

TO

PURCHASERS OF HORSES;

BEING

A SHORT AND FAMILIAR TREATISE

ON THE

EXTERNAL CONFORMATION OF THE HORSE :

THE NATURE OF SOUNDNESS & UNSOUNDNESS.

AND THE

LAWS RELATING TO SALE AND WARRANTY :

WITH COPIOUS DIRECTIONS FOR DISCOVERING UNSOUNDNESS PRIOR TO PURCHABING.

By J. STEWART.

VATERINARY SURGEON, AND PROPERTOR OF VETERINARY SURGERY IN THE ANDERSONIAN UNIVERSITY.

> " The buyer hath need of an hundred eyes, But the relier of only one."

FOURTH EDITION.

GLASGOW :

W. R. M'PHUN, 86, TRONGATE, PUBLISHER. N. H. COTES, 139, CHEAPSIDE, LONDON.

MDCCCXXXVI.

										PACE	
Рв	EFACE,	•								ix	
INT	RODUCTION,									1	
Ex	TERNAL CON	1680	ATIO	τ,						8	
	Definition,									8	
	To become a	jud	ze of	the h	lorse'	s con	form	ation.		. 8	
	The Head,									9	
	The Neck,									n	
	The Wither	×.								13	
	The Should	er.			2			÷.		13	
	The Counte									14	
	The Positio		the F	ore-l	Lors.	•				15	
	The Elbow,						÷.,			15	
	The Fore-A		-							16	
	The Knee,	,						•	•	16	
	The Shank,	or C	anno		•		•	•	•	17	
	The Fetlock			,	:	•	•	•	•	18	
	The Pasterr		•	•	•	•	•	•	•		
	The Foot,	,	•	•	•	•	•	•	•	19	
	The Chest.	•	•	•	•	•	•	•	•		
	The Barrel,		•	•	•	•	•	•	•	22	
	The Back.		•	•	• .	•	.*	•	٠	24	
	The Loins.		•	•	•	•	•	•	•	25	
	A MO LIOIIIS,		•	•						25	

BACE

					-	
EXTERNAL CONFORMATION (C	ontin	sed.)				
The Croup,		•	•	•	•	27
The Quarters,			•	•	•	28
The Position of the Hind	Legs	5	•	•	•	29
The Gaskin, · ·		•	•	•	•	29
The Hock,		•	•	•	•	30
PROPORTION,	•	•	•	• •	•	31
Colour, · · · ·	•	•	•	•	•	85
The hair can be dyed,	•	•	•	•	•	36 29
SEX,	•	•	•	•	•	39
AGE,	•	•••	•	•	•	37
Tricks of Dealers, .			•	•	•	49
To make the Horse appea				•	•	
Puffing the Glims, .	•	•	•	•	•	46 47
CONDITION,	• •	•	•	•	•	49
Mismanagement of the P			•	•	•	
Signs of Condition, .	•	•	•	•	•	50
SLUGGISHNESS AND ENERGY,	•	•		•	•	52
	•		•	•	•	56 57
Action,		•	•	•	•	
Good Action,			•	•	•	.58
Bad Action,	•	•		•	•	58
. Low Action,	• ,	۰.	•	•	•	58
High Action,		•	•	•	•	59
Extensive Action, .	•	•	•	•	•	61
Confined Action, .	•	•	•	•		61
Precise Action,	•	•	•	•	•	61
Disordered Action, .		•		•	•	62
Safety in Action,	•	•	•	•	•	62
COURAGE-TIMIDETY-SHYIN	sc, '	•	•	•	•	64
A Timid horse, .		۰,	•	•	•	65
Shying,	•		•.	•	•	66
VICE,	•	•	•		•	66
Definition, · ·	•	•	•	•	•	66
The kinds of Vice, .		•	•	•		67
A Stable examination,		. •		•	•	67

