules in this respect must obviously be very general, as the respective weights necessarily depend upon the size of the hoof, the nature of the country where the horse is principally used. &c. However, as there has been as great a disposition to run into extremes on this as on every other point, connected with the subject of shoeing, it may be proper to observe, that the Author has found it necessary to vary the weights for saddle horses from eight to sixteen ounces, and for carriage horses from twelve to twenty ounces.

Of Shoeing Horses which cut.

To prevent a horse from striking the foot or shoe against the opposite leg, by which it is often bruised or wounded, is an important point; inasmuch as this accident occurs very frequently, and as it not only blemishes and disfigures the leg, but also endangers the safety of the rider.
The parts struck in the hind leg, are the inside of the fetlock joint, and the coronet; in the fore leg, the inside of the fetlock joint, and immediately under the knee; which latter is called the speedy-cut, from its happening only when a horse goes fast.

Young horses, when first backed, generally cut their fore legs, although naturally they may be good goers. This arises from their placing the foot on the ground too much under the middle of the breast, in order the better to support the burthen to which they are unaccustomed; but by degrees they acquire the method of balancing the weight, with the foot in the same direction it would naturally have were they without it. It may therefore be laid down as a general rule, with such horses, that till they regain their natural method of going, the edge of the inner quarter of the shoe should follow exactly the outline of the crust, but should not be set within the crust, nor should the crust itself be reduced in thickness; as both these practices tend to weaken the inner quarter, and to deform the hoof. And here it must be observed, that the outer edge of the shoe should, in all cases of sound feet, follow exactly the outer edge of the crust, except just at the heel,
where it should project a little beyond the line of the hoof.

Horses with narrow chests have their legs near together, and are apt to cut when they begin to tire; and with these, the practice just mentioned should always be employed. Horses that turn their toes much outwards, are of all others most subject to cut. It has been asserted, that this defect also happens to such as turn them much inwards; however, the Author does not recollect to have met with a single instance of this kind, in the course of his practice. In horses of the first description, it has been long observed, that the inner quarters of the hoof were lower than the outer, and that the fetlock joints were nearer each other, than in horses whose feet pointed straight forwards. These two facts probably led to a conclusion, that if the inner quarters were raised to a level with the outer, and so much the more as they were made proportionably higher, that the fetlock joints would be thrown farther apart, so as to admit of the foot passing by the supporting leg without striking the joint. Accordingly, for the two last centuries at least, it has been usual to make the inner quarter of the shoe higher than the outer; and not only has this been the general practice, but
it has been regularly recommended by almost every writer, from that time to the present. And notwithstanding this method has very frequently failed of success, yet repeated disappointment appears never to have led to the circumstance of questioning the truth of the principle. Nay, indeed, the reliance placed upon it has been so strong, probably from the simplicity of the reasoning on which it was founded, that in the cases where it most particularly disappointed expectation, its failure was generally attributed to the practice not being carried sufficiently far; and accordingly the shoe has been still more raised on the inner quarter, and the edges of the crust and shoe have been filed away. When with these expedients it likewise failed, the last resource has been, a circular piece of leather placed round the joint to receive the blow of the foot.

It is now about four years since, that a shoe, with the outer quarter thick, and the inner one thin, was for the first time, in the practice of the Author at least, employed, in a case which had baffled many attempts on the old plan.

On the first trial the horse ceased to cut, nor has he ever done it since; which can only be attributed to his having constantly worn the same
kind of shoe. This circumstance did not then excite in the mind of the Author, any doubt, as to the propriety of a practice which had so long and so generally been acknowledged, but was rather considered as an extraordinary exception. However, other bad cases, which occurred occasionally since that period, were treated in the same way, and with the same success. These facts, at length, led the Author to conclude, that a practice, which was so uniformly followed by success, in cases where the established one as uniformly failed, must necessarily repose on a better principle; although for a long time he was completely at a loss how to explain it. For if the action of cutting did principally depend upon the faulty position of the fetlock joints, and the feet, with respect to each other; and it appeared to be generally agreed that such was the fact, it should seem, that a means which, by raising the outer quarters, must throw the fetlock joints still nearer to each other, would necessarily increase the defect in question; but as the reverse of this actually takes place, it might induce a suspicion, that there exists some other cause of cutting, which has been hitherto overlooked.

