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Horse and Horsemanship

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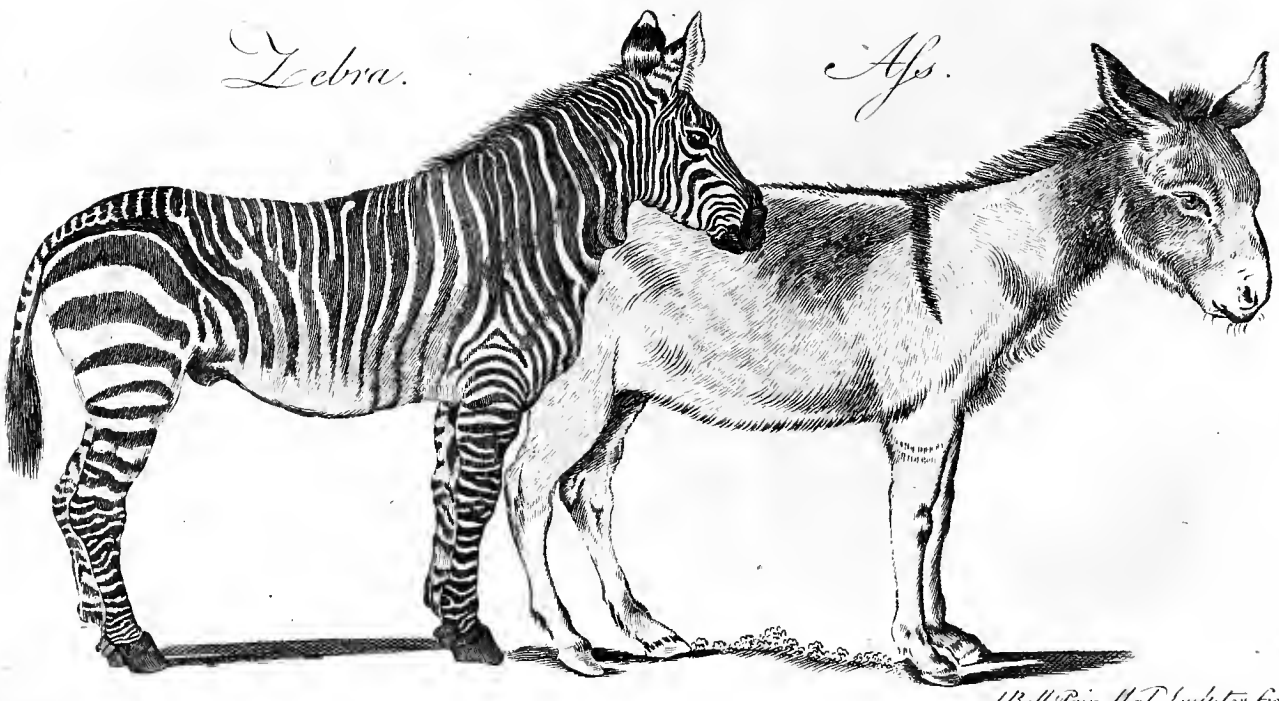

J. Bell Prin. Mal. Sculptor fecit.

Equity, Equivalent.

scribed revenue, they were expunged out of the equestrian list. The equestrian revenue just mentioned amounted to about 10,000 crowns.

Part of the ceremony whereby the honour of knighthood was conferred amongst the Romans was the giving of a horse; for every *eques* or knight had a horse kept at the public charge, he received also the stipend of an horseman to serve in the wars, and wore a ring which was given him by the state. The *equites* composed a large body of men, and constituted the Roman cavalry; for there was always a sufficient number of them in the city, and nothing but a review was requisite to fit them for service.

The knights at last grew too powerful, were a balance for the senate and people, neglected the exercises of war, and betook themselves to civil employments. The *equites* were liable to be punished by the censors, and to suffer degradation. They were degraded by taking from them the horse which was kept for each of them at the public charge; this was called *equum adimere*.

EQUITY, in a general sense, the virtue of treating all other men according to reason and justice, or as we would gladly be treated ourselves when we understand aright what is our due. See JUSTICE.

EQUITY, in jurisprudence, is defined a correction or qualification of the law, generally made in that part wherein it faileth or is too severe. It likewise signifies the extension of the words of the law to cases unexpressed, yet having the same reason; so that where one thing is enacted by statute, all other things are enacted that are of the like degree. For example, the statute of *Glouc.* gives action of waste against him that holds lands for life or years; and by the equity thereof, a man shall have action of waste against a tenant that holds but for one year, or one half-year, which is without the words of the act, but within the meaning of it; and the words that enact the one, by *equity* enact the other. So that equity is of two kinds. The one abridges and takes from the letter of the law: the other enlarges and adds to it; and statutes may be construed according to equity, especially where they give remedy for wrong, or are for expedition of justice. Equity seems to be the interposing *law of reason*, exercised by the lord chancellor in extraordinary matters to do equal justice; and by supplying the defects of the law, gives remedy in all cases. See CHANCERY.

EQUITY, in mythology, sometimes confounded with *Justice*, a goddess among the Greeks and Romans, represented with a sword in one hand and a balance in the other.

EQUIVALENT, is understood of something that is equal in value, force, or effect, to another.

Equivalence is of various kinds, in propositions, in terms, and in things.

Equivalent Propositions. See EQUIPOLLENCE.

Equivalent Terms are where several words that differ in sound have yet one and the same signification; as *every body was there*, and *nobody was absent*, *nihil non*, and *omne*.

Equivalent Things, are either *moral*, *physical*, or *statical*. *Moral*, as when we say that the commanding or advising a murder is a guilt equivalent to that of the murderer. *Physical*, as when a man who has the strength of two men is said to be equivalent to two men, *Statical*, whereby a less weight becomes of equal force with a greater, by having its distance from the centre increased. Equivocal ‖ Equus.

EQUIVOCAL TERMS or WORDS, among logicians, are those which have a doubtful or double meaning.

According to Mr Locke, the doubtfulness and uncertainty of words has its cause more in the ideas themselves, than in any incapacity of the words to signify them; and might be avoided, would people always use the same term to denote the same idea or collection of ideas: but, adds he, it is hard to find a discourse on any subject where this is the case; a practice which can only be imputed to folly or great dishonesty; since a man, in making up his accounts, might with as much fairness use the numeral characters sometimes for one sometimes for another collection of units.

Equivocal Generation, the production of animals without the intercourse between the sexes, by the influence of the sun or stars, &c.

This kind of generation is now quite exploded by the learned.

EQUIVOCATION, the using a term or expression that has a double signification. Equivocations are expedients to save telling the truth, and yet without telling a falsity. The fathers are great patrons of equivocations and mental reservations, holding that the use of such shifts and ambiguities is in many cases allowable.

EQUULEUS, or ECCULEUS, in antiquity, a kind of rack used for extorting a confession, at first chiefly practised on slaves, but afterwards made use of against the Christians.

The equuleus was made of wood, having holes at certain distances, with a screw, by which the criminal was stretched to the third, sometimes to the fourth, or fifth holes, his arms and legs being fastened on the equuleus with cords; and thus was hoisted aloft, and extended in such a manner, that all his bones were dislocated. In this state red-hot plates were applied to his body, and he was goaded in the sides with an instrument called *ungula*.

EQUULEUS, EQUICULUS, and *Equus Minor*, the horse's head, in astronomy, a constellation of the northern hemisphere, whose stars in Ptolemy's catalogue are 4, in Tycho's 4, in Hevelius's 6, and in Mr Flamsteed's 10.

EQUUS, in zoology, a genus of quadrupeds belonging to the order of belluæ. This genus comprehends the horse, the mule, the ass, the zebra, and the quagga: they have six erect and parallel fore-teeth in the upper jaw, and six somewhat prominent ones in the under jaw; the dog-teeth are solitary, and at a considerable distance from the rest; and the feet consist of an undivided hoof. Plate CLXXXIII.

1. The *caballus*, or HORSE, has a long flowing mane, and the tail covered on all parts with long hairs.

The horse, in a domestic state, is a bold and fiery animal; equally intrepid as his master, he faces danger and death with ardour and magnanimity. He delights in the noise and tumult of arms, and seems to feel the glory of victory: he exults in the chase; his eyes sparkle with emulation in the course. But though bold and intrepid, he is docile and tractable: he knows how to *Buffon Histoire Naturelle.*

govern

Equus. govern and check the natural vivacity and fire of his temper. He not only yields to the hand, but ſeems to conſult the inclination of his rider. Conſtantly obedient to the impreſſions he receives, his motions are entirely regulated by the will of his maſter. He in ſome meaſure reſigns his very exiſtence to the pleaſure of man. He delivers up his whole powers; he reſerves nothing; he will rather die than diſobey. Who could endure to ſee a character ſo noble abuſed! who could be guilty of ſuch groſs barbarity!

This character, though natural to the animal, is in ſome meaſure the effect of education. His education commences with the loſs of liberty, and is finiſhed by conſtraint. The ſlavery of the horſe is ſo ancient and ſo univerſal, that he is but rarely ſeen in a natural ſtate. Several ancient writers talk of wild horſes, and even mention the places where they were to be found. Herodotus takes notice of white ſavage horſes in Scythia; Ariſtotle ſays they are to be found in Syria; Pliny, in the northern regions; and Strabo, in Spain and the Alps. Among the moderns, Cardan ſays, that wild horſes are to be found in the Highlands of Scotland and the Orkney iſles; Olaus, in Muſcovy; Dapper, in the iſland of Cyprus; Leo and Marmol, in Arabia and Africa, &c. But as Europe is almoſt equally inhabited, wild horſes are not to be met with in any part of it: and thoſe of America were originally tranſported from Europe by the Spaniards; for this ſpecies of animals did not exiſt in the new world. The Spaniards carried over a great number of horſes, left them in different iſlands, &c. with a view to propagate that uſeful animal in their colonies. Theſe have multiplied incredibly in the vaſt deſarts of thoſe thinly peopled countries, where they roam at large without any reſtraint. M. de Salle relates, that he ſaw, in the year 1685, horſes feeding in the meadows of North America, near the bay of St Louis, which were ſo ferocious that nobody durſt come near them. Oexmelin ſays, that he has ſeen large troops of them in St Domingo running in the valleys: that when any perſon approached, they all ſtopped; and one of them would advance till within a certain diſtance, then ſnort with his noſe, take to his heels, and the whole troop after him. Every author who takes notice of theſe horſes of America, agree that they are ſmaller and leſs handſome than thoſe of Europe. Theſe relations ſufficiently prove, that the horſe, when at full liberty, though not a fierce or dangerous animal, has no inclination to aſſociate with mankind; that all the ſoftneſs and ductility of his temper proceeds entirely from the culture and poliſh he receives in his domeſtic education, which in ſome meaſure commences as ſoon as he is brought forth.

The motions of the horſe are chiefly regulated by the bit and the ſpur; the bit informs him how to direct his courſe, and the ſpur quickens his pace. The mouth of the horſe is endowed with an amazing ſenſibility: the ſlighteſt motion or preſſure of the bit gives him warning, and inſtantly determines his courſe.

The horſe has not only a grandeur in his general appearance, but there is the greateſt ſymmetry and proportion in the different parts of his body. The regularity and proportion of the different parts of the head gives him an air of lightneſs, which is well ſupported by the ſtrength and beauty of his cheſt. He erects his head, as if willing to exalt himſelf above the condition of other quadrupeds: his eyes are open and lively; his ears are handſome, and of a proper height; his mane adorns his neck, and gives him the appearance of ſtrength and boldneſs. Equus.

At the age of two years, or two years and a half, the horſe is in a condition to propagate; and the mare, like moſt other females, is ready to receive him ſtill ſooner. But the foals produced by ſuch early embraces are generally ill-made and weakly. The horſe ſhould never be admitted to the mare till he is four or four and a half; this is only meant with regard to draught-horſes. Fine horſes ſhould not be admitted to the mare before they be ſix years old; and Spaniſh ſtallions not till ſeven. The mares are generally in ſeaſon from the beginning of April to the end of June; but their chief ardour for the horſe laſts but about 15 or 20 days, and this critical ſeaſon ſhould always be embraced. The ſtallion ought to be ſound, well made, vigorous, and of a good breed. For fine ſaddle-horſes, foreign ſtallions, as Arabians, Turks, Barbs, and Andaluſians, are preferable to all others. Next to theſe, Britiſh ſtallions are the beſt; becauſe they originally ſprang from thoſe above-mentioned, and are very little degenerated. The ſtallions of Italy, and eſpecially the Neapolitans, are very good. The beſt ſtallions for draught or carriage horſes, are thoſe of Naples, Denmark, Holſtein, and Freezeland. The ſtallions for ſaddle-horſes ſhould be from 14 to 15 hands high, and for draught horſes at leaſt 15 hands. Neither ought the colour of ſtallions to be overlooked; as a fine black, grey, bay, ſorrel, &c. Beſides theſe external qualities, a ſtallion ought to have courage, tractability, ſpirit, agility, a ſenſible mouth, ſure limbs, &c. Theſe precautions in the choice of a ſtallion are the more neceſſary, becauſe he has been found by experience to communicate to his offspring almoſt all his good or bad qualities, whether natural or acquired.

The mare contributes leſs to the beauty of her offſpring than the ſtallion; but ſhe contributes perhaps more to their conſtitution and ſtature: for theſe reaſons, it is neceſſary that the mares for breed be perfectly ſound, and make good nurſes. For elegant horſes, the Spaniſh and Italian mares are beſt; but for draught-horſes, thoſe of Britain and Normandy are preferable. However, when the ſtallions are good, the mares of any country will produce fine horſes, provided they be well made and of a good breed.

Mares go with young 11 months and ſome days. They bring forth ſtanding; contrary to the courſe of moſt other quadrupeds, who lie during this operation. They continue to bring forth till the age of 16 or 18 years; and both horſes and mares live between 25 and 30 years. Horſes caſt their hair once a-year, generally in the ſpring, but ſometimes in the autumn. At this time they are weak, and require to be better fed and taken care of than at any other ſeaſon.

In Perſia, Arabia, and moſt eaſtern countries, they never geld their horſes, as is done in Europe and China. This operation greatly diminiſhes their ſtrength, courage, and ſpirit; but it makes them good humoured, gentle, and tractable. With regard to the time of performing this operation, the practice of different countries is different: ſome geld their horſes when a year old, and others at 18 months. But the beſt and moſt general practice is to delay the operation till they be-

Equus. be two years old at leaſt: becauſe, when the gelding is delayed for two years or more, the animals retain more of the ſtrength and other qualities which naturally belong to the male. Equus.

As the utility of horſes ſurpaſſes that of all other domeſtic animals, it may be of uſe to ſubjoin ſome marks by which the age and other properties of horſes may be diſtinguiſhed.

In old horſes, the eye-pits are generally deep; but this is only an equivocal mark, being alſo found in young horſes begot by old ſtallions. The moſt certain knowledge of the age is to be obtained from the teeth. Of theſe a horſe has 40; 24 grinders or double-teeth, four tuſhes, and 12 fore-teeth: mares have no tuſhes, or at leaſt very ſhort ones. It is not from the grinders that we know the age; it is diſcovered firſt by the fore-teeth, and afterwards by the tuſhes. The 12 fore-teeth begin to ſhoot within 12 days after the colt is foaled. Theſe firſt, or foal-teeth, are round, ſhort, not very ſolid, and are caſt at different times, to be replaced by others. At the age of two years and a half, the four middle fore-teeth are caſt, two in the upper jaw, and two in the lower. In one year more, four others drop out, one on each ſide of the former, which are already replaced. When he is about four years and a half old, he ſheds four others, and always next to thoſe which have fallen out and been replaced. Theſe four foal-teeth are replaced by four others, but are far from growing ſo faſt as thoſe which replaced the eight former, and are called the *corner-teeth*; they replace the four laſt foal-teeth, and by theſe the age of a horſe is diſcovered. They are eaſily known, being the third both above and below, counting from the middle of the jaw. They are hollow, and have a black mark in their cavity. When the horſe is four years and a half old, they are ſcarce viſible above the gum, and the cavity is very ſenſible: at ſix and a half, they begin to fill; and the mark continually diminiſhes and contracts till ſeven or eight years, when the cavity is quite filled up, and the black ſpot effaced. After eight years, theſe teeth ceaſing to afford any knowledge of the age, it is judged of by the tuſhes: which are four teeth adjoining to thoſe laſt mentioned; and, like the grinders, are not preceded by any other teeth. The two in the lower jaw uſually begin to ſhoot at three years and a half, and thoſe of the upper jaw at four; continuing very ſharp-pointed till ſix. At 10, the upper ſeem blunted, worn out, and long, the gum contracting itſelf as its years increaſe; the barer therefore they are, the older is the horſe. From 10 to 13 or 14 years, little can be ſeen to indicate the age; but at that time ſome hairs of the eye-brows begin to turn grey. This mark, however, is equivocal, like that drawn from the depth of the eye-pits; horſes from old ſtallions or mares, having grey hairs in the eye-brows when they are not above nine or ten years old. In ſome horſes the teeth are of ſuch a hardneſs as not to wear; and in ſuch the black mark always ſubſiſts, being never effaced by time: but the age of theſe horſes, which are called *beguts* by the French, is eaſily known; the hollow of the tooth being filled up, and at the ſame time the tuſhes very long. It has been farther obſerved, that this is more common in mares than in horſes. The age of a horſe may be alſo known, though leſs accurately, by the bars in his mouth, which wear away as he advances in years.

When the horſe is without blemiſh, the legs and thighs are clean, the knees ſtraight, the ſkin and ſhank thin, and the back-ſinew ſtrong and well-braced. The ſinews and the bones ſhould be ſo diſtinct, as to make the legs appear thin and lathy, not full and round. The paſtern joints ſhould never be large and round; nor muſt there be any ſwelling near the coronet. The hock ſhould be lean and dry, not puffed up with wind. With regard to the hoof, the coronet ſhould be equally thick, and the horn ſhining and greyiſh. A white horn is a ſign of a bad foot, for it will wear out in a ſhort time; and likewiſe when the horn is thin, it is liable to be ſpoiled in ſhoeing, and by travelling hard on ſtony grounds. This is beſt known when the ſhoe is taken off; for then the verge all round the ſole will appear thin, and the horſe will wince at the leaſt touch of the pincers.

A ſtrong foot has the fibres of the hoof very diſtinct running in a direct line from the coronet to the toe, like the grain of wood. In this caſe, care muſt be taken to keep the foot moiſt and pliable. The greateſt inconvenience attending a hard ſtrong foot, is its being ſubject to rifts and fiſſures, which cleave the hoof quite through ſometimes from the coronet down to the bottom.

A narrow heel is likewiſe a defect; and when it is not above two fingers in breadth, the foot is bad. A high heel cauſes a horſe to trip and ſtumble often; and the low one, with long yielding paſterns, is very apt to be worn quite away on a journey. Too large a foot in proportion to the reſt of the body, renders a horſe weak and heavy.

The head of a horſe ſhould be ſmall, and rather lean than fleſhy. The ears ſhould be ſmall, erect, thin, ſprightly, and pointed. The forehead, or brow, ſhould be neither too broad nor too flat, and ſhould have a ſtar or ſnip thereon. The noſe ſhould riſe a little, and the noſtrils ſhould be wide that he may breathe more freely. The muzzle ſhould be ſmall, and the mouth neither too deep nor too ſhallow. The jaws ſhould be thin, and not approach too near together at the throat, nor too high upwards towards the onſet, that the horſe may have ſufficient room to carry his head in an eaſy graceful poſture. The eyes ſhould be of a middle ſize, bright, lively, and full of fire. The tongue ſhould be ſmall, that it may not be too much preſſed by the bit; and it is a good ſign when his mouth is full of white froth, for it ſhows that he will not ſoon be overheated.

The neck ſhould be arched towards the middle, growing ſmaller by degrees from the breaſt and ſhoulders to the head. The hair of the main ſhould be long, ſmall, and fine; and if it be a little frizzled, ſo much the better. The ſhoulders ſhould be pretty long; the withers thin, and enlarge gradually from thence downwards; but ſo as to render his breaſt neither too narrow nor too groſs. A thick-ſhouldered horſe ſoon tires, and trips and ſtumbles every minute; eſpecially if he has a thick large neck at the ſame time. When the breaſt is ſo narrow that the fore-thighs almoſt touch, they are never good for much. A horſe of a middle ſize ſhould have the diſtance of five or ſix inches

Equus. between his fore-thighs, and there ſhould be leſs diſtance between his feet than his thighs near the ſhoulders when he ſtands upright.

The body or careaſe of a horſe ſhould be of a middling ſize in proportion to his bulk, and the back ſhould ſink a little below the withers; but the other parts ſhould be ſtraight, and no higher behind than before. He ſhould alſo be home-ribbed; but the ſhort ribs ſhould not approach too near the haunches, and then he will have room to fetch his breath. When a horſe's back is ſhort in proportion to his bulk, and yet otherwiſe well limbed, he will hold out a journey, tho' he will travel ſlow. When he is tall, at the ſame time with very long legs, he is but of little value.

The wind ſhould never be overlooked in the choice of a horſe: and it may eaſily be known by his flanks, if he is broken-winded, when he ſtands quiet in the ſtable; becauſe he always pinches them in with a very ſlow motion, and drops them ſuddenly. A thick-winded horſe fetches his breath often, and ſometimes rattles and wheezes. This may be always diſcovered when he is put to briſk exerciſes.

The temper of a horſe ſhould always be obſerved; a vicious horſe generally lays his ears cloſe to his pole, ſhows the whites of his eyes, and looks ſullen and dogged. An angry horſe may be known by his frowning looks; and he generally ſeems to ſtand in a poſture of defence. When he is very vicious, he pays no regard to the groom that feeds him: However, ſome horſes that are tickliſh will lay back their ears, and yet be of a good diſpoſition. A fearful horſe is apt to ſtart, and never leaves it off till he is old and uſeleſs. A fretful horſe is very unfit for a journey; and you may diſcover his temper as ſoon as he gets out of the ſtable. A dull, heavy, ſluggiſh horſe may be eaſily known, whatever tricks are uſed to rouſe his ſpirits.

With regard to the colour of a horſe, the bright bay, and indeed all kinds of bays in general, are accounted good colours. The cheſnut horſe is generally preferable to the ſorrel, unleſs the former happens to be bald, or party-coloured, with white legs. Brown horſes have generally black manes and tails, and their joints are of a ruſty black. Thoſe of this colour that are dappled, are much handſomer than the reſt. Horſes of a ſhining black, and well marked without too much white, are in high eſteem for their beauty. A ſtar, or blaze, or white muzzle, or one or more feet tipped with white, are thought to be rather better than thoſe that are quite black.

Of greys, the dappled are accounted beſt; though the ſilver grey make a more beautiful appearance, and often prove good. The iron grey with white manes and tails are thought not to be ſo hardy. Greys of every kind will turn white ſooner or later; but the nutmeg grey, when the dappled parts incline to bay or cheſnut, are ſaid to be good hardy horſes. Roan horſes have a diverſity of colours mixed together; but the white is more predominant than the reſt. They are all generally hardy, and fit for the road; and ſome are exceeding good. Thoſe of a ſtrawberry colour moſt reſemble the ſorrel, and they are often marked with white on the face and legs. When the bay is blended with it, he ſeems to be tinctured with claret; and ſome of theſe prove to be very good. Dun, ſallow, and cream-coloured horſes have a liſt down their backs; and their manes and tails are black. Dun horſes are ſeldom choſen by gentlemen, and yet they may be very uſeful to the country farmer. The ſallow and cream-coloured are more eſteemed, both for beauty and uſe. Thoſe horſes that are finely ſpotted with gay colours like leopards are a great rarity, and for that reaſon are only in the hands of great men. Equus.