iv

VICE (Continued.)								PAGE
Signs of Vice,		2				2		68
How hidden,			1		1			70
A Warranty ag	ainst	Vice.				-		70
EDUCATION, .								71
BLEMISHES, .								73
Definition,								73
HABITS,					Ξ.	1	:	74
FAUERS,							1	75
SOUNDNESS,								75
Definition of So	undne	195.	1	1			:	76
Definition of Di							1	76
UNSOUNDNESS, .			1	1			:	79
Kinds of Unsou	ndnes	8.		1			÷	81
Examination of	a hor	se for	Uns	hound	nese		1	82
List of Parts to	be ext	mine	d. ar	d for	mho		:	84
THE CAUSES OF UNS	OUND	NESS.				.,	1	85
The Eyes, .	. '	. `					1	85
Inflammation of	the E	ve.						86
Cataract, .								87
Amaurosis,				1			1	89
The Nostrils,					2			91
Polypus, .							:	91
Glanders, .				:		:	:	91
Gleet, .					•	:	:	92
Sore Throat,			1.			•	:	94
The Glands situa	ted in	1 the	Cha	nel	۰.	•	:	96
The Neck,						•	:	96
Crib-biting,						•	:	96
Windsucking.							:	96
The Veins of the	Neck				:	:		99
						:	•	100
Marks left by blis	sters.	&c.			:	:		101
The Point of the	Elbo	w.			:	•		102
The Front of the	Knee					•		102
Stiffness of the K	nee-J	oint.			:	:		102

v

					_				PAGE
Гı	E CAUSES OF UNSO	UNDI	SESS (conti	nued.)			
	Splint or Splent,				• *	•	•	•	104
	Sprain or Strain	of th	e Ba	ck Te	ndon	s,	•	•	104
	The Fetlock Join	ts,				•	•	•	106
	Windgalls, .		• 1			• *			106
	Cutting,							•	106
	Unnerving, or N	euro	toimy						107
	The Pastern, -							•	109
	The Foot, .			• •		•	• *	•	109
	Sidebones, .			• *	• *				110
	Sandcrack, .						•	•	111
	Contraction, -	• •						•	111
	Thrush, .								113
	Corns								115
	Flat Soles,								116
	Founder								117
	The Withers,					·.		•	118
	The Chest,								118
	The Counter,								118
	The Haunch Bo	nes,					• 1	•	119
	The Stiffe, .		• 1		• 1				119
	The Groin,						•		119
	The Testicles,								120
	The Hock,					• 1	÷		120
	Capped Hock,	• •						•	120
	A Curby			• 1			•	•	120
	Thorough-pin,								122
	Bone Spavin,-			. ~					122
	Bog Spavin,		• •	• 1	•*				124
	Blood Spavin,			• *					124
	The Action as in	ndica	tive	of dis	ease,				124
	Lameness								125
									125
	Tricks of the Se	ller,	•						126
	Stringhalt,		•						129
	Partial Palsy.	-							129

vi

								PAGE	
THE CAUSES OF UNSOUNDNESS (continued.)									
Shivering, .	•	•	•	•	•	· • *	•	130	
Staggers, .	•			•				131	
Internal dises								132	
Broken Wind	i, .							133	
Roaring, a								135	
Grunting, .								137	
Examination	subsequ	tent	to Sal	le,				137	
Chronic Coug	ch.							139	
LAWS RELATING TO		AND	WAR	BANI	TY OF	Hor	EES.	139	
Sale, .								139	
In England,								139	
In Scotland,								140	
Warranty,							1	141	
Kinds of War	ranty.							141	
What constitu								142:	
Form and ext								143	
The Warrant							:	144	
Duration of V			******	α,	:			144	
			•	•	-	•	•		
Breach of Wa			•	•	•	•	•	142	
			•	•	•	•	•	145.	
	•	•	•	•	•	•	•	145	
In England,		•	•	•	•	•	•	146	
In Scotland,	•	•	•	•	•	•	•	147	
Delivery, .		٠.		•	•	•	•	149	
Risk between			Seller	r,	•	•		149	
Remarks on h			•	•	•	•	•	150	
General Cautions						•		153	
Engravings of the	Teeth	xpla	ained,	•		•		154	

vii

PREFACE

TO THE FOURTH EDITION.