A minute examination of this point would far exceed the limits allotted to this division of
the work; and therefore, at present, the Author will confine himself to that part of the subject alone, which is absolutely necessary to be understood. For horses, therefore, which cut their hind legs, the shoe, at the outer heel, should be from half an inch to an inch in thickness, according to the kind of horse, and to the degree in which he may cut. The web of the shoe should gradually become thinner till it reaches the toe, which should be of the ordinary thickness, and from which it should slope off, and end like a tip in the middle of the inner quarter.* This shoe, in point of effect, would be equally proper for the fore feet, were it not that in such horses as are used for the saddle, the fore feet being more charged with weight than the hind feet, are more particularly subject to be injured, and a horse thus shod on the fore feet, might go unsafe; therefore, it is expedient to let the inner quarter of the shoe be thin, and reach to the heel, but the outer edge should be bevelled off, so as to slope inwards. The same kind of shoe is equally well calculated to prevent the speedy-cut; observing to bevel off, still more strongly, the part

* For horses which cut only in a slight degree, a shoe of the same thickness throughout, but reaching on the inner quarter only as far as the middle of the foot, will in most instances be found sufficient.
which strikes, and not to put in any nails thereabouts. And here, it may be proper to remark, that in sound feet, the heel of the shoe should reach as far on the heel of the hoof, as to admit of the angle formed by the crust and the bar resting fully upon it, but it should not be carried quite as far as the end of the heel of the hoof.

In order to ascertain what would happen to a horse shod with different kinds of shoes, the following trials were made.

EXPERIMENT I.

A horse with a narrow chest, who had never cut, and having parallel shoes on his fore feet, was trotted at about the rate of eight miles an hour in a straight line, over ground sufficiently soft to retain slightly the impressions of the shoes, but not to admit the feet to sink into it.

Two parallel lines were drawn along the track, including between them the prints of the shoes. By these it was found, that there was regularly a distance of nine inches and a half between the outer edge of the near fore shoe, and that of the off fore shoe.

EXPERIMENT II.

Shoes thick in their inner quarter, and like a tip, reaching only half-way on the outer quarter,
were then used, and it appeared, that the distance between the outer edges of the prints of the shoes, taken as before, was regularly reduced to eight inches and a half.

Experiment III.

The same shoes were afterwards placed on the opposite feet, so that the thick heel was on the outer quarter; and the result, under circumstances exactly the same as in the foregoing experiments, was, that the distance between the outer edges of the prints of the shoes, was regularly increased to eleven inches.

To account for these results, it is necessary to attend closely to the different effects produced by the weight of the fore part of the body acting upon the two fore feet, when raised on the inner or outer quarters, during the opposite states of rest and action. And first, with regard to shoes raised on the inner quarter: whilst a horse so shod, is standing still, the fetlock joints are certainly thrown farther apart than when any other kind of shoe is used. Hence, it was concluded, that the limb which supported the body would have its fetlock joint thrown so much outwards, as to keep it completely out of the way of the foot in motion. But it appears, that the impressions made on the ground by such shoes, are an inch
nearer together than those made by parallel shoes, and two inches nearer together than those made by shoes raised on the outer quarter. And this may be thus explained: when the horse is at rest, the weight is supported equally by the two fore feet, but the instant one foot quits the ground, the weight is suddenly transferred to the other; and by the outer quarter being lower than the opposite one, the fore part of the horse has a tendency to fall over to the outside. To prevent this, the moving foot is suddenly brought close to the fetlock of the supporting foot, in order to relieve it by catching the weight, and the foot itself is placed on the ground, too much under the middle of the breast. The same circumstance occurs to both feet in their turn. And the horse being thus in constant danger of falling to one side or to the other, is constrained to bring his feet near together to preserve his balance, and in doing this, strikes the foot against the opposite fetlock.

It frequently happens, that the more the toes are turned outwards, the nearer the fetlock joints are brought together, and the more the horse is disposed to cut. However, this is true only to a certain extent; for if this faulty position of the lower part of the leg be carried artificially beyond
a given point, instead of producing an increased degree of cutting, in most instances it remedies the defect altogether. The reason of this is just the reverse of what takes place when the inner quarter is raised; that is to say, when the weight of the fore part of the body rests only upon one leg, it bears too much upon the inner quarter, from its being lower than the outer quarter; and thus the horse has a tendency to fall over to the inside of the supporting leg.

To prevent this, the moving foot is thrown farther from the supporting leg, in order to maintain the balance; and thus the foot misses the fetlock joint.

THE END.