There is ſome difference in horſes according to the different countries where they are bred. For inſtance, in France, thoſe of Bretagne are pretty ſtrong made, and have generally black hair, or brown bay; and they have good legs and feet, with a hardy mouth, and a head ſhort and fleſhy; but in general they are pretty clumſy. The horſes of Franche Compté are ſaid to have the legs of tigers, and the belly of a hind; but they are ſhort and thick, and of a middle ſize; being much more proper for drawing than riding. The horſes of Gaſcony are not unlike thoſe of Spain; but they are not ſo handſome nor ſo active, and therefore they are more proper to draw carriages. The Limoſin horſes are very vicious, and are good for little till they are ſix years old. Their colour is generally bay, or a bay brown. The horſes of Normandy are much like thoſe of Bretagne; and thoſe of Poitou have good bodies, legs, feet, and eyes; but they are far from being handſome.

The horſes of Germany are much better and more handſome than thoſe of the Low Countries. They are of great uſe for carriages; but much more for the army, and for drawing the artillery. They have a great deal of hair, eſpecially about the legs. They are not large, but they are well ſet; and yet they have tender feet. The Hungarian horſes are excellent for the coach, as well as for riding: but they are large, though well proportioned; and they are of all colours, and in general very ſwift.

The Daniſh horſes are low, ſhort, and ſquare; but they have a fine head, and ſhort hair. The horſes of the Low Countries are very fit for the coach, and they are beſt known by the name of *Flanders-mares*. The Poliſh horſes are like the Daniſh; only they have not ſo fine a fore-hand: their colour is generally a bright bay, and that of the outward peel of an onion; and they are fiery and vicious. The horſes of Switzerland are pretty much like thoſe of Germany; which is no wonder, ſince the Germans purchaſe a great number of them. The horſes of Piedmont are fiery, of a middle ſize, and of all ſorts of colours; their legs are good and handſome, their eyes fine, their ears ſmall, and their mouths good; but they do not carry their heads well.

The horſes of Naples and Italy are generally ill-made and lean; and yet they are good and uſeful, for they are light and proper for racing, though not for a long courſe; they never do well in a colder climate. The Spaniſh horſes are very well made and handſome, as well as very active and nimble; they have good eyes, handſome legs and heads, and are eaſily managed; they are alſo good for racing, if they are well kept: however, they are not ſo good in northern climates as in their own country. The Turkiſh horſes are of different ſhapes; but they are generally ſwift, tho' their mouths are bad. Moſt of them are white; tho' there

Equus. there are other colours; and they are large, hardy, ſtrong, and fit for the road.

The horſes of Barbary, commonly called *barbs*, have ſtrong hoofs, and are more proper for racing than any others whatever: ſome have ſaid they never grow old, becauſe they preſerve their vigour to the laſt. They are excellent ſtallions; and ſome of them are uſed as ſuch in Britain: however, the Arabian horſes are not quite ſo good as the Barbary, though ſome think they are both of the ſame kind; only thoſe that are uſed to the deſerts of Arabia are always in action. The horſes of the Gold Coaſt of Guinea are very few in number, and in other parts of that coaſt there are none at all; for many of the negroes, when they have been firſt brought over to our American plantations, have expreſſed great admiration at the ſight of a horſe, and even been afraid to come near one.

The horſes of the Cape of Good Hope were originally brought from Perſia: and they are generally ſmall, and of a cheſnut colour; for thoſe that are natives of that country are all wild, and could never yet be tamed. The horſes of China are good, and more particularly thoſe in the province of Yun Nan; for they are very vigorous, though a little low. The horſes of the Eluth Tartars are good and full of fire; and their ſize is much the ſame as the Poliſh horſes: they are afraid of nothing; not even of lions and tigers: but perhaps this may be owing to uſe. In the country of the Mogul they are very numerous, and of all colours: they are generally of the middle ſize, though there are ſome as large and as handſome as thoſe in Europe. The wild horſes of Tartary differ very little from the tame; but they are ſo ſwift, that they avoid the arrows of the moſt ſkilful hunters.

The breed of horſes in Great Britain is as mixed as that of its inhabitants: the frequent introduction of foreign horſes has given us a variety that no ſingle country can boaſt of: moſt other countries produce only one kind; while ours, by a judicious mixture of the ſeveral ſpecies, by the happy difference of our ſoils, and by our ſuperior ſkill in management, may triumph over the reſt of Europe, in having brought each quality of this noble animal to the higheſt perfection.

In the annals of Newmarket may be found inſtances of horſes that have literally outſtripped the wind, as the celebrated M. Condamine has lately ſhown in his remarks on thoſe of Great Britain. Childers is an amazing inſtance of rapidity; his ſpeed having been more than once exerted equal to 82½ feet in a ſecond, or near a mile in a minute.

The ſpecies uſed in hunting, is a happy combination of the former with others ſuperior in ſtrength, but inferior in point of ſpeed and lineage: an union of both is neceſſary; for the fatigues of the chace muſt be ſupported by the ſpirit of the one, as well as by the vigour of the other.

No country can bring a parallel to the ſtrength and ſize of our horſes deſtined for the draught; or to the activity and ſtrength united of thoſe that form our cavalry. In London, there are inſtances of ſingle horſes that are able to draw on a plain, for a ſmall ſpace, the weight of three tuns; but could with eaſe, and for a continuance, draw half that weight. The pack-horſes of Yorkſhire, employed in conveying the manufactures of that country to the moſt remote parts of the kingdom, uſually carry a burden of 420 pounds; and that indifferently over the higheſt hills of the north, as well as the moſt level roads. But the moſt remarkable proof of the ſtrength of our Britiſh horſes, is to be drawn from that of our mill-horſes: ſome of theſe will carry at one load 13 meaſures, which at a moderate computation of 70 pounds each, will amount to 910; a weight ſuperior to that which the leſſer ſort of camels will bear: this will appear leſs ſurpriſing, as theſe horſes are by degrees accuſtomed to the weight; and the diſtance they travel no greater than to and from the adjacent hamlets. Equus.

Our cavalry, in the late campaigns (when they had opportunity), ſhowed over thoſe of our allies, as well as of the French, a great ſuperiority both of ſtrength and activity: the enemy was broken through by the impetuous charge of our ſquadrons; while the German horſes, from their great weight and inactive make, were unable to ſecond our efforts; though thoſe troops were actuated by the nobleſt ardour.

The preſent cavalry of this iſland only ſupports its ancient glory. It was eminent in the earlieſt times: our ſcythed chariots, and the activity and good diſcipline of our horſes, even ſtruck terror into Cæſar's legions: and the Britons, as ſoon as they became civilized enough to coin, took care to repreſent on their money the animal for which they were ſo celebrated. It is now impoſſible to trace out this ſpecies; for thoſe which exiſt among the *indigenæ* of Great Britain, ſuch as the little horſes of Wales and Cornwall, the hobbies of Ireland, and the ſhelties of Scotland, though admirably well adapted to the uſes of thoſe countries, could never have been equal to the work of war: but probably we had even then a larger and ſtronger breed in the more fertile and luxuriant parts of the iſland. Thoſe we employ for that purpoſe, or for the draught, are an offſpring of the German or Flemiſh breed, meliorated by our ſoil and a judicious culture.

The Engliſh were ever attentive to an exact culture of theſe animals; and in very early times ſet a high value on their breed. The eſteem that our horſes were held in by foreigners ſo long ago as the reign of Athelſtan, may be collected from a law of that monarch, prohibiting their exportation, except they were deſigned as preſents. Theſe muſt have been the native kind, or the prohibition would have been needleſs; for our commerce was at that time too limited to receive improvement from any but the German kind, to which country their own breed could be of no value. But when our intercourſe with the other parts of Europe was enlarged, we ſoon laid hold of the advantages this gave of improving our breed. Roger de Beleſme, earl of Shrewſbury, is the firſt that is on record: he introduced the Spaniſh ſtallions into his eſtate in Pow-iſland, from which that part of Wales was for many ages celebrated for a ſwift and generous race of horſes. Giraldus Cambrenſis, who lived in the reign of Hen. II. takes notice of it; and Michael Drayton, cotemporary with Shakeſpear, ſings their excellence in the ſixth part of his Polyolbion. This kind was probably deſtined to mount our gallant nobility, or courteous knights for feats of chivalry, in the generous contells of the tilt-yard. From theſe ſprung, to ſpeak the language of the times, the flower of courſers, whoſe elegant form added

charms,

Equus. charms to the rider, and whoſe activity and managed dexterity gained him the palm in that field of gallantry and romantic honour.

The increaſe of our inhabitants, and the extent of our manufactures, together with the former neglect of internal navigation to convey thoſe manufactures, multiplied the number of our horſes: an exceſs of wealth, before unknown in theſe iſlands, increaſed the luxury of carriages, and added to the neceſſity of an extraordinary culture of theſe animals: their high reputation abroad has alſo made them a branch of commerce, and proved another cauſe of their vaſt increaſe.

The all-wiſe Creator hath finely limited the ſeveral ſervices of domeſtic animals towards the human race; and ordered that the parts of ſuch, which in their lives have been the moſt uſeful, ſhould after death contribute the leaſt to our benefit. The chief uſe that the *exuviæ* of the horſe can be applied to, is for collars, traces, and other parts of the harneſs; and thus, even after death, he preſerves ſome analogy with his former employ. The hair of the mane is of uſe in making wigs; of the tail, in making the bottoms of chairs, floor-cloths, and chords; and to the angler in making lines.

Plate CLXXXIII. TECHNICAL DESCRIPTION *of the Parts of a* HORSE.

The Fore Part. 1. The forehead. 2. The temples. 3. Cavity above the eye. 4. The jaw. 5. The lips. 6. The noſtrils. 7. The tip of the noſe. 8. The chin. 9. The beard. 10. The neck. 11. The mane. 12. The fore-top. 13. The throat. 14. The withers. 15. The ſhoulders. 16. The cheſt. 17. The elbow. 18. The arm. 19. The plate vein. 20. The cheſnut. 21. The knee. 22. The ſhank. 23. The main tendents. 24. The fetlock joint. 25. The fetlock. 26. The paſtern. 27. The coronet. 28. The hoof. 29. The quarters. 30. The toe. 31. The heel.—*The Body.* 32. The reins. 33. The fillets. 34. The ribs. 35. The belly. 36. The flanks.—*The Hind Part.* 37. The rump. 38. The tail. 39. The buttocks. 40. The haunches. 41. The ſtifle. 42. The thighs. 43. The hock. 44. The kerb. 45. The point of the hock.

For the breeding, rearing, &c. of horſes, ſee the articles, COLT, HORSE, and STALLION; for the method of training and managing them, ſee HORSEMANSHIP; and for their diſeaſes and cure, ſee FARRIERY.

2. The *Aſinus*, or *Aſs*, has long flouching ears, ſhort mane, tail covered with long hairs at the end. The body is uſually of an aſh colour, with a black bar croſs the ſhoulders.

The *Koulan*, or aſs in a wild ſtate (the *onager* of the ancients), varies from the tame in ſeveral reſpects, and requires a more particular deſcription. The forehead is very much arched: the ears are erect, even when the animal is out of order; ſharp-pointed, and lined with whitiſh curling hairs; the irides are of a livid brown; the lips thick; and the end of the noſe ſloping ſteeply down to the upper lip: the noſtrils are large and oval. It is much higher on its limbs than the tame aſs, and its legs are much finer, but it again reſembles it in the narrowneſs of its cheſt and body: it carries its head much higher; and its ſkull is of a ſurpriſing thinneſs. The mane is duſky, about three or four inches long, compoſed of ſoft woolly hair, and extends quite to the ſhoulders: the hairs at the end of the tail are coarſe, and about a ſpan long. The colour of the hair in general is a ſilvery white; the upper part of the face, the ſides of the neck and body, are of a flaxen-colour; the hind part of the thighs are the ſame; the fore part divided from the flank by a white line, which extends round the rump to the tail: the belly and legs are alſo white: along the very top of the back, from the mane quite to the tail, runs a ſtripe of buſhy waved hairs of a coffee-colour, broadeſt above the hind part, growing narrower again towards the tail; another of the ſame colour croſſes it at the ſhoulders (of the males only), forming a mark, ſuch as diſtinguiſhes the tame aſſes: the dorſal band and the mane are bounded on each ſide by a beautiful line of white, well deſcribed by Oppian, who gives an admirable account of the whole. Its winter coat is very fine, ſoft, and ſilky, much undulated, and likeſt to the hair of the camel; greaſy to the touch: and the flaxen colour, during that ſeaſon, more exquiſitely bright. Its ſummer coat is very ſmooth, ſilky, and even, with exception of certain ſhaded rays that mark the ſides of the neck, pointing downwards. Equus.

Theſe animals inhabit the dry and mountainous parts of the deſerts of Great Tartary, but not higher than lat. 48. They are migratory, and arrive in vaſt troops to feed, during the ſummer, in the tracts eaſt and north of lake Aral. About autumn they collect in herds of hundreds, and even thouſands, and direct their courſe towards the north of India, to enjoy a warm retreat during winter. But Perſia is their moſt uſual place of retirement: where they are found in the mountains of Caſbin, ſome even at all times of the year. If we can depend on Barboga, they penetrate even into the ſouthern parts of India, to the mountains of Malabar and Golconda. According to Leo Africanus, wild aſſes of an aſh-colour are found in the deſerts of northern Africa. The Arabs take them in ſnares for the ſake of their fleſh. If freſh killed, it is hot and unſavory: if kept two days after it is boiled, it becomes excellent meat. Theſe people, the Tartars and Romans, agreed in their preference of this to any other food: the latter indeed choſe them young, at a period of life in which it was called *Laliſio*; (vide *Martial.* xiii. 97.) The epicures of Rome preferred thoſe of Africa to all others. The grown onagri were introduced among the ſpectacles of the theatre; and their combats were preferred even to thoſe of the elephants.

The manners of the wild aſs are very much the ſame with thoſe of the wild horſe and the dſhikketei. They aſſemble in troops under the conduct of a leader; and are very ſhy. They will, however, ſtop in the midſt of their courſe, and even ſuffer the approach of man at that inſtant, but will then dart away with the rapidity of an arrow diſmiſſed from the bow. This Herodotus ſpeaks to, in his account of thoſe of Meſopotamia; and Leo Africanus, in that of the African.

They are extremely wild. Holy writ is full of alluſions to their ſavage nature. "He ſcorneth the multitude of the city, neither regardeth he the crying of the driver," (Job xxxix. 7.). Yet they are not untameable. The Perſians catch and break them for the draught: they make pits, half-filled with plants to leſſen the fall, and take them alive. They break, and

Equus. hold them in great eſteem, and ſell them at a high price. The famous breed of aſſes in the eaſt is produced from the koulan reclaimed from the ſavage ſtate, which highly improves the breed. The Romans reckoned the breed of aſſes produced from the onager and tame aſs to excel all others. The Tartars, who kill them only for the ſake of the fleſh and ſkins, lie in ambuſh and ſhoot them. They have been at all times celebrated for their amazing ſwiftneſs; for which reaſon the Hebreans called them *Pere;* as they ſtyled them *Arod* from their braying. Their food is the ſalteſt plants of the deſerts, ſuch as the kalis, atriplex, chenopodium, &c.; and alſo the bitter milky tribe of herbs: they alſo prefer ſalt-water to freſh. This is exactly conformable to the hiſtory given of this animal in the book of Job; for the words "barren land", expreſſive of its dwelling, ought, according to the learned Bochart, to be rendered "ſalt places." The hunters lie in wait for them near the ponds of brackiſh water, to which they reſort to drink: but they are not of a thirſty nature, and ſeldom have recourſe to water. Theſe animals were anciently found in the Holy Land, Syria, the land of Uz or Arabia Deſerta, Meſopotamia, Phrygia, and Lycaonia. But at preſent they are entirely confined to the countries above mentioned. Chagrin, a word derived from the Tartar ſoghré, is made of the ſkin of theſe animals, which grows about the rump, and alſo thoſe of horſes, which is equally good. There are great manufactures of it at Aſtracan and in all Perſia. It is a miſtake to ſuppoſe it to be naturally granulated, for its roughneſs is entirely the effect of art. The Perſians uſe the bile of the wild aſs as a remedy againſt the dimneſs of ſight: and the ſame people, and the Nogayan Tartars, have been known to endeavour the moſt infamous beſtialities with it, in order to free themſelves from the diſorders of the kidneys.

The tame or *domeſtic aſs*, is a humble, patient, and tranquil, animal. He ſubmits with firmneſs to ſtrokes and chaſtiſement: he is temperate both as to the quantity and quality of his food; he contents himſelf with the rigid and diſagreeable herbage which the horſe and other animals leave to him and diſdain to eat: he is more delicate with regard to his drink, never uſing water unleſs it be perfectly pure. As his maſter does not take the trouble of combing him, he often rolls himſelf on the turf among thiſtles, ferns, &c. Without regarding what he is carrying, he lies down to roll as often as he can, ſeeming to reproach his maſter for neglect and want of attention. When very young, the aſs is a gay, ſprightly, nimble, and gentle animal. But he ſoon loſes theſe qualities, probably by the bad uſage he meets with; and becomes lazy, untractable, and ſtubborn. When under the influence of love, he becomes perfectly furious. The affection of the female for her young is ſtrong: Pliny aſſures us, that when an experiment was made to diſcover the ſtrength of maternal affection in a ſhe-aſs, ſhe run through the flames in order to come at her colt. Although the aſs be generally ill uſed, he diſcovers a great attachment to his maſter; he ſmells him at a diſtance, ſearches the places and roads he uſed to frequent, and eaſily diſtinguiſhes him from the reſt of mankind. The aſs has a very fine eye, an excellent ſcent, and a good ear. When overloaded, he hangs his head, and ſinks his ears: when too much teazed or tormented, he opens his mouth and retracts his lips in a diſagreeable manner, which gives him an air of ridicule and deriſion. If you cover his eyes, he will not move another ſtep; if you lay him on his ſide, and place his head ſo that one eye reſts on the ground, and cover the other with a cloth, he will remain in this ſituation without making any attempt to get up. He walks, trots, and gallops in the ſame manner as the horſe; but all his motions are ſlower. Whatever be the pace he is going at, if you puſh him, he inſtantly ſtops. Equus.

The cry of the horſe is known by the name of *neighing;* that of the aſs, by *braying*, which is a long, diſagreeable noiſe, conſiſting of alternate diſcords from ſharp to grave and from grave to ſharp; he ſeldom cries but when preſſed with hunger or love: the voice of the female is clearer and more piercing than that of the male.

The aſs is leſs ſubject to vermin than other animals covered with hair; he is never troubled with lice, probably owing to the hardneſs and dryneſs of his ſkin; and it is probably for the ſame reaſon that he is leſs ſenſible to the whip and ſpur than the horſe. The teeth of the aſs fall out and grow at the ſame age and in the ſame manner as thoſe of the horſe; and he has nearly the ſame marks in his mouth.

Aſſes are capable of propagating when two years old. The females are in ſeaſon during the months of May and June. The milk appears in the dugs ten months after impregnation; ſhe brings forth in the twelfth month, and always one at a time. Seven days after the birth, the ſeaſon of the female returns, and ſhe is again in a condition to receive the male. The colt ſhould be taken from her at the end of five or ſix months, that the growth and nouriſhment of the fetus may not be obſtructed. The ſtallion or jack-aſs ſhould be the largeſt and ſtrongeſt that can be found; he ſhould be at leaſt three years old, and never ought to exceed ten. The aſs, like the horſe, takes three or four years in growing, and lives till he be 25 or 30: he ſleeps leſs than the horſe, and never lies down to ſleep but when exceſſively fatigued. He is more robuſt, and leſs ſubject to diſeaſes, than the horſe.

Travellers inform us that there are two ſorts of aſſes in Perſia; one of which is uſed for burdens, they being ſlow and heavy: the other is kept like horſes for the ſaddle; for they have ſmooth hair, carry their head well, and are much quicker in their motion; but when they ride them, they ſit nearer their buttocks than when on a horſe: they are dreſſed like horſes, and are taught to amble like them; but they generally cleave their noſtrils to give them more room for breathing. Dr Ruſſel likewiſe tells us they have two ſorts in Syria; one of which is like ours; and the other very large, with remarkable long ears; but they are both put to the ſame uſe, which is, to carry burdens.

In America there were originally no aſſes at all, nor yet horſes: but they were carried thither long ago, at firſt by the Spaniards, and afterwards by other nations, where they multiplied greatly; inſomuch, that, in ſome places, there are whole droves of them that run wild, and are very hard to be caught. Aſſes in general carry the heavieſt burdens in proportion to their bulk; and, as their keeping coſts little or nothing, it

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Equus. is a great wonder that they are not put to more uſes than they generally are among us. The fleſh of the common aſs is never eaten in theſe parts of the world; though ſome pretend their colts are tender, and not diſagreeable. Equus.

3. The *Hemionus* of Pallas, or WILD MULE, is of the ſize and appearance of the common mule; with a large head, flat forehead growing narrow toward the noſe, eyes of a middle ſize, the irides of an obſcure aſh-colour; 38 teeth in all, being two in number fewer than in a common horſe; ears much longer than thoſe of a horſe, quite erect, lined with a thick whitiſh curling coat; neck ſlender, compreſſed; mane upright, ſhort, ſoft, of a greyiſh colour; in place of the foretop, a ſhort tuft of downy hair about an inch and three quarters long. The body is rather long, and the back very little elevated; the breaſt protuberant and ſharp. The limbs are long and elegant; the thighs thin, as in a mule's. Within the fore-legs there is an oval callus; in the hind legs none. The hoofs are oblong, ſmooth, and black; the tail is like that of a cow, ſlender, and for half of its length naked, the reſt covered with long aſh-coloured hairs. Its winter coat grey at the tips, of a browniſh aſh-colour beneath; about two inches long, in ſoftneſs like the hair of a camel, and undulated on the back. Its ſummer coat is much ſhorter, of a moſt elegant ſmoothneſs, and in all parts marked moſt beautifully with ſmall vortexes. The end of the noſe is white; from thence to the foretop inclining to tawny. The buttocks are white; as are the inſide of the limbs and belly. From the mane a blackiſh teſtaceous line extends along the top of the back to the tail, broadeſt on the loins, and growing narrower towards the tail. The colour of the upper part of the body is a light yellowiſh grey, growing paler towards the ſides. The length, from the tip of the noſe to the baſe of the tail, is ſix feet ſeven inches; length of the trunk of the tail one foot four; of the hairs beyond the end, eight inches. The height of the animal is three feet nine. This ſpecies inhabits the deſerts between the rivers Onon and Argun in the moſt ſouthern part of Siberia, and extends over the vaſt plains and deſerts of weſtern Tartary, and the celebrated ſandy deſert of Gobi, which reaches even to India. In Siberia they are ſeen only in ſmall numbers, as if detached from the numerous herds to the ſouth of the Ruſſian dominions. In Tartary they are particularly converſant about Taricnoor, a ſalt lake at times dried up. They ſhun wooded tracts and lofty ſnowy mountains. They live in ſeparate herds, each conſiſting of a chief, a number of mares and colts, in all to the number of about 20; but ſeldom ſo many, for commonly each male has but five and ſometimes fewer females. They copulate towards the middle or end of Auguſt; and bring for the moſt part but one at a time, which by the third year attains its full growth, form, and colour. The young males are then driven away from their paternal herds, and keep at a diſtance till they can find mates of their own age which have quitted their dams. Theſe animals always carry their heads horizontally; but when they take to flight, hold them upright, and erect their tail. Their neighing is deeper and louder than that of a horſe. They fight by biting and kicking, as uſual with the horſe: they are fierce and untameable; and even thoſe which have been taken young, are ſo intractable as not to be broken by any art which the wandering Tartars could uſe. Yet was it poſſible to bring them into fit places, and to provide all the conveniencies known in Europe, the taſk might be effected: but it is doubted whether the ſubdued animal would retain the ſwiftneſs it is ſo celebrated for in its ſtate of nature. It exceeds that of the antelope; it is even proverbial; and the inhabitants of Thebet, from the fame of its rapid ſpeed, mount on it Chammo their god of fire. The Mongalians deſpair of ever taking them by the chace; but lurk behind ſome tomb, or in ſome ditch, and ſhoot them when they come to drink or eat the ſalt of the deſert. They are exceſſively fearful animals, and provident againſt danger. A male takes on him the care of the herd, and always is on the watch. If they ſee a hunter, who by creeping along the ground has got near them, the centinel takes a great circuit, and goes round and round him, as diſcovering ſomewhat to be apprehended. As ſoon as the animal is ſatisfied, it rejoins the herd, which ſets off with great precipitation. Sometimes its curioſity coſts it its life; for it approaches ſo near as to give the hunter an opportunity of ſhooting it. But it is obſerved, that in rainy or in ſtormy weather, theſe animals ſeem very dull, and leſs ſenſible of the approach of mankind. The Mongalians and Tunguſi, according to Du Halden, kill them for the ſake of the fleſh, which they prefer to that of horſes, and even to that of the wild boar, eſteeming it equally nouriſhing and wholeſome. The ſkin is alſo uſed for the making of boots. Their ſenſes of hearing and ſmelling are moſt exquiſite: ſo that they are approached with the utmoſt difficulty. The Mongalians call them *dſhikketaei*, which ſignifies "the eared;" the Chineſe, *yo to tſe*, or "mule." In ancient times the ſpecies extended far to the ſouth. It was the hemionos or half aſs of Ariſtotle, found in his days in Syria, and which he celebrates for its amazing ſwiftneſs and its fecundity, a breeding mule being thought a prodigy; and Pliny, from the report of Theophraſtus, ſpeaks of this ſpecies being found in Cappadocia, but adds they were a particular kind.