This demand for this little book has been much greater than I had any reason to expect. Since its first appearance, three large editions have been exhausted, and the work has been reprinted in America. The continued and increasing demand has induced me to make some alternious, which, I think, will render it less university of the attention it receives. Originally it was written somewhat too harriedly, and published with little considerations. Several subjects, that deserved more notice, were dismissed in a single sentence, while others occupied more space than they required.

The book has been carefully revised. It has been rewritten from beginning to end. The different articles have been treated more apart, the one from the other; several-wuch as those on Proportion, Action, Vice, Courage, and Condition-have been so much enlarged.

PREFACE.

as almost to deserve the name of additional. The chapter relating to law has been abridged, but nothing essential has been expunged.

The book is intended chiefly for boresmen—for menalready familiar with the technical terms applied to the hores, and to the things about him. But it has not been forgotten that there are many purchasers of this animal who are not horeseens, and that these have more need for the Advice than the others. People who have any thing at all to do with hores, require to know these technicalities. I have therefore admitted them, although they could have been dispensed with. Whereever they have occurred for the first time, I have endeavoured to explain their sual meaning; but they are solidous introduced for any other purpose. In description they have been employed as little as possible. If sought in the index, it will probably point to the page in which the technical word is defined.

It appears to me that the Advice to Parchasers might sometimes be useful to gendemen of the law. A great many of them know not the meaning of such words as soundness, vice, blemishes, and others, which play an important part in mosily all harsuits regarding losses. They are frequently consulted when the clicat can tell nothing about the evil he complains of, except its name, which the agent, most probably, never heard obferor, or vith within he may associate things and

PREFACE.

circumstances having no relation to it. I do not say that this book will always, or often, afford a law agent the information he may require; yet I have no doubt but it sometimes will.

JOHN STEWART.

HOFE STREET, GLASCOW, } 26th February, 1836. }



ADVICE

ro

PURCHASERS OF HORSES.

Introduction.

HE wants much who wants a good horse. Among the purchasers of this animal a great many select with little judgment. They require something more than a quadruped able to carry and draw. He must be gifted with certain properties, the precise nature of which is not often clearly defined. Some demand too much. others too little, and a few make diligent search without knowing very well for what they are seeking. The last, indeed, declare that they are looking out for a good horse ; but what constitutes this scarce sort of animal is another question, often debated and soldom decided. Some require all the perfections in combination that have ever existed in separate individuals. They speak of a horse as they would of a piece of machinery. They will have so much strength, so much speed, and a certain size ; but perhaps all these when found may be refused, because there is some insignificant mark, or other peculiarity, to which nobody but themselves attaches any consequence .- " You must seek me out a horse," says one. " I want him chiefly for the saddle. but able occasionally to run in harness ; he must be well broke to both ; and, as I may follow the hounds now

and then, he must be a good and safe leaper. He must be showy : I like a bright bay best, with black legs and fect, and a fine star of white on the forehead. Let him be fifteen-and-a-half hands high, and five years old. His action must be perfect ; he must be fast and safe in all his paces. Be sure that he will never come down. I have a particular dread of stumblers. If he can walk four miles an hour I will be content, but he will please me well if he can manage five. Some horses can easily trot from fourteen to sixteen miles within the hour ; but mine will rarely require to go beyond ten or twelve. To carry my weight, he must have considerable power. He must be well-made in every respect. And, moreover, he must be warranted quite sound, free from all manner of vice, and docile as a child. Let him not have any scars about him, nor a white foot, nor too much white in the face. I parted with my last horse because his tail was too short, and I thought he did not carry his head very well; and I want to sell this capital saddle horse because he does not go quite so well in hamess."