The domeſtic MULES of preſent times (*equus mulus* of Geſner and Linnæus) are the offspring of the horſe and the aſs, or aſs and mare; are very hardy, and have more the form and diſpoſition of the aſs than the horſe. The fineſt are bred in Spain; very large ones in Savoy.

4. The ZEBRA. This animal has the figure and gracefulneſs of the horſe, joined to the ſwiftneſs of the ſtag. He is about ſeven feet long, from the point of the muzzle to the origin of the tail, and about four feet high. The colour of his ſkin is beautiful and uniform, conſiſting of alternate parallel rings of black and white, diſpoſed in the moſt regular manner, as repreſented in the plate. He is generally leſs than the horſe and larger than the aſs. The zebra is found no where but in the eaſtern and ſouthern provinces of Africa, from Ethiopia to the Cape of Good Hope, and from the Cape of Good Hope to Congo. The Dutch have been at great pains to tame and uſe them for domeſtic purpoſes, but with little ſucceſs. He is hard-mouthed, and kicks when any perſon attempts to touch or come near him. He is reſtleſs and obſtinate as a mule: but perhaps the wild horſe is naturally as

Era
Erasmus.

untractable as the zebra; for it is probable, if he were early accustomed to obedience and a domestic life, he would become as docile as the horse.

5. The quacha, or quagga, is striped like the former on the head and body, but with fewer lines. The flanks are spotted; the rump is plain; the ground colour of the head, neck, body, and rump, a bright bay: the belly, thighs, and legs are white, and free from all marks. This species, till of late, has been supposed to be the female of the zebra; but recent observations prove that the male and female zebra are marked alike. This differs likewise in being thicker and stronger made, and in being more tractable; for instance, one had been so far broken as to draw in a cart. The Hottentots also distinguish them from the former, by the names of *quagga* and *opeagha*.

ERA, in chronology. See ÆRA.

ERANARCHA, a public officer among the ancient Greeks, whose business was to preside over and direct the alms and provisions made for the poor. Cornelius Nepos, in his life of Epaminondas, describes his office thus: When any person was reduced to poverty, taken captive, or had a daughter to marry, which he could not effect for want of money, &c. the eranarcha called an assembly of friends and neighbours, and taxed each according to his means and estate, to contribute towards his relief.

ERANTHEMUM, in botany: A genus of the monogynia order, belonging to the diandria class of plants; and in the natural method ranking with those of which the order is doubtful. The corolla is quinquefid, with the tube filiform; the antheræ without the tube; the stigma simple.

ERASISTRATUS, a celebrated physician, grandson to the philosopher Aristotle. He discovered by the motion of the pulse the love which Antiochus had conceived for his mother-in-law Stratonice, and was rewarded with 100 talents for the cure by the father of Antiochus. He was a great enemy to bleeding and violent physic.

ERASMUS (Desiderius), born at Rotterdam in 1467. He lost his father and mother at 14 years of age; and was committed to the care of certain guardians, who would force him to be an ecclesiastic, which he refused for a long time. However, he was obliged to assume the religious habit among the canons regular in the monastery of Stein near Tergou; but afterwards obtained a dispensation from his vows. He was the most learned man of the age in which he lived; and contributed, by his example and his writings, to the restoration of learning in the several countries in which he occasionally resided, viz. Italy, Switzerland, Holland, France, and England: with the last, he was most satisfied; and found the greatest encouragement from Henry VIII. Sir Thomas More, and all the learned Englishmen of those days. He published a great many books; and died at Basil in 1536. He was buried honourably, and his memory is still held in veneration. He had, however, many enemies; and as he did not embrace the reformation, and yet censured many things in popery, he hath been treated injuriously both by Catholics and Protestants. The works of Erasmus in 10 vols folio were published at Leyden in 1706, in a very handsome manner, under the care of M. Le Clerc. Dr Jortin published his life in one vol. 4to, 1758.

Erastians
Erection.

ERASTIANS, a religious sect or faction which arose in England during the time of the civil wars in 1647, thus called from their leader Thomas Erastus, whose distinguishing doctrine it was, that the church had no right to discipline, that is, no regular power to excommunicate, exclude, censure, absolve, decree, or the like.

ERATO (from ἐραω *I love*), in mythology, the name of one of the nine muses who presided over love-poetry. To this muse some have ascribed the invention of the lyre and lute; and she is represented with a garland of myrtles and roses, holding a lyre in one hand and a bow in the other, and at her side a Cupid with his torch. There is also a Nereid of the same name.

ERATOSTHENES, a Cyrenæan philosopher, historian, and poet; called for his learning *Plato Minor*. He was keeper of the famous library at Alexandria; and was greatly in favour with Ptolemy Euergetes, by whose order he wrote a history of the Theban kings of Egypt, which succession was entirely omitted by Manetho. He thus fixed the Egyptian chronology, and his authority is by many preferred to that of Manetho. He wrote many other things, a catalogue of which is to be seen in Fabricius, Vossius, &c. but his only piece now remaining entire is a description and fabulous account of the stars. He starved himself in old age through grief for the dimness of his sight, about the 10th or 12th year of Ptolemy Epiphanes, 194 B. C.

ERATOSTRATUS, an Ephesian who burnt the famous temple of Diana the same night that Alexander the Great was born. This burning, as some writers have observed, was not prevented or seen by the goddess of the place, who was then present at the labours of Olympias, and at the birth of the conqueror of Persia. Eratostratus did this villany merely to eternize his name by so uncommon an action.

EREBUS (Ἔρεβος, from ערב *night*), in mythology, a term denoting darkness. According to Hesiod, Erebus was the son of Chaos and the night, and the father of the day. This was also the name of part of the *inferi* among the ancients: they had a peculiar expiation for those who were detained in Erebus.

Erebus was properly the gloomy region, and distinguished both from Tartarus the place of torment, and Elysium the region of bliss: according to the account given of it by Virgil, it forms the third grand division of the invisible world beyond the Styx, and comprehends several particular districts, as the *limbus infantum*, or receptacle for infants; the *limbus* for those who have been put to death without cause; that for those who have destroyed themselves; the fields of mourning, full of dark groves and woods, inhabited by those who died for love; and beyond these, an open champaign country for departed warriors.

ERECTION, in a general sense, the art of raising or elevating any thing; as the erection of a perpendicular, &c. It is also used in a figurative sense; as the erection of a bishopric, marquisate, &c.

ERECTION is particularly used by medical writers for the state of the penis when swelled and distended

Eremit || Erica.

by the action of the muſcles called *erectores*. See ANATOMY, p. 739.

There is alſo an erection of the clitoris which is performed by muſcles for that purpoſe.

EREMIT. See HERMIT.

ERETRIA (anc. geog.), a town of Eubœa, ſituated on the Euripus, in the ſouth-weſt of the iſland. A very ancient city, and the largeſt of the iſland, after Chalcis. After being demoliſhed by the Perſians, it was reſtored on an adjoining ſpot, according to Strabo, who mentions a ſchool of Eretrian philoſophers there. The Abantes of Homer were of Eubœa.

ERFORT, a town of Germany, in the circle of Upper Saxony, the capital of Thuringia, and ſubject to the elector of Mentz. It is defended by good ramparts; and has a caſtle on an eminence, which commands the town. Its inhabitants are almoſt all Lutherans, but its principal churches belong to the Catholics. There are ſeveral handſome ſtructures, both public and private; but the houſes in general are but indifferently built. E. Long. 11. 14. N. Lat. 50. 49.

ERGASTULUM, among the Romans, was a priſon, work-houſe, or houſe of correction, where ſlaves by the private authority of their maſters were confined and kept for their offences to hard labour. The Greeks had a place of confinement of this ſort called Σωφρονιστηριον.

ERGOT, in farriery, is a ſtub, like a piece of ſoft horn, about the bigneſs of a cheſnut, placed behind and below the paſtern-joint, and commonly hid under the tuft of the fetlock.

ERICA, HEATH, in botany: A genus of the monogynia order, belonging to the octandria claſs of plants; and in the natural method ranking under the 18th order, *Bicornes*. The calyx is tetraphyllous; the corolla quadrifid; the filaments inſerted into the receptacle; the antheræ bifid; the capſule quadrilocular. Of this there are four ſpecies, natives of Britain; which are ſo well known, that no deſcription needs be given of them. In the Highlands of Scotland this plant is made ſubſervient to a great variety of purpoſes. The poorer inhabitants make walls for their cottages with alternate layers of heath and a kind of mortar made of black earth and ſtraw. The woody roots of the heath are placed in the centre; the tops externally and internally. They make their beds of it, by placing the roots downwards; and the tops only being uppermoſt, they are ſufficiently ſoft to ſleep upon. Cabbins are alſo thatched with it. In the iſland of Ilay, ale is frequently made by brewing one part of malt and two of the tops of young heath; ſometimes adding hops. Boethius relates, that this liquor was much uſed by the Picts. Woollen cloth boiled in alum water, and afterwards in a ſtrong decoction of heath-tops, comes out of a fine orange colour. The ſtalks and tops will tan leather. Beſoms and faggots to burn in ovens are alſo made of this plant. It is alſo uſed for filling up drains that are to be covered over. Sheep and goats will ſometimes eat the tender ſhoots, but they are not fond of them. Cattle not accuſtomed to feed on heath, give bloody milk; but they are ſoon relieved by drinking plentifully of water. Horſes will eat the tops. Bees extract a great deal of honey from the flowers; and, where heath abounds, the honey has a reddiſh caſt. There are many exotic ſpecies with which our green-houſe collections are enriched and adorned, as the triflora, tubiflora, auſtralis, &c.

Eridanus || Erigena.

ERIDANUS (anc. geog.) a river of Attica, falling into the Iliſſus.—Another Eridanus, the more ancient name of the Padus, an appellation aſcribed by Pliny to the Greeks; followed in this by Virgil. It riſes in mount Veſulus, in the Alpes Cottiæ, and dividing the Ciſalpine Gaul into the Ciſpadana and Tranſpadana, and ſwelled on each hand with no inconſiderable rivers from the other Alps and the Apennine, falls at ſeven mouths into the Adriatic. Famous in mythology, from the ſtory of Phaëton; whoſe ſiſters, the Heliades, were here changed into poplars, according to Ovid.

ERIDANUS, in aſtronomy, a conſtellation of the ſouthern hemiſphere, in form of a river.—The ſtars in the conſtellation Eridanus, in Ptolemy's catalogue, are 34; in Tycho's, 19; and in the Britiſh Catalogue, 84.

ERIE, a vaſt lake to the weſtward of Pennſylvania, in North America, ſituated between 80° and 87° W. Long. and between 41° and 42° N. Lat.

ERIGENA, or SCOTUS, (John), a famous ſcholaſtic divine, born about the beginning of the ninth century; but where, is a matter of diſpute among authors. Bale and Pits ſay he was born at St David's in Wales; Dempſter, Mackenzie, and Henry, that he was born at Ayr in Scotland; which they infer from his names *Erigina* and *Scotus*, by the latter of which he was generally diſtinguiſhed by his cotemporary writers. But Du Pin and Sir James Ware aſſert that he was by birth an Iriſhman; Ireland being in thoſe days called *Scotia*, and by the natives *Erin*. They agree, however, in relating that he travelled to Athens, where he acquired a competent knowledge of the Greek and other oriental languages; and that he afterwards reſided many years in the court of Charles the Bald, king of France, who, on account of his ſingular abilities, treated him as his intimate friend and companion. He ſlept frequently in the royal apartment; and was conſtantly admitted to the king's table. "We may judge (ſays a modern hiſtorian) of the freedom which he uſed with Charles, by the following repartee. As the king and Scotus were ſitting one day at table, oppoſite to each other, after dinner, drinking a cheerful glaſs, the philoſopher having ſaid ſomething that was not quite agreeable to the rules of French politeneſs, the king in a merry humour aſked him, Pray what is between a *Scot* and a *ſot?* To which he anſwered, "Nothing but the table." See *Henry's Hiſtory of Great Britain*, vol. I. p. 344. who quotes this ſtory from *Hovedeni Annal. ad an.* 86. Quer. What language were they talking when this *bon mot* was uttered?

During his reſidence with Charles, he wrote ſeveral books of ſcholaſtic divinity; which, though abſurd enough, were at that time not ſufficiently ſo to ſecure him from the imputation of heterodoxy; and on that account the pope commanded Charles the Bald to ſend him to Rome; but the king had too great a regard for his companion to truſt him with his holineſs. One of the chief controverſies in which Scotus was engaged, and with which the pope was much offended, was concerning the real preſence and blood of Chriſt in the wafer.

Horn || Horners.

be taken to keep it clear, as it is apt to be clogged by a thin fluid that gradually oozes out and fills up the paſſage. Some have practiſed ſawing off the horn; but, according to the beſt obſervations, it does not ſucceed better than boring. From the caſes Dr Tufts has ſeen, he is led to conclude that injections are in general unneceſſary; that, when the diſtemper is early diſcovered, no more is required than a proper opening into the horn, keeping it ſufficiently clear for the admiſſion of freſh air, the removal of the compreſſion, and the diſcharge of floating matter. But when the diſtemper has communicated its effects to the brain, ſo as to produce a high degree of inflammation, it is much to be doubted whether any method of cure will ſucceed.

Horn-Fiſh, *Gar-fiſh*, or *Sea-Needle*. See Esox.

Horn-Work, in fortification, an outwork compoſed of two demi-baſtions joined by a curtain. See Fortification.

HORNBY, a town of Lancaſhire in England, ſeated on a branch of the river Lune, and beautified with a handſome parochial chapel. The ruins of a decayed caſtle are ſtill to be ſeen here. W. Long. 2. 20. N. Lat. 54. 6.

HORN-castle, a town of Lincolnſhire in England. It had a caſtle, as the name imports; from the architecture of which, and the Roman coins that are ſometimes dug up here, it is thought to have been a camp or ſtation of the Romans. The town is well built, and is almoſt ſurrounded with water. It is a ſigniory of 13 lordſhips. In theſe lordſhips there are ſeveral chapels for the convenience of the inhabitants, who are at too great a diſtance from the mother-church, and pretty numerous. It has a market on Saturdays, and fairs in June and Auguſt.

HORNDON, a town of Eſſex, in England. It ſtands near a rivulet, that at a ſmall diſtance from hence falls into the Thames, which is there called the *Hope*. E. Long. 0. 30. N. Lat. 51. 20.

HORNECK (Dr Anthony), a learned and pious divine, was born at Baccharach, in the Lower Palatinate, in 1641. He ſtudied divinity under Dr Spanheim at Heidelberg; and afterwards coming to England, completed his ſtudies at Oxford, and became vicar of Allhallows in that city. In 1665, he removed into the family of the duke of Albemarle; and was tutor to his grace's ſon, then lord Torrington. The duke preſented him to the rectory of Doulton in Devonſhire, and procured for him a prebend in Exeter. He was afterwards choſen preacher of the Savoy. In 1693, he was collated to a prebend in Weſtminſter, and the ſame year admitted to a prebend in the cathedral of Wells. He publiſhed, 1. The great law of conſideration. 2. The happy aſcetick. 3. Delight and judgment. 4. The fire of the altar. 5. The exerciſe of prayer. 6. The crucified Jeſus. 7. Several ſermons, and other works. He died in 1696, and was interred in Weſtminſter abbey, where a monument is erected to his memory.

HORNERS, thoſe people whoſe buſineſs it is to prepare various utenſils of the horns of cattle. The horners were a very ancient and conſiderable fraternity in the city of London ſome hundred years ago. In the reign of Edward II. they complained to parliament, that by foreigners buying up the horns in England, they were in danger of being ruined, and this buſineſs loſt to the nation. For this reaſon was made the ſtatute 6 Edw. IV. by which the ſale of horns to foreigners (except ſuch as the ſaid horners refuſed) was prohibited; and the wardens had power granted them to ſearch all the markets in London and 24 miles round, and to inſpect Sturbridge and Ely fairs, to prevent ſuch practices, and to purchaſe horns at ſtated prices. But on plauſible pretences this law was repealed in the reign of James I. and thereupon the old evil revived. The horners again applied to parliament, and king Edward's ſtatute was renewed (excepting as to the inſpection of the fairs), and ſtill remains in force. The importation of unwrought horns into this country is alſo prohibited. In 1750, there were exported to Holland 514,500 lantern-leaves, beſides powder flaſks. There was formerly a duty of 20 ſhillings a thouſand, under which in 1682 were exported 76,650; but in the reign of George I. this duty was taken off, and theſe and all other manufactures made of horns may be exported free. The preſent company of horners were incorporated January 12. 1638; and conſiſt of a maſter, two wardens, and nine aſſiſtants, without livery or hall. They have a warehouſe in Spitalfields, to which the horns are ſent as brought from town and country markets, and thence regularly divided, the widows and orphans of deceaſed members having equal ſhares.

Hornet || Hornpipe.

HORNET, in zoology, a ſpecies of waſp. See Vespa.

HORNING, in Scots law, a writing iſſuing from the ſignet, in his majeſty's name, at the inſtance of a creditor againſt his debtor, commanding him to pay or perform within a certain time, under pain of being declared rebel, and by a caption put in priſon.

HORNIUS (George), profeſſor of hiſtory at Leyden, was born in the Palatinate, and died at Leyden in 1670. He was a little maniacal towards the end of his life; which diſorder was ſuppoſed to be occaſioned by the loſs of 6000 florins he had entruſted with an alchemiſt at the Hague. His works are, 1. *Hiſtoria Eccleſiaſtica ad an.* 1666. This has been well eſteemed. 2. *De Originibus Americanis*, 1652, 8vo. 3. *Geographia Vetus & Nova.* 4. *Orbis Politicus.* He was a man of vaſt reading, rather than great parts.

HORNSEY, a town in Yorkſhire, 188 miles from London. It is almoſt ſurrounded by a ſmall arm of the ſea; and the church having a high ſteeple, is a noted ſea-mark. Not many years ago there was a ſtreet here called *Hornſey beck*, which was waſhed away by the ſea, except a houſe or two. E. Long. 0. 6. N. Lat 54. 0.

Hornsey, a town of Middleſex, five miles north of London. It is a long ſtraggling place, ſituated in a low valley, but extremely pleaſant, having the new-river winding through it. Its church, of which Highgate is a hamlet, is ſuppoſed to be built with the ſtones that came from Lodge-Hill, the biſhop of London's hunting-ſeat in his park here; it having been his manor from the moſt ancient times. About a mile nearer this is a coppice of young trees, called *Hornſey-wood*, at the entrance of which is a public houſe, to which great numbers of perſons reſort from the city. This houſe being ſituated on the top of a hill, affords a delightful proſpect of the neighbouring country.

HORNPIPE, a common inſtrument of muſic in Wales,

Horologium, Horoſcope

Wales, conſiſting of a wooden pipe, with holes at ſtated diſtances, and a horn at each end; the one to collect the wind blown into it by the mouth, and the other to carry off the ſounds as modulated by the performer.

HORNPIPE is alſo the name of an Engliſh air, probably derived from the above inſtrument. The meaſure of this air is triple time, with ſix crotchets in a bar; four of which are to be beat with the hand down and two up.

HOROLOGIUM, ὡρολογιον (compoſed of ὡρα *hora*, "time, hour," and λογος "ſpeech, diſcourſe"), a common name among ancient writers for any inſtrument or machine for meaſuring the hours; (ſee CHRONOMETER).—Such are our clocks, watches, ſun-dials, &c. See CLOCK, WATCH DIAL, and CLEPSYDRA.

Modern inventions and gradual improvements, have given birth to ſome new terms that come properly under this head, and annexed new meanings to others totally different from what they had originally. All chronometers that announced the hour by ſtriking on a bell, were called *clocks*: thus, we read of pocket-clocks, though nothing could ſeem more abſurd than to ſuppoſe that a clock, according to the modern idea, ſhould be carried in the pocket. In like manner, all clocks that did not ſtrike the hour were called *watches* or *time-pieces*; and the different parts of a ſtriking clock were diſtinguiſhed by the watch-part and the clock-part; the former meaning that part which meaſures the time, and the latter the part which proclaims the the hours. In the report of Sir Iſaac Newton to the houſe of commons, *anno* 1713, relative to the longitude act, he ſtates the difficulties of aſcertaining the longitude by means of a watch: yet it is obvious, from ſeveral circumſtances, that his remarks were directly to be underſtood of a time-piece regulated by a pendulum; for his objections are founded on the known properties of the pendulum, ſome of which differ eſſentially from the properties of the balance and ſpring. It is alſo to be remembered, that all the attempts of Huygens for finding the longitude were by means of pendulum clocks that did not ſtrike the hour, and conſequently, according to the language of the times, were called *watches*. At this time ſuch machines for meaſuring time as are fixed in their place are called *clocks*, if they ſtrike the hour: if they do not ſtrike the hour, they are called *time-pieces*; and when conſtructed with more care, for a more accurate meaſure of time, they are called *regulators*. Some artiſts of late have affected to call ſuch watches as were conſtructed for aſtronomical and nautical obſervations by the name of *time-pieces*, probably to intimate that they poſſeſs the advantages of thoſe conſtructed with a pendulum.

Mr John Harriſon firſt gave the name of *time-keeper* to his watch, for the performance of which he received from parliament the ſum of L. 20,000. See LONGITUDE.

For the account of the principles of this machine, ſee TIME-KEEPER. And for the chief improvements that have been made for the more accurate meaſure of time, ſee PALLETS, PENDULUM, and SCAPEMENT.

HOROSCOPE, in aſtrology, the degree or point of the heavens riſing above the eaſtern point of the horizon at any given time when a prediction is to be made of a future event: as, the fortune of a perſon then born, the ſucceſs of a deſign then laid, the weather, &c. The word is compoſed of ὡρα *hora*, "hour," and the verb σκεπτομαι, *ſpecto, conſidero*, "I conſider." Horoſcopy ſi Horſe.

They were formerly ſo infatuated with horoſcopes, that Albertus Magnus, Cardan, and others, are ſaid to have had the temerity to draw that of Jeſus Chriſt.

HOROSCOPE is alſo uſed for a ſcheme or figure of the twelve houſes; i. e. the twelve ſigns of the zodiac, wherein is marked the diſpoſition of the heavens for any given time. Thus we ſay, to draw a horoſcope, conſtruct a horoſcope, &c. We call it, more peculiarly, *calculating a nativity*, when the life and fortune of a perſon are the ſubject of the prediction; for they draw horoſcopes of cities, great enterprizes, &c. See HOUSE.

HOROSCOPY. See DIVINATION, n° 2.

HORREA, in Roman antiquity, were public magazines of corn and ſalt meat, out of which the ſoldiers were furniſhed on their march in the military roads of the empire. *Horrea* was alſo the name which they gave to their granaries.

HORROX (Jeremiah), an eminent Engliſh aſtronomer in the 17th century, was born at Texteth near Liverpool in Lancaſhire in 1619. He died, to the great loſs of that ſcience and of the world, in the 23d year of his age, after he had juſt finiſhed his *Venus in ſole viſa*; which, with ſome other works, were publiſhed by Dr Wallis, in quarto.

HORROR, ſtrictly ſignifies ſuch an exceſs of fear as makes a perſon tremble. See FEAR, FRIGHT, and TERROR. In medicine, it denotes a ſhivering and ſhaking of the whole body, coming by fits. It is common at the beginning of all fevers, but is particularly remarkable in thoſe of the intermittent kind.

HORROR of a Vacuum, was an imaginary principle among the ancient philoſophers, to which they aſcribed the aſcent of water in pumps, and other ſimilar phenomena, which are now known to be occaſioned by the weight of the air.

HORSE, in zoology. See the article EQUUS.

Horſes were very rare in Judæa till Solomon's time. Before him we find no horſemen mentioned in the armies of Iſrael. David having won a great battle againſt Hadadezer king of Shobah (2 Sam. viii. 4, 5.), took 1700 horſes, and lamed all belonging to the chariots of war, reſerving only 100 chariots. The judges and princes of Iſrael uſed generally to ride on mules or aſſes. After David's time, horſes were more common in the country of Judah, &c. Solomon is the firſt king of Judah who had a great number of horſes, and he kept them rather for pomp than for war; for we do not read that he made any military expeditions. He had, ſays the ſcripture (1 Kings iv. 26.) 40,000 ſtalls of horſes for his chariots, and 12,000 horſemen diſtributed in his fortified places (1 Kings x. 26.) He had his horſes from Egypt (*ibid.* ver. 28, 29.); and there was not a ſet which did not coſt him more than 600 ſhekels, which make of our money about 90l. Moſes had forbidden the king of the Hebrews to keep a great number of horſes (Deut. xvii. 16.), leſt at any time he ſhould be inclined to carry the people back into Egypt.

We read in the ſecond book of Kings (xxiii. 17.), that Joſiah took away the horſes which the kings of Judah his predeceſſors had conſecrated to the ſun. We know

Horſe. know the ſun was worſhipped over all the eaſt, and that the horſe, the ſwifteſt of tame beaſts, was conſecrated to this deity, who was repreſented as riding in a chariot drawn by the moſt beautiful and ſwifteſt horſes in the world, and performing every day his journey from eaſt to weſt, in order to communicate his light to mankind. Xenophon deſcribes a ſolemn ſacrifice of horſes, which was made with ceremony to the ſun: they were all the fineſt ſteeds, and were led with a white chariot, crowned, and conſecrated to the ſame god. We may believe that the horſes which Joſiah removed out of the court of the temple, were appointed for the like ſacrifices. The rabbins inform us, that theſe horſes were every morning put to the chariots dedicated to the ſun, whereof there is mention made in the ſame book; and that the king, or ſome of his officers, got up and rode to meet the ſun in its riſing, as far as from the eaſtern gate of the temple to the ſuburbs of Jeruſalem. Others are of opinion, that the horſes mentioned in the book of kings were of wood, ſtone, or metal, erected in the temple in honour of the ſun: Others, that they were horſes which none were permitted to ride or faſten to the yoke, but were free, and left to themſelves, like thoſe which Julius Cæſar let looſe and ſet at liberty after his paſſage of the Rubicon.

Horſes were uſed both amongſt the Greeks and Romans in war, but were not originally very numerous; for as each horſeman provided his own horſe, few would be able to bear the expence. Horſes for a conſiderable time were managed by the voice alone, or by a ſwitch, without bridle, ſaddle, or ſtirrups. Their harneſs was ſkins of beaſts, or ſometimes cloth. Both horſes and men amongſt the Greeks underwent a ſevere probation before their admiſſion into the cavalry. —Horſe-races were common amongſt the Greeks and Romans, and the place where they ran or breathed their courſers was called *hippodromus*.

Management of a Horse *upon and after a Journey.* See that his ſhoes be not too ſtrait, or preſs his feet, but be exactly ſhaped; and let him be ſhod ſome days before you begin a journey, that they may be ſettled to his feet.

Sportſman's Dictionary. Obſerve that he is furniſhed with a bitt proper for him, and by no means too heavy, which may incline him to carry low, or to reſt upon the hand when he grows weary, which horſemen call *making uſe of his fifth leg.*

The mouth of the bitt ſhould reſt upon his bars about half a finger's-breadth from his tuſhes, ſo as not to make him frumble his lips; the curb ſhould reſt in the hollow of his beard a little above the chin; and if it gall him, you muſt defend the place with a piece of buff or other ſoft leather.

Take notice that the ſaddle do not reſt upon his withers, reins, or back-bone, and that one part of it do not preſs his back more than another.

Some riders gall a horſe's ſides below the ſaddle with their ſtirrup-leathers, eſpecially if he be lean; to hinder it, you ſhould fix a leather ſtrap between the points of the fore and hind-bows of the ſaddle, and make the ſtirrup-leather paſs over them.

Begin your journey with ſhort marches, eſpecially if your horſe has not been exerciſed for a long time: ſuffer him to ſtale as often as you find him inclined; and not only ſo, but invite him to it: but do not excite your mares to ſtale, becauſe their vigour will be thereby diminiſhed. Horſe.

It is adviſable to ride very ſoftly, for a quarter or half an hour before you arrive at the inn, that the horſe not being too warm, nor out of breath, when put into the ſtable, you may unbridle him: but if your buſineſs obliges you to put on ſharply, you muſt then (the weather being warm) let him be walked in a man's hand, that he may cool by degrees; otherwiſe, if it be very cold, let him be covered with cloths, and walked up and down in ſome place free from wind; but in caſe you have not the conveniency of a ſheltered walk, ſtable him forthwith, and let his whole body be rubbed and dried with ſtraw.

Although ſome people will have their horſes legs rubbed down with ſtraw as ſoon as they are brought into the ſtable, thinking to ſupple them by that means; yet it is one of the greateſt errors that can be committed, and produces no other effects than to draw down into the legs thoſe humours that are always ſtirred up by the fatigue of the journey: not that the rubbing of horſes legs is to be diſallowed; on the contrary, we highly approve of it, only would not have it done at their firſt arrival, but when they are perfectly cooled.

Being come to your inn, as ſoon as your horſe is partly dried, and ceaſes to beat in the flanks, let him be unbridled, his bit waſhed, cleanſed, and wiped, and let him eat his hay at pleaſure.

If your horſe be very dry, and you have not given him water on the road, give him oats waſhed in good mild ale.

The duſt and ſand will ſometimes ſo dry the tongues and mouths of horſes, that they loſe their appetites: in ſuch caſe, give them bran well moiſtened with water to cool and refreſh their mouths; or waſh their mouths and tongues with a wet ſponge, to oblige them to eat.

The foregoing directions are to be obſerved after moderate riding; but if you have rode exceſſively hard, unſaddle your horſe, and ſcrape off the ſweat with a ſweating-knife, or ſcraper, holding it with both hands, and going always with the hair; then rub his head and ears with a large hair-cloth, wipe him alſo between the fore-legs and hind-legs; in the mean while, his body ſhould be rubbed all over with ſtraw, eſpecially under his belly and beneath the ſaddle, till he is thoroughly dry.

That done, ſet on the ſaddle again, cover him; and if you have a warm place, let him be gently led up and down in it, for a quarter of an hour; but if not, let him dry where he ſtands.

Or you may unſaddle him immediately; ſcrape off the ſweat; let the oſtler take a little vinegar in his mouth, and ſquirt it into the horſe's; then rub his head, between the fore and hind-legs, and his whole body, till he is pretty dry: let him not drink till thoroughly cool and has eaten a few oats; for many, by drinking too ſoon, have been ſpoiled. Set the ſaddle in the ſun or by a fire, in order to dry the pannels.

When horſes are arrived in an inn, a man ſhould, before they are unbridled, lift up their feet, to ſee whether they want any of their ſhoes, or if thoſe they

Horſe. have do not reſt upon their ſides; afterwards he ſhould pick and clear them of the earth and gravel, which may be got betwixt their ſhoes and ſoles.

If you water them abroad, upon their return from the river cauſe their feet to be ſtopped with cow-dung, which will eaſe the pain therein; and if it be in the evening, let the dung continue in their feet all night, to keep them ſoft and in good condition: but if your horſe have brittle feet, it will be requiſite to anoint the fore-feet, at the on-ſetting of the hoofs, with butter, oil, or hog's-greaſe, before you water him in the morning, and in dry weather they ſhould be alſo greaſed at noon.

Many horſes, as ſoon as unbridled, inſtead of eating, lay themſelves down to reſt, by reaſon of the great pain they have in their feet, ſo that a man is apt to think them ſick: but if he looks to their eyes, he will ſee they are lively and good; and if he offers them meat as they are lying, they will eat it very willingly; yet if he handles their feet, he will find them extremely hot, which diſcovers their ſuffering in that part. You muſt therefore ſee if their ſhoes do not reſt upon their ſoles, which is ſomewhat difficult to be certainly known without unſhoeing them; but if you take off their ſhoes, then look to the inſide of them, and you may perceive that thoſe parts which reſt upon the ſoles are more ſmooth and ſhining than the others: in this caſe you are to pare their feet in thoſe parts, and fix on their ſhoes again, anointing the hoofs, and ſtopping the ſoles with ſcalding hot black pitch or tar.

After a long day's journey, at night feel your horſe's back, if he be pinched, galled, or ſwelled (if you do not immediately diſcover it, perhaps you may after ſupper), there is nothing better than to rub it with good brandy and the white of an egg. If the galls are between the legs, uſe the ſame remedy; but if the oſtler rubs him well between the legs, he will ſeldom be galled in that part.

In order to preſerve horſes after travel, take theſe few uſeful inſtructions. When you are arrived from a journey, immediately draw the two heel-nails of the fore-feet; and, if it be a large ſhoe, then four: two or three days after, you may blood him in the neck, and feed him for 10 or 12 days only with wet bran, without giving him any oats; but keep him well littered.

The reaſon why you are to draw the heel-nails, is becauſe the heels are apt to ſwell, and if they are not thus eaſed, the ſhoes would preſs and ſtraiten them too much: it is alſo adviſable to ſtop them with cow-dung for a while; but do not take the ſhoes off, nor pare the feet, becauſe the humours are drawn down by that means.

The following bath will be very ſerviceable for preſerving your horſe's legs. Take the dung of a cow or ox and make it thin with vinegar, ſo as to be of the conſiſtence of thick broth; and having added a handful of ſmall ſalt, rub his fore-legs from the knees, and the hind-legs from the gambrels, chafing them well with and againſt the hair, that the remedy may ſink in and ſtick to thoſe parts, that they may be all covered over with it. Thus leave the horſe till morning, not wetting his legs, but giving him his water that evening in a pail: next morning lead him to the river, or waſh his legs in well-water, which is very good, and will keep them from ſwelling. Horſe.

Thoſe perſons, who, to recover their horſes feet, make a hole in them, which they fill with moiſtened cow-dung, and keep it in their fore-feet during the ſpace of a month, do very ill; becauſe, though the continual moiſture that iſſues from the dung occaſions the growing of the hoof, yet it dries and ſhrinks it ſo exceſſively when out of that place, that it ſplits and breaks like glaſs, and the foot immediately ſtraitens. For it is certain, that cow-dung (contrary to the opinion of many people) ſpoils a horſe's hoof: it does indeed moiſten the ſole; but it dries up the hoof, which is of a different nature from it. In order, therefore, to recover a horſe's feet, inſtead of cow-dung, fill a hole with blue wet clay, and make him keep his fore-feet in it for a month.

Moſt horſes that are fatigued, or over-rid, and made lean by long journeys, have their flanks altered without being purſy, eſpecially vigorous horſes that have worked too violently.

There is no better method to recover them, than to give each of them in the morning half a pound of honey very well mingled with ſcalded bran; and when they readily eat the half pound, give them the next time a whole one, and afterwards two pounds, every day continuing this courſe till your horſes are empty, and purge kindly with it; but as ſoon as you perceive that their purging ceaſes, forbear to give them any more honey.

You may adminiſter powder of liquorice in the ſcalded bran for a conſiderable time; and to cool their blood, it will not be improper to let them have three or four gliſters.

In caſe the horſe be very lean, it is expedient to give him ſome wet bran, over and above his proportion of oats; and graſs is alſo extraordinary beneficial, if he be not purſy.

If it be a mare, put her to a horſe; and if ſhe never had a foal before, it will enlarge her belly.

Sometimes exceſſive feeding may do horſes more harm than good, by rendering them ſubject to the farcy. You ſhould therefore be cautious in giving them too great a quantity at a time, and take a little blood from them now and then.

When a horſe begins to drink water heartily, it is a certain ſign that he will recover in a ſhort time. As to the method of giving him water during a journey, obſerve the following rules:

All the while you are upon a journey, let your horſe drink of the firſt good water you come to, after ſeven o'clock in the morning if it be in ſummer-time, and after nine or ten in winter.

That is accounted good water which is neither too quick and piercing, nor too muddy and ſtinking.

This is to be done, unleſs you would have him gallop a long time after drinking; for if ſo, you muſt forbear.

Though it is the cuſtom of England to run and gallop horſes after drinking, which we call *watering-courſes*, to bring them (as they ſay) into wind; yet, ſays M. de Solleyſel, it is the moſt pernicious practice that can be imagined for horſes, by which many are rendered purſy.

While a horſe is drinking, draw up his head five or ſix times, making him move a little between every draught;

Horſe. draught; and notwithſtanding he be warm, and ſweat very much, yet if he is not quite out of breath, and you have ſtill four or five miles to ride, he will be better after drinking a little, than if he had drank none at all: it is true, indeed, that if the horſe is very warm, you ſhould, at coming out of the water, redouble your pace, to make him go at a gentle trot, to warm the water in his belly.

You ought to let him drink after this manner during the whole time of your journey; becauſe, if when you happen to bait he be hot or ſweaty, you muſt not let him drink for a long time, as it would endanger his life; and when his bridle is taken of, his exceſſive thirſt will hinder him from eating, ſo that he will not offer to touch his meat for an hour or two, which perhaps your occaſions will not allow you for a baiting time, and not to have any food will render him unfit for travel.

If you meet with any ford before you come to your inn, ride the horſe through it two or three times, but not up to his belly: this will only cleanſe his legs; but the coldneſs of the water will bind up the humours, and prevent them from deſcending.

If your horſe has been very warm, and you have not had the conveniency of watering him upon the road, he will, when unbridled, eat but very little; therefore he ſhould have his oats given him waſhed in ale or beer, or only ſome of them, if you intend to feed him again after he has drank.

Some are of opinion, that horſes are often ſpoiled by giving them oats before their water; becauſe they ſay the water makes the oats paſs too ſoon, and out of the ſtomach undigeſted. But M. de Solleyſel affirms, that though it be the common cuſtom not to do it till after, yet it is proper to feed with oats both before and after, eſpecially if the horſe be warm, and has been hard rode: for they will be a great deal the better for it, and in no danger of becoming ſick.

Buffon's Nat. Hiſt. *Breeding of Horſes.* When the ſtallion is choſen, and all the mares intended for him are collected together, there muſt be another ſtone-horſe, to diſcover which of the mares are in heat; and, at the ſame time, contribute to inflame them. All the mares are to be brought ſucceſſively to this ſtone-horſe; which ſhould alſo be inflamed, and ſuffered frequently to neigh. As he is for leaping every one, ſuch as are not in heat keep him off, whilſt thoſe which are ſo ſuffer him to approach them. But inſtead of being allowed to ſatisfy his impulſe, he muſt be led away, and the real ſtallion ſubſtituted in his ſtead. This trial is neceſſary for aſcertaining the true time of the mare's heat, eſpecially of thoſe which have not yet had a colt; for with regard to ſuch as have recently foaled, the heat uſually begins nine days after their delivery; and on that very day they may be led to the ſtallion to be covered; and nine days after, by the experiment above mentioned, it may be known whether they are ſtill in heat. If they are, they muſt be covered a ſecond time; and thus ſucceſſively every ninth day while their heat continues: for when they are impregnated, their heat abates, and in a few days ceaſes entirely.

But that every thing may be done eaſily and conveniently, and at the ſame time with ſucceſs and advantage, great attention, expence, and precaution are requiſite. The ſtud muſt be fixed in a good ſoil, and in a ſuitable place, proportioned to the number of mares and ſtallions intended to be uſed. This ſpot muſt be divided into ſeveral parts, incloſed with rails or ditches well fenced; in the part where the paſture is the richeſt, the mares in fold, and thoſe with colts by their ſides, are to be kept. Thoſe which are not impregnated, or have not yet been covered, are to be ſeparated, and kept with the fillies in another cloſe, where the paſture is leſs rich, that they may not grow too fat, which would obſtruct the progreſs of generation. Laſtly, the young ſtone colts or geldings, are to be kept in the drieſt part of the fields, and where the ground is moſt unequal; that by running over the uneven ſurface, they may acquire a freedom in the motion of their legs and ſhoulders. This cloſe, where the ſtone colts are kept, muſt be very carefully ſeparated from the others, leſt the young horſes break their bounds, and enervate themſelves with the mares. If the tract be ſo large as to allow of dividing each of theſe cloſes into two parts, for putting oxen and horſes into them alternately, the paſture will laſt much longer than if continually eaten by horſes; the ox improving the fertility, whereas the horſe leſſens it. In each of theſe cloſes ſhould be a pond; ſtanding water being better than running, which often gripes them: and if there are any trees in the ground, they ſhould be left ſtanding, their ſhade being very agreeable to the horſes in great heats; but all ſtems or ſtumps ſhould be grubbed up, and all holes levelled, to prevent accidents. In theſe paſtures your horſes ſhould feed during the ſummer; but in the winter the mares ſhould be kept in the ſtable and fed with hay. The colts alſo muſt be houſed, and never ſuffered to feed abroad in winter, except in very fine weather. Stallions that ſtand in the ſtable ſhould be fed more with ſtraw than hay; and moderately exerciſed till covering time, which generally laſts from the beginning of April to the end of June. But during this ſeaſon they ſhould have no other exerciſe, and be plentifully fed, but with the ſame food as uſual. Before the ſtallion is brought to the mare, he ſhould be dreſſed, as that will greatly increaſe his ardour. The mare muſt alſo be curried, and have no ſhoes on her hind feet, ſome of them being ticklish, and will kick the ſtallion. A perſon holds the mare by the halter, and two others lead the ſtallion by long reins; when he is in a proper ſituation, another aſſiſtant carefully directs the yard, pulling aſide the mare's tail, as a ſingle hair might hurt him dangerouſly. It ſometimes happens that the ſtallion does not complete the work of generation, coming from the mare without making any injection: it ſhould therefore be attentively obſerved, whether, in the laſt moments of the copulation, the dock of the ſtallions tail has a vibrating motion; for ſuch a motion always accompanies the emiſſion of the ſeminal lymph. If he has performed the act, he muſt on no conſideration be ſuffered to repeat it; but be lead away directly to the ſtable, and there kept two days. For, however able a good ſtallion may be of covering every day during the three months, it is much better to let him be led to a mare only every other day: his produce will be greater, and he himſelf leſs exhauſted. During the firſt ſeven days, let four different mares be ſucceſſively brought to him; and the ninth day let the firſt be again brought, and ſo ſucceſſively while they continue in heat: but as

Horſe. ſoon

Horſe. ſoon as the heat of any one is over, a freſh mare is to be put in her place, and covered in her turn every nine days; and as ſeveral retain even at the firſt, ſecond, or third time, it is computed that a ſtallion, by ſuch management, may, during the three months, cover 15 or 18 mares, and beget 10 or 12 colts. Theſe animals have a very large quantity of the ſeminal lymph; ſo that a conſiderable portion of it is ſhed during the emiſſion. In the mares likewiſe is an emiſſion, or rather diſtillation of the ſeminal lymph, during the whole time they are horſing; ejecting a viſcid whitiſh lymph, called the *heats*, which ceaſe on conception. This ichor the Greeks called *hippomanes*; and pretended that philtres might be made of it, one remarkable effect of which was, to render a horſe frantic with luſt. This hippomanes is very different from that found in the ſecundines of the foal, which M. Daubenton firſt diſcovered, and has ſo accurately deſcribed its nature, origin, and ſituation. The ejection of this liquor is the moſt certain ſign of the mare's heat; but it is alſo known by the inflation of the lower part of the vulva, by her frequent neighings, and attempts to get to the horſes. After being covered, nothing more is requiſite than to lead her away to the field. The firſt foal of a mare is never ſo ſtrongly formed as the ſucceeding; ſo that care ſhould be taken to procure for her, the firſt time, a larger ſtallion, that the defect of the growth may be compenſated by the largeneſs of the ſize. Particular regard ſhould alſo be had to the difference or congruity of the faſhion of the ſtallion and the mare, in order to correct the faults of the one by the perfections of the other: eſpecially never to make any diſproportionate copulations, as of a ſmall horſe with a large mare, or a large horſe with a ſmall mare; as the produce of ſuch copulation would be ſmall, or badly proportioned. It is by gradations that we muſt endeavour to arrive at natural beauty: for inſtance, to give to a mare a little too clumſy, a well-made horſe and finely ſhaped; to a ſmall mare, a horſe a little higher; to a mare which is faulty in her forehand, a horſe with an elegant head and noble cheſt, &c.

It has been obſerved, that horſes fed in dry and light grounds, produce temperate, ſwift, and vigorous foals, with muſcular legs and a hard hoof; while the ſame bred in marſhes and moiſt paſtures have produced foals with a large heavy head, a thick carcaſe, clumſy legs, bad hoofs, and broad feet. Theſe differences proceed from the air and food, which is eaſily underſtood; but what is more difficult to be accounted for, and ſtill more eſſential than what we have hitherto obſerved, is, to be continually croſſing the breed to prevent a degeneracy.

In coupling of horſes, the colour and ſize ſhould be ſuited to each other, the ſhape contraſted, and the breed croſſed by an oppoſition of climates: but horſes and mares foaled in the ſame ſtud ſhould never be joined. Theſe are eſſential articles; but there are others which ſhould by no means be neglected: as that no ſhort-docked mares be ſuffered in a ſtud, becauſe from their being unable to keep off the flies, they are much more tormented by them than others which have a long ſweeping tail; and their continual agitations from the ſtings of theſe inſects, occaſions a diminution in the quantity of their milk, and has a great influence on the conſtitution and ſize of the colt, which will be vigorous in proportion as its dam is a good nurſe. Care muſt alſo be taken, that the ſtud mares be ſuch as have been always brought up in paſtures, and never over-worked. Mares which have always been brought up in the ſtable on dry food, and afterwards turned to graſs, do not breed at firſt: ſome time is required for accuſtoming them to this new aliment. Horſe.