To seek a hore able to perform several duties, and to perform each of these in the most perfort masch, is to seck an animal that never did and never an exist. The very circumstances which produce ability for one task, disquilly laim, to a certain extent, for executing nome other. There are horess to be sure of all work, as there are men of all modes; but perfection cannot exist in the one case more than in the other. The power and doclify of the dny horee an never bu united with the speel and fary energy of the racer. That which confers the one, forbids the other.

Some purchasers insist upon having a faultless horse. But there are no horses of this kind. Taken altogether, horses have a great many virtues; and the deficiency, or even excess of one of these is at all times sufficient to constitute a fault. Individuals would have fewer faults if the race had fewer virtues; for we compare the virtues and vices of one horse, not so much with one other as with many others. But the nurchaser, however fastidious, must always be content to overlook some blemishes, or to sacrifice some beauties, especially when the price is limited. He must place the good against the bad, and calculate how far the one counteracts the other. The loss of an eye, for example, is a serious fault, and the horse with such a defect is sold proportionally low. But if . he have good limbs, and have youth on his side, he may be a very serviceable animal. He may do his work in a stage coach or a cart almost, or quite, as well as another with perfect vision.

The goodness of a horse depends upon his speed, tenegh, douling, courage, his safety in progression, age, education, disposition to work, and ability to ordure faigues; and, in order that he may have a tolerable share of these qualifications, it is necessary that he be sound. His colour, marks, and deportment form have considerable influence on his price, though they may have none on his physical powers. One or to may be disposed to pay a high price for a pie-bald, but the majority of purchaser dislike him. A horse recently sold for a large sam of money; but this, fit proves any thing, mee'ny proves that he suited one

purchaser who perhaps paid for peculiarities which are valueless to others.

The virtues and vices or faults of horses arc very numerous. In the same animal they are frequently mingled in such proportions that it may be difficult to say which predominates, or to what extent they ought to influence his value. They are combined so variously in number and in degree, that it is quite impossible to describe all the shades of character they produce. We may analyze the component elements, but we cannot measure the proportions in which they are combined. Even in an individual horse, after all his good and bad qualities are ascertained, the degree in which each exists cannot be stated with any thing like arithmetical preciseness. His pace, indeed, may be measured by time and distance ; and some notion may be obtained of his power by the load he can carry or draw. But no scale has yet been constructed by which his action, docility, disposition to work, &c., may be measured ; and their real worth is so vaguely estimated that hardly two men out of a great many will fix the same price upon them.

How are the properties of a horse discovered? The nost accurate mole of ascertaining his physical powers is to test them by an actual trial. But, in the most of cases, there are insuperable objections to this plan. The dealer, in his ordinary transactions, cannot have time or opportunity to adopt it himself; and it is not apprising that he should refuse, or be very unwilling, to afford such an advantage to others. There are certain signs however, which, with more or less accuracy, indicate the properties of the horse; and

these, when a trial is impracticable, ought to be well attended to.

Some old-fashioned people pretend to recognise a good horse by certain marks on the face or tail, by the colour of the skin, irregularities in the disposition of the hair, called feathers or swirls : some aver that a rat-tailed horse is always a good one, that stringhalt is a sign of hardiness, and so forth. Others proceed much further, and are not satisfied till they have collected more and better evidence. Yet few, especially in regard to soundness, can or do avail themselves of all the symptoms which every horse affords. It may be true that the trivial signs upon which some rely, are never found but in horses possessed of desirable properties; but, though there can be no harm in noting them, there is much folly in trusting to them. These vague signs, however, are not greatly attended to now-a-days ; they are cherished only by the ignorant or the antiquated, Most of those who are in the habit of buying horses, or who have been much among these animals, predict his qualities chiefly from his shapes, his action, and his carriage. From the external conformation, some knowledge may be obtained as to his speed and power ; his activity, disposition to work, and safety in progression, may be inferred from his action ; and a systematic examination of different parts affords evidence, pretty strong, as to his soundness. From these three sources a great deal may be ascertained ; but of the information afforded by each, that in general is the least uncertain which relates to soundness. In the market or stable-yard, it is easier to discover an unsoundness than to discover any defect in speed or power.