Though the uſual ſeaſon for the heat of mares be from the beginning of April to the end of June, yet it is not uncommon to find ſome among a large number that are in heat before that time: but it is adviſable to let this heat paſs over without giving them to the ſtallion, becauſe they would foal in winter; and the colts, beſides the inclemency of the ſeaſon, would have bad milk for their nouriſhment. Again, if the mares are not in heat till after the end of June, they ſhould not be covered that ſeaſon; becauſe the colts being foaled in ſummer, have not time for acquiring ſtrength ſufficient to repel the injuries of the following winter.

Many, inſtead of bringing the ſtallion to the mare, turn him looſe into the cloſe, where all the mares are brought together; and there leave him to chooſe ſuch as will ſtand to him. This is a very advantageous method for the mares: they will always take horſe more certainly than in the other; but the ſtallion, in ſix weeks, will do himſelf more damage than in ſeveral years by moderate exerciſe, conducted in the manner we have already mentioned.

When the mares are pregnant, and their belly begins to ſwell, they muſt be ſeparated from thoſe that are not, leſt they hurt them. They uſually go 11 months and ſome days; and foal ſtanding, whereas moſt other quadrupeds lie down. Thoſe that cannot foal without great difficulty, muſt be aſſiſted; the foal muſt be placed in a proper ſituation; and ſometimes, if dead, drawn out with cords. The head of the colt uſually preſents itſelf firſt, as in all other animals: at its coming out of the matrix, it breaks the ſecundines or integuments that incloſe it, which is accompanied with a great flux of the lymph contained in them; and at the ſame time one or more ſolid lumps are diſcharged, formed by the ſediment of the inſpiſſated liquor of the allantoides. This lump, which the ancients called the *hippomanes of the colt*, is ſo far from being, as they imagined, a maſs of fleſh adhering to the head of the colt, that it is ſeparated from it by a membrane called *amnois*. As ſoon as the colt is fallen, the mare licks it, but without touching the hippomanes; which points out another error of the ancients, who affirmed that ſhe inſtantly devours it.

The general cuſtom is to have a mare covered nine days after her foaling, that no time may be loſt; but it is certain, that the mare having, by this means, both her preſent and future foal to nouriſh, her ability is divided, and ſhe cannot ſupply both ſo largely as ſhe might one only. It would therefore be better, in order to have excellent horſes, to let the mares be covered only every other year; they would laſt the longer, and bring foals more certainly: for, in common ſtuds, it is ſo far from being true that all mares which have been covered bring colts every year, that it is conſidered

as

Horſe. as a fortunate circumſtance if half or at moſt two thirds of them foal.

Mares, when pregnant, will admit of copulation; but it is never attended with any ſuperfœtation. They uſually breed till they are 14 or 15 years of age; and the moſt vigorous till they are above 18. Stallions, when well managed, will engender till the age of 20, and even beyond; but it muſt be obſerved, that ſuch horſes as are ſooneſt made ſtallions, are alſo the ſooneſt incapable of generation: thus the large horſes, which acquire ſtrength ſooner than the ſlender, and are therefore often uſed as ſtallions as ſoon as they are four years old, are incapable of generation before they are ſixteen.

Gelding of Horses. See Gelding.

Rearing of Horses. See Colt.

Draught-Horse, in farming, a ſort of coarſe-made horſe deſtined for the ſervice of the cart or plough. In the choice of theſe horſes for what is called the *ſlow draught*, they are to be choſen of an ordinary height; for otherwiſe, when put into the cart, one draws unequally with the other. The draught-horſe ſhould be large bodied and ſtrong loined, and of ſuch a diſpoſition, as rather to be too dull than too briſk, and rather to crave the whip than to draw more than is needful. Mares are the fitteſt for this uſe for the farmer, as they will be kept cheap, and not only do the work, but be kept breeding, and give a yearly increaſe of a foal. They ſhould have a good head, neck, breaſt, and ſhoulders; for the reſt of the ſhape, it is not of much conſequence. Only, for breeding, the mare ſhould have a large belly; for the more room a foal has in the dam, the better proportioned it will be. Draught-horſes ſhould be always kept to that employ. Some put them to the ſaddle on occaſion, but it does them great harm, alters their pace, and ſpoils them for labour. The draught horſe ought to have a large broad head, becauſe horſes of this ſhaped head are leſs ſubject than others to diſeaſes of the eyes. The ears ſhould be ſmall, ſtraight and upright; the noſtrils large and open, that he may breathe with the more freedom. A horſe with a full and bold eye always promiſes well. On the other hand, a ſunk eye and an elevated brow are bad ſigns. The horſe is eſteemed fitteſt for this purpoſe alſo, that has a large and round buttock, which neither ſinks down nor cuts. He muſt have a firm and ſtrong tail, and the dock muſt be thick and well furniſhed with hair, and placed neither very high nor very low. The legs ſhould be rather flat and broad than round: the roundneſs of the leg being a fault in a horſe deſtined to labour that will ſoon ruin him. As to the hinder legs, the thighs ſhould be fleſhy and long, and the whole muſcle which ſhows itſelf on the outſide of the thigh ſhould be large and very thick. No country can bring a parallel to the ſize and ſtrength of our horſes deſtined for the draught. In London there are inſtances of ſingle horſes that are able to draw on a plain, for a ſmall ſpace, the weight of three tuns, and which can with eaſe, and for continuance, draw half that weight. The pack horſes of Yorkſhire uſually carry a burden of 420 lb. over the higheſt hills of the north, as well as the moſt level roads: but the moſt remarkable proof of the ſtrength of our Britiſh horſes is derived from that of our mill horſes; ſome of which will at one load carry 13 meaſures, which at a moderate computation of 70 lb. each, will amount to 910 lb. Nothing is ſo eſſential to the health of theſe ſerviceable creatures as cleanlineſs; if they are fed ever ſo well, and not kept clean, they will be ſubject to numerous diſeaſes. Horſe.

The ſervant who has the care of them ought to be up very early, and to clean the racks and mangers from all filth. The currying of them ought to be carefully performed every morning, but not in the ſtable, for the duſt to fall upon the other horſes, as it is too often done. After the horſes are duſted, they ſhould daily twiſt a whiſp of ſtraw hard up, and wetting it in water, rub the legs, ſhoulders and body with it. Many of the diſeaſes of draught-horſes, which are not owing to naſtineſs, are owing to bad water; ſuch as are two raw, too muddy, or too cold, being all improper. If there be any running ſtream in the neighbourhood, they ſhould always be led to that to water every day in ſummer, but in winter, well-water is warmiſh, and is better for them. If there be a neceſſity of giving them well-water in ſummer, it muſt be drawn up ſome hours before the time, and expoſed to the ſun-beams in tubs or troughs; marſh-water or that of lowland ditches is worſt of all. When the labouring horſe has drank his water, he ſhould have his oats given him, and theſe ſhould be carefully ſifted, and the manger duſted firſt. It is a common practice, as ſoon as a horſe is come in from his work, to rub down his legs with a hard whiſp of hay; but the beſt judges of horſes abſolutely condemn this, and obſerve, that this rubbing of the legs after hard labour brings down humours into them, and makes them ſtiff.

The rubbing itſelf is wholeſome, but the doing it when the creature is hot is the miſchief; while a horſe is in a ſweat it is a great relief and refreſhment to him to have his body rubbed down, but when he is cold is the proper time to rub his legs. The racks are to be well ſupplied with hay, and the horſes ſhould be left to reſt and eat, about two hours, and then led to water; after this their oats ſhould be given them, and they ſhould then go to work again.

In the evening, when the labour of the day is over, the firſt thing to be done is to examine the feet, and ſee if any thing is amiſs about the ſhoes, and what earth or gravel is lodged in the foot, between the ſhoe and the ſole, is to be picked out and ſome freſh cow-dung put in its place, which will cool and refreſh the part.

A very material thing for the preſervation of all ſorts of cattle, but of none ſo much as draught-horſes, is freſh and clean litter.

Horse-Cheſnut. See Æsculus, and Hippocastanum.

Horse Guards. See Guards.

Horse-Hunting. See Hunter.

Horse Meaſure is a rod of box to ſlide out of a cane, with a ſquare at the end, being divided into hands and inches to meaſure the height of horſes.

Horse-Muſcle. See Mytulus.

Race Horse. See Racing.

Horse-Radiſh. See Cochlearia.

Horse-Shoe, a cover or defence for the ſole of a horſe's foot. See Farriery, p 167.

Horse-ſhoe head, a diſeaſe in infants, wherein the ſutures of the ſkull are too open, or too great a vacuity is left between them; ſo that the aperture ſhall not be

Horſe. be totally cloſed up, or the cranium in that part not be ſo hard as the reſt for ſome years after. This openneſs is found to be increaſed upon the child's catching cold. When the diſeaſe continues long, it is reputed a ſign of weakneſs and ſhort life. In this caſe, it is uſual to rub the head now and then with warm rum or brandy, mixed with the white of an egg and palm-oil. Sometimes the diſorder ariſes from a collection of waters in the head called an *hydrocephalus*.

Stone-Horse. See Stallion.

Horse-Tail. See Equisetum and Ephedra.

Horse-Vetch. See Hippocrepis.

War-Horse. The proper rules for chooſing a horſe for ſervice in war, are theſe: he ſhould be tall in ſtature, with a comely head, and out-ſwelling forehead. His eye ſhould be bright and ſparkling, and the white part of it covered by the eye brow. The ears ſhould be ſmall, thin, ſhort, and pricking; or if long, they ſhould be moveable with eaſe, and well carried. The neck ſhould be deep, and the breaſt large and ſwelling. The ribs bending, the chine broad and ſtraight, and the buttocks round and full. The tail ſhould be high and broad, neither too thick nor too thin; the thigh ſwelling; the leg broad and flat, and the paſtern ſhort. When ſuch a horſe is choſen, he muſt be kept high during the time of his teaching, that he may be full of vigour. His food muſt be ſweet hay, and good clean oats, or two parts of oats and one part of beans or peaſe, well dried and hardened. The quantity ſhould be half a peck in the morning, and the ſame quantity at noon and in the evening. Upon his reſting days he is to be dreſſed between five and ſix in the morning, and watered at ſeven or eight. In the evening he is to be dreſſed at four, and watered about five, and he muſt always have provender given him after watering; he muſt be littered about eight, and then muſt have food given him for all night. The night before he is ridden all his hay is to be taken away about nine o'clock, and he muſt have a handful or two of oats about four in the morning: when he has eaten theſe, he is to be turned upon the ſnaffle, and rubbed very well with dry cloths; then ſaddled, and made fit for his exerciſe. When he has performed this, he is to be brought ſweating into the ſtable, and rubbed down with dry wiſps. When this has been done, the ſaddle is to be taken off, and he is to be rubbed down with dry cloths; the houſing cloth is then to be laid on; and the ſaddle being again laid on, he is to be walked gently about till thoroughly cool. After this, he muſt ſtand without meat two or three hours, then he muſt be fed; and in the afternoon he is to be rubbed and dreſſed as before, and watered in the uſual manner.

Horse Worm, in natural hiſtory, a ſpecies of fly-worm called alſo *bott*, produced of eggs depoſited by a two-winged fly of the ſhape and ſize of the humble bee in the inteſtines of horſes. See Botts.

River-Horse, in zoology. See Hippopotamus.

Horse is alſo uſed in the military language, to expreſs the cavalry; or the body of ſoldiers who ſerve on horſeback.

The horſe includes horſe guards, horſe grenadiers, and troopers. Dragoons are alſo frequently comprehended under this name, though they fight on foot: of theſe there are now 18 regiments; beſides three regiments of dragoon-guards raiſed in 1685. See Grenadier, Dragoons, and Guards.

Maſter of the Horse. See Master.

Light-Horse, are regiments of cavalry, mounted on light ſwift horſes, whoſe men are ſmall and lightly accoutred. They were firſt raiſed in 1757. The denomination aroſe hence, that anciently they were lightly armed, in compariſon of the royal guards, which were armed at all points. Horſe.

Hungarian Horse. See Hussars.

Horse is alſo a term uſed in various arts and manufactories, for ſomething that helps to ſuſtain their work from the ground, for the more commodious working at it.

The horſe uſed by tanners and ſkinners, alſo called the *leg*, is a piece of wood cut hollow and roundiſh, four or five feet long, and placed aſlope; upon which they pare their ſkins to get off the dirt, hair, fleſh, &c.

Horse is alſo uſed in carpentry, for a piece of wood jointed acroſs two other perpendicular ones, to ſuſtain the boards, planks, &c. which make bridges over ſmall rivers; and on divers other occaſions.

Horse, in ſea language, is the name of a rope reaching from the middle of a yard to its extremity, or what is called the *yard-arm*, and depending about two or three feet under the yard, for the ſailors to tread upon whilſt they are looſing, reefing, or furling the ſails, rigging out the ſtudding-ſail booms, &c. In order, therefore, to keep the horſe more parallel to the yard, it is uſually ſuſpended to it at proper diſtances, by certain ropes called ſtirrups, which hang about two feet under the yard, having an eye in their lower ends through which the horſe paſſes.

Horse is alſo a thick rope, extended in a perpendicular direction near the fore or after-ſide of a maſt, for the purpoſe of hoiſting or extending ſome ſail upon it. When it is fixed before a maſt, it is calculated for the uſe of a ſail called the *ſquare-ſail*, whoſe yard being attached to the horſe, by means of a traveller or bull's eye, which ſlides up and down occaſionally, is retained in a ſteady poſition; either when the ſail is ſet, or whilſt it is hoiſting or lowering. When the horſe is placed abaft or behind a maſt, it is intended for the try-ſail of a ſnow, and is accordingly very rarely fixed in this poſition, except in thoſe ſloops of war which occaſionally aſſume the form of ſnows, in order to deceive the enemy.

Horse is alſo a cant name introduced into the management of lotteries, for the chance or benefit of a ticket or number for one or more days, upon condition, if it be drawn a prize within the time covenanted for, of returning to the ſeller an undrawn ticket.—To determine the value of a horſe; multiply the amount of the prizes in the lottery by the time the horſe is hired for; and from the product ſubtract the amount of the number of prizes by the value of an undrawn ticket into the time of the horſe: the remainder being divided by the number of tickets into the whole time of drawing, the quotient is the value of the horſe. See Lottery.

Horse-Bread. See Bread.

Horse-Dung, in gardening, is of great uſe in making hot-beds, for the raiſing all ſorts of early crops; as ſallading, cucumbers, melons, aſparagus, &c. for which

Horſe. which purpoſes no other kinds of dung will do ſo well. Horſe dung ferments the ſtrongeſt; and if mixed with litter and ſea-coal aſhes in a due proportion, will continue its heat much longer than any other ſort of dung whatſoever: and afterward, when rotted, becomes an excellent manure for moſt ſorts of land; more eſpecially for ſuch as are of a cold nature. For ſtiff clayey land, horſe dung mixed with ſea-coal aſhes, and the cleanſing of ſtreets, will cauſe the parts to ſeparate much ſooner than any other compoſt: ſo that where it can be obtained in plenty, it is always to be recommended for ſuch lands. See DUNG.

Animated HORSE-*Hairs*, a term uſed to expreſs a ſort of long and ſlender water worm, of a blackiſh colour, and ſo much reſembling a horſe-hair, that it is generally by the vulgar ſuppoſed to be the hair fallen from a horſe's mane into the water as he drinks, and there animated by ſome ſtrange power. Dr Liſter has at large confuted this abſurd opinion in the Philoſophical Tranſactions. Horſe.

Horse-Hair Worms. See AMPHISBÆNA.

Horse-Hoeing Huſbandry. See AGRICULTURE, n° 218.

HORSEMANSHIP;

Or, The Art of Riding, and of Training and Managing, HORSES.

Breaking of Horſes. SECT. I. *The Method of preparing Horſes to be mounted.*

THOUGH all horſes are generally bought at an age when they have already been backed, they ſhould be begun and prepared for the rider with the ſame care, gentleneſs, and caution, as if they had never been handled or backed, in order to prevent accidents, which might elſe ariſe from ſkittiſhneſs or other cauſes: and as it is proper that they ſhould be taught the figure of the ground they are to go upon when they are at firſt mounted, they ſhould be previouſly trotted in a *longe* on circles, without any one upon them.

Earl of Pembroke's Directions. The manner of doing this is as follows: Put an eaſy *caveſſon* upon the horſe's noſe, and make him go forwards round you, ſtanding quiet and holding the *longe*; and let another man, if you find it neceſſary, follow him with a whip. All this muſt be done very gently, and but a little at a time: for more horſes are ſpoiled by overmuch work, than by any other treatment whatever; and that by very contrary effects; for ſometimes it drives them into vice, madneſs, and deſpair, and often ſtupifies and totally diſpirits them.

The firſt obedience required in a horſe is going forwards; till he perform this duty freely, never even think of making him rein back, which would inevitably make him reſtive: as ſoon as he goes forwards readily, ſtop and careſs him. You muſt remember in this, and likewiſe in every other exerciſe, to uſe him to go equally well to the right and left; and when he obeys, careſs him and diſmiſs him immediately. If a horſe that is very young takes fright and ſtands ſtill, lead on another horſe before him, which probably will induce him inſtantly to follow. Put a ſnaffle in his mouth; and when he goes freely, ſaddle him, girting him at firſt very looſe. Let the cord, which you hold, be long and looſe; but not ſo much ſo as to endanger the horſe's entangling his legs in it. It muſt be obſerved, that ſmall circles, in the beginning, would conſtrain the horſe too much, and put him upon defending himſelf. No bend muſt be required at firſt: never ſuffer him to gallop falſe; but whenever he attempts it, ſtop him without delay, and then ſet him off afreſh. If he gallops of his own accord, and true, permit him to continue it; but if he does it not voluntarily, do not demand it of him at firſt. Should he fly and jump, ſhake the cord gently upon his noſe without jerking it, and he will fall into his trot again. If he ſtands ſtill, plunges, or rears, let the man who holds the whip make a noiſe with it; but never touch him till it be abſolutely neceſſary to make him go on. When you change hands, ſtop and careſs him, and entice him by fair means to come up to you: for by preſenting yourſelf, as ſome do, on a ſudden before horſes, and frightening them to the other ſide, you run a great riſk of giving them a ſhyneſs If he keeps his head too low, ſhake the *caveſſon* to make him raiſe it; and in whatever the horſe does, whether he walks, trots, or gallops, let it be a conſtant rule, that the motion be determined, and really ſuch as is intended, without the leaſt ſhuffling, pacing, or any other irregular gait. Of placing the Rider.

SECT. II. *The Method of placing the Rider and rendering him firm on Horſeback, with ſome occaſional Inſtructions for Riders and the Horſes.*

IT is neceſſary that the greateſt attention, and the ſame gentleneſs that is uſed in teaching the horſes, be obſerved likewiſe in teaching the rider, eſpecially at the beginning. Every method and art muſt be practiſed to create and preſerve, both in man and horſe, all poſſible feeling and ſenſibility; contrary to the uſage of moſt riding-maſters who ſeem induſtriouſly to labour at aboliſhing theſe principles both in the one and the other. As ſo many eſſential points depend upon the manner in which a man is at firſt placed on horſeback, it ought to be conſidered and attended to with the ſtricteſt care and exactneſs.

The abſurdity of putting a man, who perhaps has never before been upon a horſe, on a rough trotting horſe, on which he is obliged to ſtick with all the force of his arms and legs, is too obvious to need mentioning. This rough work, all at once, is plainly as detrimental at firſt, as it is excellent afterwards in proper time. No man can be either well or firmly ſeated on horſeback, unleſs he be maſter of the balance of his body, quite unconſtrained, with a full poſſeſſion of himſelf, and at his eaſe; none of which requiſites can he enjoy, if his attention be otherwiſe engaged; as it muſt wholly be in a raw, unſuppled, and un-

Of placing the Rider.

prepared lad, who is put at once upon a rough horſe; in ſuch a diſtreſsful ſtate, he is forced to keep himſelf on at any rate, by holding to the bridle (at the expence of the ſenſibility both of his own hand and the horſe's mouth), and by clinging with his legs, in danger of his life, and to the certain depravation of a right feeling in the horſe.

The firſt time a man is put on horſeback, it ought to be upon a very gentle one. He never ſhould be made to trot, till he is quite eaſy in the walk; nor gallop, till he is able to trot properly. The ſame muſt be obſerved in regard to horſes; they ſhould never be made to trot till they are obedient, and their mouths are well formed on a walk, nor be made to gallop, till the ſame be effected on a trot. When he is arrived at ſuch a degree of firmneſs in his ſeat, the more he trots, and the more he rides rough horſes, the better. This is not only the beſt method, but alſo the eaſieſt and the ſhorteſt: by it a man is ſoon made ſufficiently an horſeman for a ſoldier: but by the other deteſtable methods that are commonly uſed, a man, inſtead of improving, contracts all ſorts of bad habits, and rides worſe and worſe every day; the horſe too becomes daily more and more unfit for uſe. In proceeding according to the manner propoſed, a man is rendered firm and eaſy upon the horſe, both his own and the horſe's ſenſibility is preſerved, and each in a ſituation fit to receive and practiſe all leſſons effectually.

Among the various methods that are uſed of placing people on horſeback, few are directed by reaſon. Before you let the man mount, teach him to know, and always to examine, if the curb be well placed, (that is, when the horſe has a bit in his mouth, which at firſt he ſhould not; but only a ſnaffle, till the rider is firm in his ſeat, and the horſe alſo ſomewhat taught): likewiſe to know if the noſe-band be properly tight; the throat-band looſiſh; and the mouth-piece neither too high nor too low in the horſe's mouth, but rightly put ſo as not to wrinkle the ſkin nor to hang lax; the girts drawn moderately, but not too tight; and the crupper and the breaſt-plate properly adjuſted. A very good and careful hand may venture on a bit at firſt, and ſucceed with it full as well as by beginning with a ſnaffle alone; only colts, indeed, it is better, in all ſchools whatſoever, to avoid any preſſure on the bars juſt at firſt, which a curb, though ever ſo delicately uſed, muſt in ſome degree occaſion. When the bridle, &c. have been well looked to, let the man approach the horſe gently near the ſhoulder; then taking the reins and an handful of the mane in his left hand, let him put his foot ſoftly in the left ſtirrup, by pulling it towards him, leſt he touch the horſe with his toe; then raiſing himſelf up, let him reſt a moment on it with his body upright, but not ſtiff; and after that, paſſing his right leg clear over the ſaddle without rubbing againſt any thing, let him ſeat himſelf gently down. He muſt be cautious not to take the reins too ſhort, for fear of making the horſe rear, run, or fall back, or throw up his head; but let him hold them of an equal length, neither tight nor ſlack, and with the little finger betwixt them. It is fit that horſes ſhould be accuſtomed to ſtand ſtill to be mounted, and not to ſtir till the rider pleaſes. All ſoldiers ſhould be inſtructed to mount and diſmount equally well on both ſides, which may be of great uſe in times of hurry and confuſion. Then place the man in his ſaddle, with his body rather back, and his head held up with eaſe, without ſtiffneſs; ſeated neither forwards, nor very backwards; with the breaſt puſhed out a little, and the lower part of the body likewiſe a little forwards; the thighs and legs turned in without conſtraint, and the feet in a ſtraight line, neither turned in nor out. By this poſition, the natural weight of the thighs has a proper and ſufficient preſſure of itſelf, and the legs are in readineſs to act when called upon: they muſt hang down eaſy and naturally; and be ſo placed, as not to be wriggling about, touching, and tickling, the horſe's ſides, but always near them in caſe they ſhould be wanted, as well as the heels.

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The body muſt be carefully kept eaſy and firm, and without any rocking when in motion; which is a bad habit very eaſily contracted, eſpecially in galloping. The left elbow muſt be gently leant againſt the body, a little forwards: unleſs it be ſo reſted, the hand cannot be ſteady, but will always be checking, and conſequently have pernicious effects on the horſe's mouth. And the hand ought to be of equal height with the elbow; if it were lower, it would conſtrain and confine the motion of the horſe's ſhoulders: but, as the mouths of horſes are different, the place of the hand alſo muſt occaſionally differ: a leaning, low, heavy, fore-hand, requires a high hand; and a horſe that pokes out his noſe, a low one. The right-hand arm muſt be placed in ſymmetry with the left; only let the right hand be a little forwarder or backwarder, higher or lower, as occaſions may require, in order that both hands may be free; both arms muſt be a little bent at the elbow, to prevent ſtiffneſs.

A ſoldier's right hand ſhould be kept unemployed in riding; it carries the ſword, which is a ſufficient buſineſs for it.

There remains one farther obſervation, that ought not to be omitted, about the hand, that it muſt be kept clear of the body; *i. e.* about two inches and a half forwards from it, with the nails turned oppoſite to the belly, and the wriſt a little rounded with eaſe; a poſition not leſs graceful than ready for ſlackening, tightening, and moving the reins from one ſide to the other, as may be found neceſſary.

When the men are well placed, the more rough trotting they have without ſtirrups the better; but with a ſtrict care always, that their poſition be preſerved very exactly. In all caſes, great care muſt be taken to hinder their clinging with their legs: in ſhort, no ſticking by hands or legs is ever to be allowed of at any time. If the motion of the horſe be too rough, ſlacken it, till the rider grows by degrees more firm; and when he is quite firm and eaſy on his horſe in every kind of motion, ſtirrups may be given him; but he muſt never leave off trotting often without any.

The ſtirrups muſt be neither ſhort nor long; but of ſuch a length, that when the rider, being well placed, puts his feet into them (about one third of the length of each foot from the point of it), the points may be between two and three inches higher than the heels. The rider muſt not bear upon his ſtirrups, but only let

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let the natural weight of his legs reſt on them: For if he bears upon them he would be raiſed above and out of his ſaddle; which ſhould never be, except in charging ſword in hand, with the body inclined forwards at the very inſtant of attacking. Spurs may be given as ſoon as the rider is grown familiar with ſtirrups; or even long before, if his legs are well placed.

A hand ſhould always be firm, but delicate: a horſe's mouth ſhould never be ſurpriſed by any ſudden tranſition of it, either from ſlack to tight, or from tight to ſlack. Every thing in horſemanſhip muſt be effected by degrees, but at the ſame time with ſpirit and reſolution. That hand which, by giving and taking properly, gains its point with the leaſt force, is the beſt; and the horſe's mouth, under this ſame hand's directions, will alſo conſequently be the beſt, ſuppoſing equal advantages in both from nature. This principle of gentleneſs ſhould be obſerved upon all occaſions in every branch of horſemanſhip. Sometimes the right hand may be neceſſary, upon ſome troubleſome horſes, to aſſiſt the left: but the ſeldomer this is done, the better; eſpecially in a ſoldier, who has a ſword to carry, and to make uſe of.

The ſnaffle muſt on all occaſions be uppermoſt; that is to ſay, the reins of it muſt be above thoſe of the bridle, whether the ſnaffle or the bit be uſed ſeparately, or whether they be both uſed together. When the rider knows enough, and the horſe is ſufficiently prepared and ſettled to begin any work towards ſuppling, one rein muſt be ſhortened according to the ſide worked to; but it muſt never be ſo much ſhortened, as to make the whole ſtrength reſt on that rein alone: for, not to mention that the work would be falſe and bad, one ſide of the horſe's mouth would by that means be always deadened; whereas, on the contrary, it ſhould always be kept freſh by its own play, and by the help of the oppoſite rein's acting delicately in a ſomewhat ſmaller degree of tenſion; the joint effect of which produces in a horſe's mouth the proper, gentle, and eaſy, degree of *appui* or bearing.

A coward and a madman make alike bad riders, and are both alike diſcovered and confounded by the ſuperior ſenſe of the creature they are mounted upon, who is equally ſpoilt by both, though in very different ways. The coward, by ſuffering the animal to have his own way, not only confirms him in his bad habits, but creates new ones in him: and the madman, by falſe and violent motions and corrections, drives the horſe, through deſpair, into every bad and vicious trick that rage can ſuggeſt.

It is very requiſite in horſemanſhip, that the hand and legs ſhould act in correſpondence with each other in every thing; the latter always ſubſervient and aſſiſtant to the former. Upon circles, in walking, trotting, or galloping, the outward leg is the only one to be uſed, and that only for a moment at a time, in order to ſet off the horſe true, or put him right if he be falſe; and as ſoon as that is done, it muſt be taken away again immediately: but if the horſe be lazy, or otherwiſe retains himſelf, both legs muſt be uſed and preſſed to his ſides at the ſame time together. The leſs the legs are uſed in general, the better. Very delicate good riders, with horſes they have dreſſed themſelves, will ſcarcely ever want their help. By the term *outward* is underſtood the ſide which is more remote from the centre; and by *inward* is meant the ſide next to the centre. In reining back, the rider ſhould be careful not to uſe his legs, unleſs the horſe backeth on his ſhoulders; in which caſe they muſt be both applied gently at the ſame time, and correſpond with the hand. If the horſe refuſe to back at all, the rider's legs muſt be gently approached, till the horſe lifts up a leg, as if to go forwards; at which time, when that leg is in the air, the rein of the ſame ſide with that leg which is lifted up, will eaſily bring that ſame leg backwards, and accordingly oblige the horſe to back; but if the horſe offers to rear, the legs muſt be inſtantly removed away. The inward rein muſt be tighter on circles, ſo that the horſe may bend and look inwards; and the outward one croſſed over a little towards it; and both held in the left hand.

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Let the man and horſe begin on very ſlow motions, that they may have time to underſtand and reflect on what is taught them; and in proportion as the effects of the reins are better comprehended, and the manner of working becomes more familiar, the quickneſs of motion muſt be increaſed. Every rider muſt learn to feel, without the help of the eye, when a horſe goes falſe, and remedy the fault accordingly: this is an intelligence, which nothing but practice, application, and attention, can give, in the beginning on ſlow motions. A horſe may not only gallop falſe, but alſo trot and walk falſe. If a horſe gallops falſe, that is to ſay, if going to the right he leads with the left leg, or if going to the left he leads with the right; or in caſe he is diſunited, *i. e.* if he leads with the oppoſite leg behind to that which he leads with before; ſtop him immediately, and put him off again properly. The method of effecting this, is by approaching your outward leg, and putting your hand outwards; ſtill keeping the inward rein the ſhorter, and the horſe's head inwards, if poſſible: and if he ſhould ſtill reſiſt, then bend and pull his head outwards alſo; but replace it again, bent properly inwards, the moment he goes off true. A horſe is ſaid to be diſunited to the right, when going to the right, and conſequently leading with the right leg before, he leads with the left behind; and is ſaid to be diſunited to the left, when going to the left, and conſequently leading with the left leg before, he leads with the right behind. A horſe may at the ſame time be both falſe and diſunited; in correcting both which faults, the ſame method muſt be uſed. He is both falſe and diſunited to the right, when in going to the right he leads with the left leg before, and the right behind; notwithſtanding that hinder leg be with propriety more forward under his belly than the left, becauſe the horſe is working to the right: And he is falſe and diſunited to the left, when in going to the left he leads with the right leg before and the left behind; notwithſtanding, as above, that hinder leg be with propriety more forward under his belly than the right, becauſe the horſe is working to the left.

In teaching men a right ſeat on horſeback, the greateſt attention muſt be given to prevent ſtiffneſs, and ſticking by force in any manner upon any occaſion;

Of ſuppling Horſes

ſion: ſtiffneſs diſgraces every right work; and ſticking ſerves only to throw a man (when diſplaced) a great diſtance from his horſe by the ſpring he muſt go off with: whereas, by a proper equilibrating poſition of the body, and by the natural weight only of the thighs, he cannot but be firm and ſecure in his ſeat.

As the men become more firm, and the horſes more ſupple, it is proper to make the circles leſs; but not too much ſo, for fear of throwing the horſes forwards upon their ſhoulders.

Some horſes, when firſt the bit is put into their mouths, if great care be not taken, will put their heads very low. With ſuch horſes, raiſe your right hand with the *bridoon* in it, and play at the ſame time with the bit in the left hand, giving and taking.

On circles, the rider muſt lean his body inwards; unleſs great attention be given to make him do it, he will be perpetually loſing his ſeat outwards. It is ſcarce poſſible for him to be diſplaced, if he leans his body properly inwards.

Sect. III. *The Method of ſuppling Horſes with Men upon them, by the* Epaule en dedans, *&c. with and without a* Longe, *on Circles and on ſtraight Lines.*

When a horſe is well prepared and ſettled in all his motions, and the rider firm, it will be proper then to proceed on towards a farther ſuppling and teaching of both.

In ſetting out upon this new work, begin by bringing the horſe's head a little more inwards than before, pulling the inward rein gently to you by degrees. When this is done, try to gain a little on the ſhoulders, by keeping the inward rein the ſhorter, as before, and the outward one croſſed over towards the inward one. The intention of theſe operations is this: The inward rein ſerves to bring in the head, and procures the bend; whilſt the outward one, that is a little croſſed, tends to make that bend perpendicular, and as it ſhould be, that is to ſay, to reduce the noſe and the forehead to be in a perpendicular line with each other: it alſo ſerves, if put forwards, as well as alſo croſſed, to put the horſe forwards, if found neceſſary; which is often requiſite, many horſes being apt in this and other works rather to loſe their ground backwards than otherwiſe, when they ſhould rather advance; if the noſe were drawn in towards the breaſt beyond the perpendicular, it would confine the motion of the ſhoulders, and have other bad effects. All other bends, beſides what are above ſpecified, are falſe. The outward rein, being croſſed, not in a forward ſenſe, but rather a little backwards, ſerves alſo to prevent the outward ſhoulder from getting too forwards, and makes it approach the inward one; which facilitates the inward leg's croſſing over the outward one, which is the motion that ſo admirably ſupples the ſhoulders. Care muſt be taken, that the inward leg paſs over the outward one, without touching it: this inward leg's croſſing over muſt be helped alſo by the inward rein, which you muſt croſs towards and over the outward rein every time the outward leg comes to the ground, in order to lift and help the inward leg over it: at any other time, but juſt when the outward leg comes to the ground, it would be wrong to croſs the inward rein, or to attempt to lift up the inward leg by it; nay, it would be demanding an abſolute impoſſibility, and lugging about the reins and horſe to no purpoſe: becauſe in this caſe, a very great part of the horſe's weight reſting then upon that leg, would render ſuch an attempt not only fruitleſs, but alſo prejudicial to the ſenſibility of the mouth, and probably oblige him to defend himſelf; and, moreover, it would put the horſe under a neceſſity of ſtraddling before, and alſo of leading with the wrong leg, without being productive of any ſuppling motion whatſoever.

Directions for Men and Horſes

When the horſe is thus far familiarly accuſtomed to what you have required of him, then proceed to effect by degrees the ſame croſſing in his hinder legs. By bringing in the fore-legs more, you will of courſe engage the hinder ones in the ſame work: if they reſiſt, the rider muſt bring both reins more inwards; and, if neceſſary, put back alſo, and approach his inward leg to the horſe; and if the horſe throws out his croup too far, the rider muſt bring both reins outwards, and, if abſolutely neceſſary, he muſt alſo make uſe of his outward leg, in order to replace the horſe properly: obſerving that the croup ſhould always be conſiderably behind the ſhoulders, which in all actions muſt go firſt; and the moment that the horſe obeys, the rider muſt put his hand and leg again in their uſual poſition.

Nothing is more ungraceful in itſelf, more detrimental to a man's ſeat, or more deſtructive of the ſenſibility of a horſe's ſides, than a continual wriggling unſettledneſs in a horſeman's legs, which prevents the horſe from ever going a moment together true, ſteady, or determined.

A horſe ſhould never be turned, without firſt moving a ſtep forwards: and when it is doing, the rider muſt not lift his elbow, and diſplace himſelf; a motion only of the hand from the one ſide to the other being ſufficient for that purpoſe. It muſt alſo be a conſtant rule, never to ſuffer a horſe to be ſtopped, mounted, or diſmounted, but when he is well placed. The ſlower the motions are when a man or horſe is taught any thing, the better.

At firſt, the figures worked upon muſt be great, and afterwards made leſs by degrees, according to the improvement which the man and horſe make; and the cadenced pace alſo, which they work in, muſt be accordingly augmented. The changes from one ſide to the other, muſt be in a bold determined trot, and at firſt quite ſtraight forwards, without demanding any ſide-motion on two *piſtes*, which is very neceſſary to require afterwards when the horſe is ſufficiently ſuppled. By two *piſtes* is meant, when the fore-parts and hinder parts do not follow, but deſcribe two different lines.

In the beginning, a *longe* is uſeful on circles, and alſo on ſtraight lines, to help both the rider and the horſe; but afterwards, when they are grown more intelligent, they ſhould go alone. At the end of the leſſon, rein back; then put the horſe, by a little at a time, forwards, by approaching both legs gently to his ſides, and playing with the bridle: if he rears, puſh him out immediately into a full trot. Shaking the *caveſſon* on the horſe's noſe, and alſo putting one's ſelf before him and rather near to him, will generally make him back, though he otherwiſe refuſe to do it: and moreover a ſlight uſe and approaching of the rider's legs,

Of Head to the Wall, &c.

legs, will ſometimes be neceſſary in backing, in order to prevent the horſe from doing it too much upon his ſhoulders; but the preſſure of the legs ought to be very ſmall, and taken quite away the moment that he puts himſelf enough upon his haunches. If the horſe does not back upon a ſtraight line properly, the rider muſt not be permitted to have recourſe immediately to his leg, and ſo diſtort himſelf by it; but firſt try, if croſſing over his hand and reins to which ever ſide may be neceſſary, will not be alone ſufficient: which muſt frequently it will; if not, then employ the leg.

After a horſe is well prepared and ſettled, and goes freely on in all his ſeveral paces, he ought to be in all his works kept, to a proper degree, upon his haunches, with his hinder legs well placed under him; whereby he will be always pleaſant to himſelf and his rider, will be light in hand, and ready to execute whatever may be demanded of him, with facility, vigour, and quickneſs.

The common method that is uſed, of forcing a horſe ſidewiſe, is a moſt glaring abſurdity, and very hurtful to the animal in its conſequences; for inſtead of ſuppling him, it obliges him to ſtiffen and defend himſelf, and often makes a creature that is naturally benevolent, reſtive, frightened, and vicious.

For horſes, who have very long and high fore-hands, and who poke out their noſes, a running ſnaffle is of excellent uſe; but for ſuch as bore and keep their heads low, a common one is preferable; though any horſe's head indeed may be kept up alſo with a running one, by the rider's keeping his hands very high and forwards: but whenever either is uſed alone without a bridle upon horſes that carry their heads low and that bore, it muſt be ſawed about from one ſide to the other.

This leſſon of the *epaule en dedans* ſhould be taught to ſuch people as are likely to become uſeful in helping to teach men and to break horſes; and the more of ſuch that can be found the better: none others ſhould ever be ſuffered upon any occaſion to let their horſes look any way beſides the way they are going. But all horſes whatever, as likewiſe all men who are deſigned for the teaching others, muſt go thoroughly and perfectly through this excellent leſſon, under the directions of intelligent inſtructors, and often practiſe it too afterwards; and when that is done, proceed to and be finiſhed by the leſſons of head and tail to the wall.

Sect. IV. *Of the Head to the Wall, and of the Croup to the Wall.*

This leſſon ſhould be practiſed immediately after that of the *epaule en dedans*, in order to place the horſe properly the way he goes, &c. The difference between the head to the wall, and the croup to the wall, conſiſts in this: in the former, the fore parts are more remote from the centre, and go over more ground; in the latter, the hinder parts are more remote from the centre, and conſequently go over more ground: in both, as likewiſe in all other leſſons, the ſhoulders muſt go firſt. In riding-horſes, the head to the wall is the eaſier leſſon of the two at firſt, the line to be worked upon being marked by the wall, not far from his head.

Of Head to the Wall, &c.

The motion of the legs to the right, is the ſame as that of the *epaule en dedans* to the left, and ſo *vice verſa*; but the head is always bent and turned differently: in the *epaule en dedans*, the horſe looks the contrary way to that which he goes; in this, he looks the way he is going.

In the beginning, very little bend muſt be required; too much at once would aſtoniſh the horſe, and make him defend himſelf: it is to be augmented by degrees. If the horſe abſolutely refuſes to obey, it is a ſign that either he or his rider has not been ſufficiently prepared by previous leſſons. It may happen, that weakneſs or a hurt in ſome part of the body, or ſometimes temper, though ſeldom, may be the cauſe of the horſe's defending himſelf: it is the rider's buſineſs to find out from whence the obſtacle ariſes; and if he finds it to be from the firſt mentioned cauſe, the previous leſſons muſt be reſumed again for ſome time; if from the ſecond, proper remedies muſt be applied; and if from the laſt cauſe, when all fair means that can be tried have failed, proper corrections with coolneſs and judgment muſt be uſed.

In practiſing this leſſon to the right, bend the horſe to the right with the right rein; helping the left leg over the right (at the time when the right leg is juſt come to the ground), with the left rein croſſed towards the right, and keeping the right ſhoulder back with the right rein towards your body, in order to facilitate the left leg's croſſing over the right; and ſo likewiſe *vice verſa* to the left, each rein helping the other by their properly mixed effects. In working to the right, the rider's left leg helps the hinder-parts on to the right, and his right leg ſtops them if they get too forwards; and ſo *vice verſa* to the left: but neither ought to be uſed, till the hand being employed in a proper manner has failed, or finds that a greater force is neceſſary to bring about what is required than it can effect alone: for the legs ſhould not only be correſponding with, but alſo ſubſervient to, the hand; and all unneceſſary aids, as well as all force, ought always to be avoided as much as poſſible.

In the execution of all leſſons, the equilibre of the rider's body is of great uſe to the horſe: it ought always to go with and accompany every motion of the animal; when to the right, to the right; and when to the left, to the left.

Upon all horſes, in every leſſon and action, it muſt be obſerved, that there is no horſe but has his own peculiar appui or degree of bearing, and alſo a ſenſibility of mouth, as likewiſe a rate of his own, which it is abſolutely neceſſary for the rider to diſcover and make himſelf acquainted with. A bad rider always takes off at leaſt the delicacy of both, if not abſolutely deſtroys it. The horſe will inform his rider when he has got his proper bearing in the mouth, by playing pleaſantly and ſteadily with his bit, and by the ſpray about his chaps. A delicate and good hand will not only always preſerve a light appui, or bearing, in its ſenſibility; but alſo of a heavy one, whether naturally ſo or acquired, make a light one. The lighter this appui can be made, the better; provided that the rider's hand correſponds with it; if it does not, the more the horſe is properly prepared, ſo much the worſe. Inſtances of this inconvenience of the beſt of

appuis,

To make Horſes ſtand Fire, &c.

appuis, when the rider is not equally taught with the horſe, may be ſeen every day in ſome gentlemen, who try to get their horſes *bitted* as they call it, without being ſuitably prepared themſelves for riding them: the conſequence of which is, that they ride in danger of breaking their necks; till at length, after much hauling about, and by the joint inſenſibility and ignorance of themſelves and their grooms, the poor animals gradually become mere ſenſeleſs unfeeling poſts; and thereby grow, what they call, *ſettled*. When the proper appui is found, and made of courſe as light as poſſible, it muſt not be kept duly fixed without any variation, but be played with; otherwiſe one equally-continued tenſion of reins would render both the rider's hand and the horſe's mouth very dull. The ſlighteſt and frequent giving and taking is therefore neceſſary to keep both perfect.

Whatever pace or degree of quickneſs you work in, be it ever ſo faſt, or ever ſo ſlow), it muſt be cadenced; time is as neceſſary for an horſeman as for a muſician.

This leſſon of the head and of the tail to the wall, muſt be taught every ſoldier: ſcarce any manœuvre can be well performed without it. In cloſing and opening of files, it is almoſt every moment wanted.

Sect. V. *The Method of making Horſes ſtand Fire, Noiſes, Alarms, Sights, &c.*

In order to make horſes ſtand fire, the ſound of drums, and all ſorts of different noiſes, you muſt uſe them to it by degrees in the ſtable at feeding-time; and inſtead of being frightened at it, they will ſoon come to like it as a ſignal for eating.

With regard to ſuch horſes as are afraid of burning objects, begin by keeping them ſtill at a certain diſtance from ſome lighted ſtraw: careſs the horſe; and in proportion as his fright diminiſhes, approach gradually the burning ſtraw very gently, and increaſe the ſize of it. By this means he will very quickly be brought to be ſo familiar with it, as to walk undaunted even through it.

As to horſes that are apt to lie down in the water, if animating them, and attacking them vigorouſly, ſhould fail of the deſired effect, then break a ſtraw-bottle full of water upon their heads, and let the water run into their ears, which is a thing they apprehend very much.

All troop-horſes muſt be taught to ſtand quiet and ſtill when they are ſhot off from, to ſtop the moment you preſent, and not to move after firing till they are required to do it; this leſſon ought eſpecially to be obſerved in light troops: in ſhort, the horſes muſt be taught to be ſo cool and undiſturbed, as to ſuffer the rider to act upon him with the ſame freedom as if he was on foot. Patience, coolneſs, and temper, are the only means requiſite for accompliſhing this end. Begin by walking the horſe gently, then ſtop and keep him from ſtirring for ſome time, ſo as to accuſtom him by degrees not to have the leaſt idea of moving without orders: if he does, then back him; and when you ſtop him, and he is quite ſtill, leave the reins quite looſe.

To uſe a horſe to fire-arms, firſt put a piſtol or a carabine in the manger with his feed; then uſe him to the ſound of the lock and the pan; after which, when you are upon him, ſhow the piece to him, preſenting it forwards, ſometimes on one ſide, ſometimes on the other: when he is thus far reconciled, proceed to flaſh in the pan; after which, put a ſmall charge into the piece, and ſo continue augmenting it by degrees to the quantity which is commonly uſed: if he ſeems uneaſy, walk him forward a few ſteps ſlowly; and then ſtop, back, and careſs him. Horſes are often alſo diſquieted and unſteady at the elaſh, and drawing, and returning of ſwords; all which they muſt be familiarized to by little and little, by frequency and gentleneſs.

It is very expedient for all cavalry in general, but particularly for light cavalry, that their horſes ſhould be very ready and expert in leaping over ditches, hedges, gates, &c. The leaps, of whatever ſort they are, which the horſes are brought to in the beginning, ought to be very ſmall ones; the riders muſt keep their bodies back, raiſe their hands a little in order to help the fore-parts of the horſe up, and be very attentive to their equilibre. It is beſt to begin at a low bar covered with furze, which pricking the horſe's legs, if he does not raiſe himſelf ſufficiently, prevents his contracting a ſluggiſh and dangerous habit of touching, as he goes over, which any thing yielding and not pricking would give him a cuſtom of doing. Let the ditches you firſt bring horſes to be narrow; and in this, as in every thing elſe, let the increaſe be made by degrees. Accuſtom them to come up to every thing which they are to leap over, and to ſtand coolly at it for ſome time; and then to raiſe themſelves gently up in order to form to themſelves an idea of the diſtance. When they leap well ſtanding, then uſe them to walk gently up to the leap, and to go over it without firſt halting at it; and after that practice is familiar to them, repeat the like in a gentle trot, and ſo by degrees faſter and faſter, till at length it is as familiar to them to leap flying on a full gallop as any other way: all which is to be acquired with great facility by calm and ſoft means, without any hurry.