There are also a few signs indicative of other circumstances which influence the horse's value or utility. Such are those relating to temper, condition, courage, age, &c. Still it must be confessed that, even after the most minute inspection, something must be taken on trust. A perfect knowledge of the horse cannot be obtained without making an actual trial of him. The symptoms tell much, but they seldom tell all. They are of such a nature that, in ordinary transactions, the purchaser may rely upon them with considerable assurance. But for all this, whenever a trial of a few days can be obtained, the purchaser should always take it, however well he may be satisfied after an examination of the horse. Next to the trial, the best guarantee he can have against loss, is to withhold payment of the price for two or three days. It is always easier to return an unpaid horse than one for whom the money has been delivered.

Many and load are the complaints about the difficulty experienced in discovering the properties of a hore before purchasing him. He is often compared to a lottery ticket; and, according to many, the chances of his being a bink or a price appear to be nearly equal. It is true that the purchaser of a horee cannel, all atone, accertain the real qualities of the animal with the same case and safety, or in the same time that he may estimate the value of some other articles of merchandize. But yet, the difficulty arises, not so much from the mature of the commodity, as from the ignorance of the boyer. Mandactured goods, watches, cloths, cutting instruments, &c., vary greatly in quality, and it is not every one who can distinguish the good

from the worthless ; but we hear few or no complaints about the difficulty of verifying these and many other articles. They all have indications of their properties with which the most of people soon become acquainted. The properties, good and bad, of the horse are also shown by certain signs; but these are less easily learned and therefore less generally known. The horse is almost, though perhaps not quite, as susceptible of verification as any other mercantile commodity. In this as in every other case, the buyer must learn to verify the article. In purchasing borses, the greater part, perhaps the whole of the uncertainty as to the ultimate result of the transaction, arises partly from the buyer's want of judgment, and partly, in many cases, from want of opportunity to exercise his judgment.

In looking at an intended purchase, the buyer has to consider the horse's conformation, or, as it is commonly expressed, his shapes ; his action, education, age, doolity, and soundness, along with some other properties of minor importance, are eash to be made the subject of inquiry. If possible the horse should, first of all, be seen in the stable, and afterwards in the open air where there is plenty of light and a causewayed lance or stretce, in which be may be trotted and seen without interruption from the passage of many vehicles. It will appear hereafter, when speaking of vice, that a stable examination is of considerable importance. Much may be discovered here that may not be apparent in the stable-yard to market-place.

External Conformation.

Definition. By the External Conformation, is mean the outline of the whole animal, and the relative development and position of the different parts. In this place it has nothing to do with the size of the horse taken altogether. No useful rules can be offered as to the horse's height or weight. It must vary, of course, with the purpose to which he is to be applied and he who has no noison of adjusting the sites to the work knows too little of the horse to purchase jadiciouty. No writen instructions will be of much avail to one whore eye is not already familiar with the different horeds of horses.

To become a judge of the lowes' conformation the minimized abould, in the first place, learn the names by which horemen indicate the different parts? next he should know to what variations these parts are tilde, in form, position, and development; and, to apply this to a useful purpose, he must know what are due consequences of these variations; or, in other words, what influence they have upon the hores's capacities. Written or oral instruction will afford him great assistance, but he must have recourse to the have formed hat cannot be written. After obtaining what may be called the theory, he must obtain the particle, by actual observation; a fatter learning what he

* The annexed diagrams will be of use for this purpose.

is to look for, he must teach his eye to perceive the peculiarities of conformation when they are hefore him. This is easily managed by attentively, and in a systematic manner, examining many horses, and comparing them with each other. It requires many words and some time to describe the shapes of the horse ; but an experienced eye detects beauties and imperfections in the glance of a moment. A professed dealer will single out a horse for his purpose almost the instant he sees him." But he has served a long apprenticeship before he acquires this facility, and it has been the longer that he has had few or no rules to guide him. From occasional remarks of more experienced hands, and from insensibly noting striking peculiarities, and afterwards learning how these animals turned out, whether well or ill, he cannot but consider the properties as the consequence of the peculiarities of conformation. Many observations of this kind at length teach him what to expect from horses possessed of a certain form. It is obvious, however, that information obtained in this manner must be obtained very slowly. If there were no other method, the private purchaser could never be so well qualified to judge, for his opportunities are very limited when compared with those of the dealer. Yet, by adopting the mode mentioned in the heginning of this paragraph he may acquire the same degree of tact in a much shorter period.