As horſes are naturally apt to be frightened at the ſight and ſmell of dead horſes, it is adviſable to habituate them to walk over and leap over carcaſes of dead horſes: and as they are particularly terrified at this ſight, the greater gentleneſs ought conſequently to be uſed.

Horſes ſhould alſo be accuſtomed to ſwim, which often may be neceſſary upon ſervice; and if the men and horſes both are not uſed to it, both may be frequently liable to periſh in the water. A very ſmall portion of ſtrength is ſufficient to guide a horſe, anywhere indeed, but particularly in the water, where they muſt be permitted to have their heads, and be no-ways conſtrained in any ſhape.

The unreaſonable rage in Britain of cutting off all extremities from horſes, is in all caſes a very pernicious cuſtom. It is particularly ſo in regard to a troop-horſe's tail. It is almoſt incredible, how much they ſuffer at the picket for want of it: conſtantly fretting, and ſweating, kicking about and laming one another, tormented, and ſtung off their meat, miſerable, and helpleſs; whilſt other horſes, with their tails on, bruſh off all flies, are cool and at their eaſe, and mend daily; whilſt the docked ones grow every hour more and more out of condition.

Of reining back, &c.

SECT. VI. *The Method of reining back,—and of moving forwards immediately after;—of Piaffing,—of Pillars,* &c.

NEVER finiſh your work by reining back with horſes that have any diſpoſition towards retaining themſelves; but always move them forwards, and a little upon the haunches alſo, after it, before you diſmount, (unleſs they retain themſelves very much indeed, in which caſe nothing at all muſt be demanded from the haunches). This leſſon of reining back, and piafing, is excellent to conclude with, and puts an horſe well and properly on the haunches: It may be done, according as horſes are more or leſs ſuppled, either going forwards, backing, or in the ſame place: if it is done well advancing, or at moſt on the ſame ſpot, it is full ſufficient for a ſoldier's horſe: For to piafe in backing, is rather too much to be expected in the hurry which cannot but attend ſuch numbers both of men and horſes as muſt be taught together in regiments. This leſſon muſt never be attempted at all, till horſes are very well ſuppled, and ſomewhat accuſtomed to be put together; otherwiſe it will have very bad conſequences, and create reſtiveneſs. If they refuſe to back, and ſtand motionleſs, the rider's legs muſt be approached with the greateſt gentleneſs to the horſe's ſides; at the ſame time that the hand is acting on the reins to ſolicit the horſe's backing. This ſeldom fails of procuring the deſired effect, by raiſing one of the horſe's fore-legs, which being in the air, has no weight upon it, and is conſequently very eaſily brought backwards by a ſmall degree of tenſion in the reins. When this leſſon is well performed, it is very noble and uſeful, and has a pleaſing air; it is an excellent one to begin teaching ſcholars with.

The leſſon is particularly ſerviceable in the pillars, for placing ſcholars well at firſt. Very few regimental riding houſes have pillars, and it is fortunate they have not: for though, when properly made uſe of with ſkill, they are one of the greateſt and beſt diſcoveries in horſemanſhip; they muſt be allowed to be very dangerous and pernicious, when they are not under the direction of a very knowing perſon.

SECT. VII. *The Method of curing Reſtiveneſſes, Vices, Defences, Starting,* &c.

WHENEVER a horſe makes reſiſtance, one ought, before remedy or correction is thought of, to examine very minutely all the tackle about him, if any thing hurts or tickles him, whether he has any natural or accidental weakneſs, or in ſhort any the leaſt impediment in any part. For want of this precaution, many fatal diſaſters happen: the poor dumb animal is frequently accuſed falſely of being reſtive and vicious; is uſed ill without reaſon; and, being forced into deſpair, is in a manner obliged to act accordingly, be his temper and inclination ever ſo well diſpoſed. It is very ſeldom the caſe, that a horſe is really and by nature vicious; but if ſuch be found, he will deſpiſe all careſſes, and then chaſtiſements become neceſſary.

Correction, according as you uſe it, throws a horſe into more or leſs violent action, which, if he be weak, he cannot ſupport: but a vicious ſtrong horſe is to be conſidered in a very different light, being able both to undergo and conſequently to profit by all leſſons; and is far preferable to the beſt-natured weak one upon earth. Patience and attention are never failing means to reclaim ſuch a horſe: in whatſoever manner he defends himſelf, bring him back frequently with gentleneſs (not however without having given him proper chaſtiſement if neceſſary) to the leſſon which he ſeems moſt averſe to. Horſes are by degrees made obedient, through the hope of recompenſe and the fear of puniſhment: how to mix theſe two motives judiciouſly together, is a very difficult matter; it requires much thought and practice; and not only a good head, but a good heart likewiſe. The cooleſt and beſt-natured rider will always ſucceed beſt. By a dexterous uſe of the incitements above-mentioned, you will gradually bring the horſe to temper and obedience; mere force, and want of ſkill and coolneſs, would only tend to confirm him in bad tricks. If he be impatient or choleric, never ſtrike him, unleſs he abſolutely refuſe to go forwards; which you muſt reſolutely oblige him to do, and which will be of itſelf a correction, by preventing his having time to meditate and put in execution any defence by retaining himſelf. Reſiſtance in horſes, you muſt conſider, is ſometimes a mark of ſtrength and vigour, and proceeds from ſpirit, as well as ſometimes from vice and weakneſs. Weakneſs frequently drives horſes into viciouſneſs, when any thing wherein ſtrength is neceſſary is demanded from them; nay, it inevitably muſt: great care therefore ſhould always be taken to diſtinguiſh from which of theſe two cauſes any remedy or puniſhment is thought of. It may ſometimes be a bad ſign when horſes do not at all defend themſelves, and proceed from a ſluggiſh diſpoſition, a want of ſpirit, and of a proper ſenſibility. Whenever one is ſo fortunate as to meet with a horſe of juſt the right ſpirit, activity, delicacy of feeling, with ſtrength and good nature, he cannot be cheriſhed too much; for ſuch a one is a rare and ineſtimable jewel, and, if properly treated, will in a manner do every thing of himſelf. Horſes are oftener ſpoilt by having too much done to them, and by attempts to dreſs them in too great an hurry, than by any other treatment.

Of curing Reſtiveneſs, &c.

If after a horſe has been well ſuppled, and there are no impediments, either natural or accidental, if he ſtill perſiſts to defend himſelf, chaſtiſements then become neceſſary: but whenever this is the caſe, they muſt not be frequent, but always firm, though always as little violent as poſſible; for they are both dangerous and very prejudicial when frequently or ſlightly played with, and ſtill more ſo when uſed too violently.

It is impoſſible, in general, to be too circumſpect in leſſons of all kinds, in aids, chaſtiſements, or careſſes. Some have quicker parts, and more cunning, than others. Many will imperceptibly gain a little every day on the rider. Various, in ſhort, are their diſpoſitions and capacities. It is the rider's buſineſs to find out their different qualities, and to make them ſenſible how much he loves them, and deſires to be loved by them; but at the ſame time that he does not fear them, and will be maſter.

Plunging is a very common defence among reſtive and vicious horſes: if they do it in the ſame place, or backing, they muſt, by the rider's legs and ſpurs firmly

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firmly applied, be obliged to go forwards, and their heads kept up high. But if they do it flying forwards, keep them back, and ride them gently and very ſlow for a good while together. Of all bad tempers and qualities in horſes, thoſe which are occaſioned by harſh treatment and ignorant riders are the worſt.

Rearing is a bad vice, and, in weak horſes eſpecially, a very dangerous one. Whilſt the horſe is up, the rider muſt yield his hand; and when the horſe is deſcending, he muſt vigorouſly determine him forwards: if this be done at any other time but whilſt the horſe is coming down, it may add a ſpring to his rearing, and make him fall backwards. With a good hand on them, horſes ſeldom perſiſt in this vice; for they are themſelves naturally much afraid of falling backwards. If this method fails, you muſt make the horſe kick up behind, by getting ſomebody on foot to ſtrike him behind with a whip; or, if that will not effect it, by pricking him with a goad.

Starting often proceeds from a defect in the ſight; which therefore muſt be carefully looked into. Whatever the horſe is afraid of, bring him up to it gently; if you careſs him every ſtep he advances, he will go quite up to it by degrees, and ſoon grow familiar with all ſorts of objects. Nothing but great gentleneſs can correct this fault; for if you inflict puniſhment, the apprehenſion of chaſtiſement becomes prevalent, and cauſes more ſtarting than the fear of the object. If you let him go by the object, without bringing him up to it, you increaſe the fault, and confirm him in his fear: the conſequence of which is, he takes his rider perhaps a quite contrary way from what he was going, becomes his maſter, and puts himſelf and the perſon upon him every moment in great danger.

With ſuch horſes as are to a very great degree fearful of any objects, make a quiet horſe, by going before them, gradually entice them to approach nearer and nearer to the thing they are afraid of. If the horſe, thus alarmed, be undiſciplined and headſtrong, he will probably run away with his rider; and if ſo, his head muſt be kept up high, and the ſnaffle ſawed backwards and forwards from right to left, taking up and yielding the reins of it, as alſo the reins of the bit: but this latter muſt not be ſawed backwards and forwards like the ſnaffle, but only taken up and yielded properly. No man ever yet did, or ever will, ſtop a horſe, or gain any one point over him, by main force, or by pulling a dead weight againſt him.

Sect. VIII. *Rules for bad Horſemen.*

Thomſon's Rules.

In the firſt place, every horſe ſhould be accuſtomed to ſtand ſtill when he is mounted. One would imagine this might be readily granted; yet we ſee how much the contrary is practiſed. When a gentleman mounts at a livery-ſtable, the groom takes the horſe by the bit, which he bends tight round his under jaw: the horſe ſtriving to go on, is forced back; advancing again, he frets, as he is again ſtopped ſhort, and hurt by the manner of holding him. The rider, in the mean time, mounting without the bridle, or at leaſt holding it but ſlightly, is helped to it by the groom, who being thoroughly employed by the horſe's fluttering, has at the ſame time both bridle and ſtirrup to give. This confuſion would be prevented, if every horſe was taught to ſtand ſtill when he is mounted. Forbid your groom, therefore, when he rides your horſe to water, to throw himſelf over him from a horſe-block, and kick him with his leg, even before he is fairly upon him. This wrong manner of mounting is what chiefly teaches your horſe the vicious habit againſt which we are here warning. On the other hand, a conſtant practice of mounting in the proper manner, is all that is neceſſary to prevent a horſe's going on till the rider is quite adjuſted in the ſaddle.

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The next thing neceſſary therefore is, that the rider ſhould mount properly. The common method is to ſtand near the croup or hinder part of the horſe, with the bridle held very long in the right hand. By this manner of holding the bridle before you mount, you are liable to be kicked; and when you are mounted, your horſe may go on ſome time, or play what gambols he pleaſes, before the rein is ſhort enough in your hand to prevent him. It is common likewiſe for an aukward rider, as ſoon as his foot is in the ſtirrup, to throw himſelf with all his force to gain his ſeat; which he cannot do, till he hath firſt overbalanced himſelf on one ſide or the other: he will then wriggle into it by degrees. The way to mount with eaſe and ſafety is, to ſtand rather before than behind the ſtirrup. In this poſture take the bridle ſhort, and the mane together in your left hand, helping yourſelf to the ſtirrup with your right, ſo that your toe may not touch the horſe in mounting. When your left foot is in the ſtirrup, move on your right, till you face the ſide of the horſe, looking acroſs over the ſaddle. Then with your right hand graſp the hinder part of the ſaddle; and with that and your left, which holds the mane and bridle, lift yourſelf upright on your left foot. Remain thus a mere inſtant on your ſtirrup, only ſo as to divide the action into two motions. While you are in this poſture, you have a ſure hold with both hands, and are at liberty, either to get ſafely down, or to throw your leg over and gain your ſeat. By this deliberate motion, likewiſe, you avoid, what every good horſeman would endeavour to avoid, putting your horſe into a flutter.

When you diſmount, hold the bridle and mane together in your left hand, as when you mounted; put your right hand on the pommel of the ſaddle, to raiſe yourſelf; throw your leg back over the horſe, graſp the hinder part of the ſaddle with your right hand, remain a moment on your ſtirrup, and in every reſpect diſmount as you mounted; only what was your firſt motion when you mounted, becomes the laſt in diſmounting. Remember not to bend your right knee in diſmounting, leſt your ſpur ſhould rub againſt the horſe.

It may be next recommended to hold your bridle at a convenient length. Sit ſquare, and let not the purchaſe of the bridle pull forward your ſhoulder; but keep your body *even*, as it would be if each hand held a rein. Hold your reins with the whole graſp of your hand, dividing them with your little finger. Let your hand be perpendicular; your thumb will then be uppermoſt, and placed on the bridle. Bend your

wriſt

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wriſt a little outward; and when you pull the bridle, raiſe your hand toward your breaſt, and the lower part of the palm rather more than the upper. Let the bridle be at ſuch a length in your hand, as, if the horſe ſhould ſtumble, you may be able to raiſe his head, and ſupport it by the ſtrength of your arms, and the weight of your body thrown backward. If you hold the rein too long, you are ſubject to fall backward as your horſe riſes.

If, knowing your horſe perfectly well, you think a tight rein unneceſſary, advance your arm a little (but not your ſhoulder) towards the horſe's head, and keep your uſual length of rein. By this means, you have a check upon your horſe, while you indulge him.

If you ride with a curb, make it a rule to hook on the chain yourſelf; the moſt quiet horſe may bring his rider into danger, ſhould the curb hurt him. If, in fixing the curb, you turn the chain to the right, the links will unfold themſelves, and then oppoſe a farther turning. Put on the chain looſe enough to hang down on the horſe's under lip, ſo that it may not riſe and preſs his jaw, till the reins of the bridle are moderately pulled.

If your horſe has been uſed to ſtand ſtill when he is mounted, there will be no occaſion for a groom to hold him: but if he does, ſuffer him not to touch the reins, but that part of the bridle which comes down the cheek of the horſe. He cannot then interfere with the management of the reins, which belongs to the rider only; and holding a horſe by the curb (which is ever painful to him) is evidently improper when he is to ſtand ſtill.

Another thing to be remembered is, not to ride with your arms and elbows as high as your ſhoulders; nor let them ſhake up and down with the motion of the horſe. The poſture is unbecoming, and the weight of the arms (and of the body too if the rider does not ſit ſtill) acts in continual jerks on the jaw of the horſe, which muſt give him pain, and make him unquiet, if he has a tender mouth or any ſpirit.

Bad riders wonder why horſes are gentle as ſoon as they are mounted by ſkilful ones, tho' their ſkill ſeems unemployed: the reaſon is, the horſe goes at his eaſe, yet finds all his motions watched; which he has ſagacity enough to diſcover. Such a rider hides his whip, if he finds his horſe is afraid of it; and keeps his legs from his ſides, if he finds he dreads the ſpur.

Avoid the ungraceful cuſtom of letting your legs ſhake againſt the ſides of the horſe: and as you are not to keep your arms and elbows high, and in motion; ſo you are not to rivet them to your ſides, but let them fall eaſy. One may, at a diſtance, diſtinguiſh a genteel horſeman from an awkward one: the firſt ſits ſtill, and appears of a piece with his horſe; the latter ſeems flying off at all points.

It is often ſaid with emphaſis, that ſuch a one has no *ſeat* on horſeback; and it means, not only that he does not ride well, but that he does not ſit on the right part of the horſe. To have a *good ſeat*, is to ſit on that part of the horſe, which, as he ſprings, is the centre of motion; and from which, of courſe, any weight would be with moſt difficulty ſhaken. As in the riſing and falling of a board placed in *æquilibrio*, the centre will be always moſt at reſt; the true ſeat will be found in that part of your ſaddle, into which your body would naturally ſlide, if you rode without ſtirrups; and is only to be preſerved by a proper poiſe of the body, though the generality of riders imagine it is to be done by the graſp of the thighs and knees. The rider ſhould conſider himſelf as united to his horſe in this point; and when ſhaken from it, endeavour to reſtore the balance.

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Perhaps the mention of the two extremes of a bad ſeat may help to deſcribe the true one. The one is, when the rider ſits very far back on the ſaddle, ſo that his weight preſſes the loins of the horſe; the other, when his body hangs forward over the pommel of the ſaddle. The firſt may be ſeen practiſed by grooms, when they ride with their ſtirrups affectedly ſhort; the latter, by fearful horſemen on the leaſt flutter of the horſe. Every *good* rider has, even on the hunting ſaddle, as *determined* a place for his thighs, as can be determined for him by the bars of a demi-peak. Indeed there is no difference between the ſeat of either: only, as in the firſt you ride with ſhorter ſtirrups, your body will be conſequently more behind your knees.

To have a good ſeat yourſelf, your ſaddle muſt ſit well. To fix a preciſe rule might be difficult: it may be a *direction*, to have your ſaddle preſs as nearly as poſſible on that part which we have deſcribed as the point of union between the man and horſe; however, ſo as not to obſtruct the motion of the horſe's ſhoulders. Place yourſelf in the middle or loweſt part of it: ſit erect; but with as little conſtraint as in your ordinary ſitting. The eaſe of action marks the gentleman: you may repoſe yourſelf, but not lounge. The ſet and ſtudied erectneſs acquired in the riding-houſe, by thoſe whoſe deportment is not eaſy, appears ungenteel and unnatural.

If your horſe ſtops ſhort, or endeavours by riſing and kicking to unſeat you, bend not your body forward, as many do in thoſe circumſtances: that motion throws the breech backward, and you off your fork or twiſt, and out of your ſeat; whereas, the advancing the lower part of your body, and bending back the upper part and ſhoulders, is the method both to keep your ſeat, and to recover it when loſt. The bending your body back, and that in a great degree, is the greateſt ſecurity in *flying* leaps; it is a ſecurity too, when your horſe leaps *ſtanding*. The horſe's riſing does not try the rider's ſeat; the laſh of his hind legs is what ought chiefly to be guarded againſt, and is beſt done by the body's being greatly inclined back. Stiffen not your legs or thighs; and let your body be pliable in the loins, like the coachman's on his box. This looſe manner of ſitting will elude every rough motion of the horſe; whereas the fixture of the knees, ſo commonly laid a ſtreſs on, will in great ſhocks conduce to the violence of the fall.

Was the cricket-player, when the ball is ſtruck with the greateſt velocity, to hold his hand firm and fixed when he receives it, the hand would be bruiſed, or perhaps the bones fractured by the reſiſtance. To obviate this accident, he therefore gradually yields his hand to the motion of the ball for a certain diſtance; and thus by a due mixture of oppoſition and obedience, catches it without ſuſtaining the leaſt injury. The caſe is exactly the ſame in riding: the ſkilful horſeman

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will recover his poiſe by giving ſome way to the motion; and the ignorant horſeman will be flung out of his ſeat by endeavouring to be fixed.

Stretch not out your legs before you; this will puſh you againſt the back of the ſaddle: neither gather up your knees, like a man riding on a pack; this throws your thighs upwards: each practice unſeats you. Keep your legs ſtraight down; and ſit not on the moſt fleſhy part of the thighs, but turn them inwards, ſo as to bring in your knees and toes: and it is more ſafe to ride with the ball of the foot preſſing on the ſtirrup, than with the ſtirrup as far back as the heel; for the preſſure of the heel being in that caſe behind the ſtirrup, keeps the thighs down.

When you find your thighs thrown upwards, widen your knees to get them and the upper part of your fork lower down on the horſe. Graſp the ſaddle with the hollow or inner part of your thighs, but not more than juſt to aſſiſt the balance of your body: this will alſo enable you to keep your ſpurs from the horſe's ſides, and to bring your toes in, without that affected and uſeleſs manner of bringing them in practiſed by many. Sink your heels ſtraight down; for while your heels and thighs keep down, you cannot fall: this (aided with the bend of the back) gives the ſecurity of a ſeat, to thoſe who bear themſelves up in their ſtirrups in a ſwift gallop, or in the alternate riſing and falling in a full trot.

Let your ſeat determine the length of your ſtirrups, rather than the ſtirrups your ſeat. If more preciſion is requiſite, let your ſtirrups (in the hunting ſaddle) be of ſuch a length, as that, when you ſtand in them, there may be the breadth of four fingers between your ſeat and the ſaddle.

It would greatly aſſiſt a learner, if he would practiſe riding in a large circle, as directed ſect. ii. without ſtirrups; keeping his face looking on the outward part of the circle ſo as not to have a full view of the horſe's head, but juſt of that ear which is on the outward part of the circle; and his ſhoulder, which is towards the centre of the circle, very forward. By this means you learn to balance your body, and keep a true ſeat, independent of your ſtirrups: you may probably likewiſe eſcape a fall, ſhould you at any time loſe them by being accidentally ſhaken from your ſeat.

As the ſeat in ſome meaſure depends on the ſaddle, it may not be amiſs to obſerve, that becauſe a ſaddle with a high pommel is thought dangerous, the other extreme prevails, and the pommel is ſcarce allowed to be higher than the middle of the ſaddle. The ſaddle ſhould lie as near the back-bone as can be, without hurting the horſe; for the nearer you ſit to his back, the better ſeat you have. If it does ſo, it is plain the pommel muſt riſe enough to ſecure the withers from preſſure: therefore, a horſe whoſe withers are higher than common, requires a higher pommel. If, to avoid this, you make the ſaddle of a more ſtraight line, the inconvenience ſpoken of follows; you ſit too much above the horſe's back, nor can the ſaddle form a proper ſeat. There ſhould be no ridge from the button at the ſide of the pommel, to the back part of the ſaddle. That line alſo ſhould be a little concave, for your thighs to lie at eaſe. In ſhort, a ſaddle ought to be, as nearly as poſſible, as if cut out of the horſe.

When you want your horſe to move forward, raiſe his head a little, and touch him gently with your whip; or elſe, preſs the calves of your legs againſt his ſides. If he does not move faſt enough, preſs them with more force, and ſo till the ſpur juſt touches him. By this practice he will (if he has any ſpirit) move upon the leaſt preſſure of the leg. Never ſpur him by a kick; but if it be neceſſary to ſpur him briſkly, keep your heels cloſe to his ſides, and ſlacken their force as he becomes obedient.

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When your horſe attempts to be vicious, take each rein ſeparate, one in each hand, and advancing your arms forward, hold him very ſhort. In this caſe, it is common for the rider to pull him hard, with his arms low. But the horſe by this means having his head low too, has it more in his power to throw out his heels: whereas, if his head be raiſed very high, and his noſe thrown out a little, which is conſequent, he can neither riſe before nor behind; becauſe he can give himſelf neither of thoſe motions, without having his head at liberty. A plank placed *in æquilibrio*, cannot riſe at one end unleſs it ſinks at the other.

If your horſe is headſtrong, pull not with one continued pull, but ſtop, and back him often, juſt ſhaking the reins, and making little repeated pulls till he obeys. Horſes are ſo accuſtomed to bear on the bit when they go forward, that they are diſcouraged if the rider will not let them do ſo.

If a horſe is looſe-necked, he will throw up his head at a continued pull; in which ſituation, the rider, ſeeing the front of his face, can have no power over him. When your horſe does thus, drop your hand and give the bridle play, and he will of courſe drop his head again into its proper place: while it is coming down, make a ſecond gentle pull, and you will find his mouth. With a little practice, this is done almoſt inſtantaneouſly; and this method will ſtop, in the diſtance of a few yards, a horſe, which will run away with thoſe who pull at him with all their might. Almoſt every one muſt have obſerved, that when a horſe feels himſelf pulled with the bridle, even when he is going gently, he often miſtakes what was deſigned to ſtop him, as a direction to bear on the bit and to go faſter.

Keep your horſe's head high, that he may raiſe his neck and creſt; play a little with the rein, and move the bit in his mouth, that he may not preſs on it in one conſtant and continued manner: be not afraid of raiſing his head too high; he will naturally be too ready to bring it down, and tire your arms with its weight, on the leaſt abatement of his mettle. When you feel him heavy, ſtop him, and make him go back a few paces: thus you break by degrees his propenſity to preſs on his bridle.

You ought not to be pleaſed (though many are) with a round neck, and a head drawn in towards his breaſt: let your horſe carry his head bridling in, provided he carries it high, and his neck arching upwards; but if his neck bends downwards, his figure is bad, his ſight is too near his toes, he leans on the bridle, and you have no command over him. If he goes preſſing but lightly on the bridle, he is the more ſure-footed, and goes pleaſanter; as your wriſt only may guide him. If he hangs down his head, and makes you ſupport the weight of that and his neck with your arms bearing

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ing on his fore-legs, (which is called *being on his ſhoulders*), he will ſtrike his toes againſt the ground, and ſtumble.

If your horſe is heavy upon the bit, tie him every day, for an hour or two, with his tail to the manger, and his head as high as you can make him lift it, by a rein on each poſt of the ſtall, tied to each ring of the ſnaffle bit.

Horſe-breakers and grooms have a great propenſity to bring a horſe's head *down*, and ſeem to have no feat without a ſtrong hold by the bridle. They know indeed, that the head ſhould yield to the reins, and the neck form an arch; but do not take the proper pains to make it an arch *upward*. A temporary effect of attempting to raiſe a horſe's head, may perhaps be making him puſh out his noſe. They will here tell you, that his head is too high already; whereas it is not the diſtance from his *noſe*, but from the *top* of his head to the ground, which determines the head to be high or low. Beſides, although the fault is ſaid to be in the manner of carrying the head, it ſhould rather be ſaid to be in that of the neck; for if the neck was raiſed, the head would be more in the poſition of one ſet on a well formed neck.

The deſign therefore of lifting up the head, is to raiſe the neck, and *thereby* bring in the head; for even while the bridle makes the ſame line from the rider's hand to the bit, the horſe's noſe may be either drawn in, or thruſt out, according as his neck is raiſed or depreſſed. Inſtead of what has been here recommended, we uſually ſee colts broke with their heads caveſſoned very low, their necks ſtiff, and not in the leaſt ſuppled. When the breaking-tackle is left off, and they are mounted for the road, having more food and reſt, they frequently plunge, and a ſecond breaking becomes neceſſary. Then, as few gentlemen can manage their own horſes, they are put into the hands of grooms, from whom they learn a variety of bad habits.

If, on the other hand, your horſe carries his head (or rather his noſe) too high, he generally makes ſome amends by moving his ſhoulders lightly, and going ſafely. Attend to the cauſe of this fault. Some horſes have their necks ſet ſo low on their ſhoulders, that they bend firſt down, then upwards, like a ſtag's. Some have the upper line of their necks, from their ears to their withers, too ſhort. A head of this ſort cannot poſſibly bend inwards and form an arch, becauſe the vertebræ (or neck bones) are too ſhort to admit of flexure; for in long and ſhort necked horſes the number of the vertebræ is the ſame. In ſome, the jaw is ſo thick, that it meets the neck, and the head by this means has not room to bend. On the other hand, ſome have the under line from the jaw to the breaſt ſo ſhort, that the neck cannot riſe.

In all theſe caſes you may gain a *little* by a nice hand with an eaſy bit; but no curb, martingale, or other forcible method, will *teach* a horſe to carry his head or neck in a poſture which nature has made uneaſy to him. By trying to pull in his noſe farther than he can bear, you will add a bad habit to nature. You could not indeed *contrive* a more effectual method to make him continually toſs his noſe up, and throw his foam over you.

The rule already given to ride a looſe-necked horſe, will be a proper one for all light-mouthed horſes: one caution being added, which is, always to ſearch whether his ſaddle or girths may not in ſome way pinch him; and whether the bit may not hurt his lip by being too high in his mouth: becauſe, whenever he frets from either of theſe cauſes, his head will not be ſteady.

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It is a common cuſtom to be always pulling at the bridle, as if to ſet off to advantage either the ſpirit of the horſe, or the ſkill of the rider. Our horſes therefore are taught to hold their heads low, and pull ſo, as to bear up the rider from the ſaddle, ſtanding in his ſtirrups, even in the gentleſt gallop: how very improper is this, we are experimentally convinced, when we happen to meet with a horſe which gallops otherwiſe. We immediately ſay, *he canters excellently*, and find the eaſe and pleaſure of his motion. When horſes are deſigned for the race, and ſwiftneſs is the only thing conſidered, the method may be a good one.

It is not to be wondered that *dealers* are always pulling at their horſes; that they have the ſpur conſtantly in their ſides, and are at the ſame time continually checking the rein: by this means they make them bound, and champ the bit, while their rage has the appearance of ſpirit. Theſe people ride with their arms ſpread, and very low on the ſhoulders of their horſes: this method makes them ſtretch their necks, and gives a better appearance to their fore-hands; it conceals alſo a thick jaw, which, if the head was up, would prevent its yielding to the bit; it hides likewiſe the ewe-neck, which would otherwiſe ſhow itſelf. Indeed, if you have a horſe unſteady to the bit, formed with a natural heavy head, or one which carries his noſe obſtinately in the air, you muſt find his mouth where you can, and make the beſt of him.

Many horſes are taught to ſtart by whipping them for ſtarting. How is it poſſible they can know it is deſigned as a puniſhment? In the riding-houſe, you teach your horſe to riſe up before, and to ſpring and laſh out his hinder legs, by whipping him when tied between two pillars, with his head a little at liberty. If he underſtood this to be a puniſhment for doing ſo, he would not by that method learn to do it. He ſeems to be in the ſame manner *taught* to ſpring and fly when he is frightened. Moſt horſes would go quietly paſt an object they were beginning to fly from, if their riders, inſtead of gathering up their bridles, and ſhowing themſelves ſo ready, ſhould throw the reins looſe upon their necks.

When a horſe ſtarts at any thing on one ſide, moſt riders turn him out of the road, to make him go up to what he ſtarts at: if he does not get the better of his fear, or readily comply, he generally goes paſt the object, making with his hinder parts, or croup, a great circle out of the road; whereas, he ſhould learn to keep ſtraight on, without minding objects on either ſide.

If he ſtarts at any thing on the left, hold his head high, and keep it ſtraight in the road, pulling it *from* looking at the thing he ſtarts at, and keeping your right leg hard preſſed againſt his ſide, towards his flank: he will then go ſtraight along the road. By this method, and by turning his head a little more, he may be forced with his croup cloſe up to what frightened him; for as his head is pulled one way, his croup neceſſarily turns the other. Always avoid a

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quarrel with your horſe, if you can: if he is apt to ſtart, you will find occaſions enough to exerciſe his obedience, when what he ſtarts at lies directly in his way, and you *muſt* make him paſs; if he is not ſubject to ſtart, you ſhould not quarrel with him about a trifle.

It muſt be obſerved, however, that this rule in going paſt an object may perhaps be a little irregular in a managed horſe, which will always obey the leg: but even ſuch a horſe, if he is really afraid, and not reſtive, it may not be amiſs to make look another way; unleſs the object be ſomething you would particularly accuſtom him to the ſight of.

The caſe will alſo be different with a horſe whoſe fear is owing to his being not uſed to objects; but ſuch a one is not to be rode by any horſeman to whom theſe rules are directed: the ſtarting here meant ariſes merely from the horſe's being pamper'd, and ſpringing through livelineſs.

The notion of the neceſſity of making a horſe go immediately up to every thing he is afraid of, and not ſuffering him to become maſter of his rider, ſeems to be in general carried too far. It is an approved and good method to conquer a horſe's fear of the ſound of a drum, by beating one near to him at the time of feeding him: this not only familiarizes the noiſe to him, but makes it pleaſant, as a fore-runner of his meat *; whereas, if he was whipped up to it, he might perhaps ſtart at it as long as he lived. Might not this be applied to his ſtarting at other things, and ſhow that it would be better to ſuffer him (provided he does not turn back) to go a little from and avoid an object he has a diſlike to, and to accuſtom him to it by degrees, convincing him, as it were, that it will not hurt him; than to puniſh him, quarrel with him, and perhaps ſubmit to his will at laſt, while you inſiſt on his overcoming his fear in an inſtant? If he ſees a like object again, it is probable he will recollect his dread, and arm himſelf to be diſobedient.

* See ſect. v.

We are apt to ſuppoſe that a horſe fears nothing ſo much as his rider: but may he not, in many circumſtances, be afraid of inſtant deſtruction? of being cruſhed? of being drowned? of falling down a precipice? Is it a wonder that a horſe ſhould be afraid of a loaded waggon? may not the hanging load ſeem to threaten the falling on him? There cannot be a rule more general, than, in ſuch a caſe, to ſhow him there is room for him to paſs. This is done by turning his head a very little from the carriage, and preſſing your leg, which is fartheſt from it, againſt his ſide.

A horſe is not to ſtop without a ſign from his rider.—Is it not then probable, that when driven up to a carriage he ſtarts at it, he conceives himſelf obliged either to attack or run againſt it? Can he underſtand the rider's ſpurring him with his face directed to it, as a ſign for him to paſs it? That a horſe is eaſily alarmed for his face and eyes (he will even catch back his head from a hand going to careſs him); that he will not go with any force, face to face, even to another horſe (if in his power to ſtop); and that he ſees perfectly ſideways,—may be uſeful hints for the treatment of horſes with regard to ſtarting.

Though you ought not to whip a horſe for ſtarting, there can be no good effect from clapping his neck with your hand to encourage him. If one took any notice of his ſtarting, it ſhould be rather with ſome tone of voice which he uſually underſtood as an expreſſion of diſlike to what he is doing; for there is *oppoſition* mixed with his ſtarting, and a horſe will ever repeat what he finds has foiled his rider.

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Notwithſtanding the directions above given, of not preſſing a horſe up to a carriage he ſtarts at; yet if one which you apprehend will frighten him meets you at a narrow part of the road, when you have once let him know he is to paſs it, be ſure you remain determined, and preſs him on. Do this more eſpecially when part of the carriage has already paſſed you: for if, when he is frightened, he is accuſtomed to go back, and turn round, he will certainly do it if he finds, by your hand ſlackening, and legs not preſſing, that you are irreſolute; and this at the moſt dangerous point of time, when the wheels of the carriage take him as he turns. Remember not to touch the curb rein at this time; it will certainly check him. It is not known to every one, that the perſon who would lead a horſe by the bridle, ſhould not turn his face to him when he refuſes to follow him: if, beſides this, he raiſes his arms, ſhows his whip, or pulls the bridle with jerks, he frightens the horſe, inſtead of perſuading him to follow; which a little patience may bring about.

Ride with a ſnaffle; and uſe your curb, if you have one, only occaſionally. Chooſe your ſnaffle full and thick in the mouth, eſpecially at the ends to which the reins are faſtened. Moſt of them are made too ſmall and long; they cut the horſe's mouth, and bend back over the bars of his jaw, working like pincers.

The management of the curb is too nice a matter to enter on here, farther than to preſcribe great caution in the uſe of it: a turn of the wriſt, rather than the weight of your arm, ſhould be applied to it. The elaſticity of a rod, when it hath hooked a fiſh, may give you ſome idea of the proper play of a horſe's head on his bridle; his ſpirit and his pliableneſs are both marked by it.

A horſe ſhould never be put to do any thing in a curb which he is not ready at: you may force him, or pull his head any way with a ſnaffle; but a curb acts only in a ſtraight line. It is true, that a horſe will be turned out of one track into another by a curb, but it is becauſe he knows it as a *ſignal*. When he is put to draw a chair, and does not underſtand the neceſſity he is then under of taking a larger ſweep when he turns, you frequently ſee him *reſtive*, as it is then called: but put him on a ſnaffle, or buckle the rein to that part of the bit which does not curb him; and the horſe ſubmits to be pulled about, till he underſtands what is deſired of him. Theſe directions ſuppoſe your horſe to have ſpirit, and a good mouth: if he has not, you muſt take him as he is, and ride him with ſuch a bit as you find moſt eaſy to yourſelf.

When you ride a journey, be not ſo attentive to your horſe's nice carriage of himſelf, as to your encouragement of him, and keeping him in good humour. Raiſe his head; but if he flags, you may indulge him with bearing a little more upon the bit than you would ſuffer in an airing. If a horſe is lame, tender-footed, or tired, he naturally hangs upon his bridle.

Plain Rules for bad Horſemen.

On a journey, therefore, his mouth will depend greatly on his ſtrength and the goodneſs of his feet. Be then very careful about his feet, and let not a farrier ſpoil them. You will be enabled to keep them from danger, by the directions given under the article FARRIERY, p. 167.

Very few, although practiſed in riding, know they have any power over a horſe but by the bridle; or any uſe for the ſpur, except to make him go forward. A little experience will teach them a farther uſe. If the left ſpur touches him (and he is at the ſame time prevented from going forward), he has a ſign, which he will ſoon underſtand, to move ſideways to the right. In the ſame manner to the left, if the right ſpur is cloſed to him: he afterwards, through fear of the ſpur, obeys a touch of the leg; in the ſame manner as a horſe moves his croup from one ſide of the ſtall to the other, when any one ſtrikes him with his hand. In ſhort, his croup is guided by the leg, as his head is by the bridle. He will never diſobey the leg, unleſs he becomes reſtive. By this means you will have a far greater power over him: he will move ſideways, if you cloſe one leg to him; and ſtraight forward, if both: even when he ſtands ſtill, your legs held near him will keep him on the watch; and with the ſlighteſt, unſeen motion of the bridle upwards, he will raiſe his head, and ſhow his forehand to advantage.

On this uſe of the legs of the rider, and guidance of the croup of the horſe, are founded all the *airs* (as the riding-maſters expreſs themſelves) which are taught in the manege; the paſſage, or ſide-motion of troopers to cloſe or open their files, and indeed all their evolutions. But the convenience of ſome degree of this diſcipline for common uſe is the reaſon of mentioning it here. It is uſeful if a horſe is apt to ſtumble or ſtart. If to the firſt, by preſſing your legs to his flank, and keeping up his head, he is made to go light on his fore-legs, which is aiding and ſupporting him; and the ſame if he does actually ſtumble, by helping him at the very inſtant to exert himſelf, while as yet any part of him remains not irrecoverably impreſſed with the precipitate motion. Hence this uſe of the hand and legs of the rider is called *giving aids* to a horſe; for, as to holding up the weight of a heavy unactive horſe, by mere pulling, it is as impoſſible as to recover him when falling down a precipice.

A horſe is ſupported and helped by the hands and legs of his rider in every action they require of him; hence he is ſaid to perform his *airs* by the *aids* from his rider.

Plain Rules for bad Horſemen.

The ſame manner is uſeful if a horſe ſtarts. For if when he is beginning to fly to one ſide, you leg on the ſide he is flying to, he ſtops his ſpring immediately. He goes paſt what he ſtarted at, keeping ſtraight on, or as you chooſe to direct him; and he will not fly back from any thing if you preſs him with both legs. You keep his haunches under him, going down a hill; help him on the ſide of a bank; more eaſily avoid the wheel of a carriage; and approach more gracefully and nearer to the ſide of a coach or horſeman. When a pampered horſe curvets irregularly, and twiſts his body to and fro, turn his head either to the right or left, or both alternately (but without letting him move out of the track), and preſs your leg to the oppoſite ſide: your horſe cannot then ſpring on his hind-legs to one ſide, becauſe your leg prevents him; nor to the other, becauſe his head looks that way, and a horſe does not ſtart and ſpring to the ſide on which he looks. Here it may not be amiſs to obſerve the impropriety of the habit which many riders have, of letting their legs ſhake againſt the ſides of the horſe: if a horſe is taught, they are then continually preſſing him to violent action; and if he is not, they render him inſenſible and incapable of being taught. The fretting of a hot horſe will hence be exceſſive, as it can no otherwiſe be moderated than by the utmoſt ſtillneſs of the ſeat, hands, and legs of the rider.

Colts at firſt are taught to *bear* a bit, and by degrees to *pull* at it. If they did not preſs it, they could not be guided by it. By degrees they find their necks ſtronger than the arms of a man; and that they are capable of making great oppoſition, and often of foiling their riders. Then is the time to make them ſupple and pliant in every part. The part which of all others requires moſt this pliancy is the neck. Hence the metaphor of *ſtiff-necked* for *diſobedient*. A horſe cannot move his head but with the muſcles of his neck: this may be called his *helm*; it guides his courſe, changes and directs his motion.

The uſe of this pliancy in the different parts and limbs of a horſe has been already ſhown in a former ſection. The preſent ſection being directed to the *unexperienced* horſeman, it may ſuffice to add, that *his* idea of ſuppleneſs need only be, that of an ability and readineſs in a horſe to move every limb, on a ſign given him by the hands or legs of his rider; as alſo, to bend his body, and move in a ſhort compaſs, quick and collected within himſelf, ſo as inſtantly to be able to perform any other motion.

Horſham.

HORSHAM, a town of Suſſex, ſeated near St Leonard's foreſt, 38 miles from London. It has its name from Horſa, brother to Hengiſt the Saxon; and is one of the largeſt towns in the county. It has ſent members to parliament ever ſince the 30th of Edward I. and is the place where the county-gaol is held, and often the aſſizes. It is a borough by preſcription, with the title of two bailiffs and burgage-holders within and without the borough, &c. who elect the members of parliament, and they are returned by the bailiffs choſe yearly by a court-leet of the lord of the manor, who return four candidates to the ſteward, and he nominates two of them for the office. Here is a very fine church, and a well endowed free-ſchool. Great ſtore of poultry is bought up for London at its market on Saturday, and it has a patent alſo for a monthly market.

Horſtius.

HORSTIUS (James), profeſſor of medicine in the univerſity

Horſtius Hortus.

univerſity of Helmſtadt, in the 16th century. He joined devotion with the knowledge and practice of phyſic. He carefully prayed to God to bleſs his preſcriptions, and publiſhed a form of prayer upon this ſubject. He alſo wrote, 1. A treatiſe on the qualities of a good phyſician. 2. Another on the qualities of a good apothecary. 3. A treatiſe of the plague, in German. 4. A commentary *in libros Hippocratis de corde*, and other works.

HORSTIUS (Gregory), nephew of the former, called *the Æſculapius of Germany*, publiſhed ſeveral books, which are eſteemed.

HORTAGILERS, in the grand ſignior's court, upholſterers, or tapeſtry-hangers. The grand ſignior has conſtantly 400 in his retinue when he is in the camp: theſe go always a day's journey before him, to fix upon a proper place for his tent, which they prepare firſt; and afterwards thoſe of the officers, according to their rank.

HORTENSIUS (Quintus), a celebrated Roman orator, the cotemporary of Cicero, pleaded with univerſal applauſe at 19 years of age, and continued the ſame profeſſion during 48 years. But being at laſt eclipſed by Cicero, he quitted the bar, and embraced a military life; became a military tribune, prætor, and afterwards conſul, about 70 B. C. Cicero ſpeaks of him in ſuch a manner as makes us regret the loſs of his orations. Hortenſius had a wonderful memory, and delivered his orations without writing down a ſingle word, or forgetting one particular that had been advanced by his adverſaries. He died very rich, a little before the civil war, which he had endeavoured by all poſſible means to prevent.

HORTUS SICCUS, a DRY GARDEN; an appellation given to a collection of ſpecimens of plants, carefully dried and preſerved.

The value of ſuch a collection is very evident, ſince 1000 minutiæ may be preſerved in the well dried ſpecimens of plants, which the moſt accurate engraver would overlook. We ſhall therefore give two methods of drying and preſerving a *hortus ſiccus*; the firſt by Sir Robert Southwell in Philoſophical Tranſactions, n° 237.; and the other by Dr Hill, in his review of the works of the Royal Society, with his objections to Sir Robert's method.

According to the former gentleman, the plants are to be laid flat between papers, and then put between two ſmooth plates of iron, ſcrewed together at the corners; and in this condition committed to a baker's oven for two hours. When taken out, they are to be rubbed over with a mixture of equal parts of aquafortis and brandy; and after this to be faſtened down on paper with a ſolution of the quantity of a walnut of gum tragacanth diſſolved in a pint of water. See HERBAL.

To this the Doctor objects, that the heat of an oven is much too uncertain to be employed in ſo nice an operation; and that the ſpace of time ordered for continuing the plants in it is of no information, unleſs the degree of heat, and even the different nature of the plant as to its ſucculency and the firmneſs or tenderneſs of its fibres, be attended to; there being ſcarcely any two plants alike in theſe particulars: conſequently the degree and duration of heat ſufficient for one plant would deſtroy another. Beſide which, the acid uſed deſtroys the colour of many plants; and never recovers that of others loſt in the drying; and frequently after the plant is fixed down, rots both the paper it is fixed to, and that which falls over it. Dr Hill's method is as follows. Take a ſpecimen of a plant in flower, and with it one of its bottom leaves if it have any; bruiſe the ſtalk if too rigid, or ſlit it if too thick: ſpread out the leaves and flowers on paper, cover it with more paper, and lay a weight over all. At the end of 18 hours take out the plants, now perfectly flattened, and lay them on a bed of dry common ſand; ſift more dry ſand over them to the depth of two inches, and thus let them lie about three weeks: the leſs ſucculent dry much ſooner, but they take no harm afterward. If the floor of a garret be covered in ſpring with ſand two inches deep, leaving ſpace for walking to the ſeveral parts, it will receive the collection of a whole ſummer; the covering of ſand being ſifted over every parcel as laid in, they need no farther care from the time of laying them till they are taken up to be ſtuck on paper. The cement uſed by the Doctor is thus prepared: early in the ſpring, put two ounces of camphor into three quarts of water in a large bottle, ſhake it from time to time, and when the firſt collected plants are ready for the faſtening down, put into a pint of the water, poured off into an earthen veſſel that will bear the fire, two ounces of common glue, ſuch as is uſed by the carpenters, and the ſame quantity of ichthyocolla beat to ſhreds; let them ſtand 36 hours, then gently boil the whole a few moments, and ſtrain it off through a coarſe cloth: this is to be warmed over a gentle heat when it is to be uſed, and the back of the plants ſmeared over with a painter's bruſh: after this lay them on paper, and gently preſs them for a few minutes, then expoſe them to the air a little; and finally, lay them under a ſmall weight between quires of paper to be perfectly dried.

It is ſcarce to be conceived how ſtrongly the water becomes impregnated with the camphor by this ſimple proceſs: a part of it indeed flies off in the making of the cement and the uſing of it: but enough remains with the plants to prevent the breeding of inſects in it. He farther obſerves, that plants may be dried very well without ſand, by only putting them frequently into freſh quires of paper, or a few, by only preſſing them between the leaves of a book: but the ſand method preſerves the colour beſt, and is done with leaſt trouble.

Another method much better than that of the oven is the flattening and drying the plant by paſſing a common ſmoothing iron for linen over the papers between which it is laid: but for nice things the moſt perfect of all methods is that by a common ſand heat, ſuch as is uſed for chemical purpoſes. The cold ſand is to be ſpread ſmooth upon this occaſion, the plant laid on it carefully flatted, and a thick bed of ſand ſifted over: the fire is then to be made, and the whole proceſs carefully watched until by a very gentle heat the plant be carefully dried. The colour of the tendereſt herb may by this manner be preſerved; and flowers, that can no way elſe be preſerved, may be managed perfectly well thus.

Hortus, Horus.

HORUS, a renowned deity of ancient Egypt. He was an emblem of the ſun. Plutarch (in his treatiſe *de Iſide et Oſiride*) ſays, "that virtue which preſides

over