The Head varies considerably in size, form, and expression. In the saddle horse it cannot be too

* This refers only to shape, not to soundness.

small ; the cars should be small, pointed, placed wide space, betto the langing downwards and outwards; the space between the eyes should be flat and broad; the fait, or nearly so the maxile thin, tapering to the lips, free from fishiness; the nosirili thin, their entrance large and open; it he space between the branches of the lower jaw, called the channel, should be wide. The head should be so placed on the neck, that their junction may form an angle acidner very acute nor very obtaxe.

A large head is generally unhandsome. It is common to draught horses. The countenance often exhibits a total want of animation ; the eves are small, sunk in their sockets ; and the lids are thick, clumsy. These are termed pig, or crow eyes. The forehead is narrow, indicating a small brain, and its usual, though not invariable, accompaniment, a want of energy. The nose is often arched, and such horses are called Roman-nosed ; the entrance to the nostrils is small, and the borders thick, fleshy, and collapsed ; the ears are large, and hang downwards, as if too weighty to be supported : as the horse moves his head, the ears wave from side to side as if uncontrolled. Such horses are termed lob or lop-eared. It has been said, but without much truth, that they are often good goers : the ears will not make them either good or bad, but the lop-cared are generally sloggish. The channel is

* The nostrils are always large in swift and active horses. They form not a bad criterion of the size of his lungs: a slow horse possibly may have a large nostril, but a swift horse never had a small one.

narrow, and, in consequence, the head appears to be awkwardly placed upon the neck : the throat is thick ; the motion of the head appears restrained, and the horse cannot suffer tight reining up ; there is not sufficient space between the jaws to receive the head of the wind-pipe without compression. These horses never carry the head gracefully, and they are, more than others, subject to roaring. In the saddle horse, a heavy, ill-set-on head makes him bear heavily on tho hand of the rider ; makes him liable to stumble ; and a head of this kind is often combined with other defects in form. The head of the draught horse, however, need not be too strictly criticised ; the harness hides its unseemly shape ; and the support which the collar affords, counteracts the horse's tendency to fall on his knees.

Tde Arce in all middle horses should be long, thin,not too much arched, yet describing a carrer from thewithers to the forsetop." It may bettoo thick and harryin the anddle horse, but can hardly be too long. Ananimal authority however contends, that it can neverbe too short, and that a long neck, by adding to thewight, burdless and wears out he legs and field, besidesmaking the horse liable to stamble. "Give me aprove," says Professor Coleman, "that will sarve atgrass—that is now with a short neck." But this is notwhere," says Professor Coleman, "that will sarve atlevels bears a certain proportion to the height of the neckalways bears a certain proportion to the height of the neckblong, or the withers must be low; and a practised rider,Knows which of these evels he would most avoid. He

that has riden a short-needed horse, has occupied an incomotable scatt is has field in the horse were all behind him, or constantly going down hill. Morewere, length of needs, gives the rider more power over over, length of needs, gives the rider more power over the horse's mouth. There is an important nuncel, too, of greatuse in beinging the legge forward, and preventing atumbling, whose length of the needs.

The junction of the neck with the shoulder is very different in different horses. In all those intended solely for the saddle, it is important that the neck stand high on the shoulder, rising upwards and forwards ; it gives the horse a lofty, commanding carriage, and ensures safety on the road. When the neck is placed lower on the shoulder, it runs almost directly forward, as in the ox, describing a line nearly straight with the back : the horse has a mean appearance, is usually slow, and bears constantly and heavily upon the bridle : in such cases, the neck itself is always short. When the neck is arched downwards, the horse is said to be crest-fallen, or eve-necked : they are apt to project the muzzle, and carry the head so, that they can hardly see before them. These are also termed stargazers. For the draught horse, a long and thin neck is less essential than for a roadster ; yet it is probable he has more power ; and he certainly looks better when the head projects considerably from the collar It should not, however, as in the saddle horse, he thin: when it wants substance, the collar must be small, and there is then some difficulty in getting the head through it; and the additional weight which a thick neck confers, is no disadvantage to the draught

horse, for much of his power depends upon the weight he can throw into the collar.

The Withers, that is, the ridge hetween the nummel of the saddle and the termination of the mane, should be elevated, spare, easily embraced with the hand. When the withers are high, the horse is said to stand well up before ; and dealers usually attempt to exaggerate the height, by making the horse stand with his head up hill, when shown to an intended purchaser. When the withers are low, the shoulder appears thick, overloaded with flesh. Such horses are unpleasant and unsafe to ride : the weight is thrown too much forward, and they are apt to stumble. The saddle shifts forward, the rider feels as if the horse were always going down hill. In the ass and mule, the withers are usually very low : and this is one reason why they are so unpleasant to ride, and why it is so difficult to keep the saddle in its proper place without the aid of a crupper. High withcrs, however necessary for safety and case, are not essential to the racer or the collar horse. Very few draught horses are high before ; and Eclipse, so celebrated for his speed, had low withers, as, indeed, have the most, or a great many, of racing notoriety. In other breeds, low withers, a thick shoulder, a short, and ill-set-on neck, often go all together. Mares are generally lower before than behind.

The Shoulder should be deep, extensive, slanting from the withers downwards and forwards, and seeming to be confounded with, or running into the neck. In the heavy draught horse, the space between the

withers and the elbow joint-that is, the depth of the shoulder-is comparatively inconsiderable; the neck terminates abruptly, and is quite distinct from the shoulder, which swells outwards all at once. The difference may be ascertained in the dark. by mcrely passing the hand down the ncck and over the shoulder ; in the one case it passes insensibly on to the shoulder, and in the other it is suddenly arrested at the seat of the collar. The difference chiefly arises from the length and position of the shoulder-blade. In the draught horse, this bone is shorter, and stands more unrightly; the muscles have less room; they are clustered together : some of them are shorter, and the motion of the whole shoulder and limb is much less extensive than is requisite for good action and safety in the road horse. This kind of shoulder, so common in heavy horses, is far from being disadvantageous for those that are altogether confined to draught work. While it allows them all the action and all the safety their work requires, it affords a convenient bed for the collar, which is not disturbed as in those that have more motion in the shoulder. But the same kind of shoulder renders the saddle horse liable to stumble, and he is usually slow, confined in his action, especially in the trot. It is often combined with low withers, a short and ill-set-on neck, a wide chest, and an unsafe inclination of the body over the fore-legs. It is never seen along with a deep chest.

The Counter or breast is never too broad in the heavy draught horse; it is often too narrow in all kinds of horses, and in those intended for quick work it may

possibly be too wide. It indicates the width of the chest. When very broad, it is usually accompanied with a rolling gait in the walk or trot, and an inelination of the body over the fore-legs, both of which are faults in the saddle horse.

The Position of the Fore-legs should be observed. Viewed from the horse's side, they should descend in a straight line from the elbow to the fetlock, with the toe of the foot falling directly below the point of the shoulder. In a sound horse, the foot is rarely farther forward ; when farther back, as it is in almost all farm and heavy horses, it makes the saddle horse very liable to come to his knees : the weight is naturally so much thrown beyond the points of support, that his sure-footedness can never be depended upon. Viewed from the horse's head, the limbs should approach each other a very little, as they proceed towards the ground. The approximation should be just enough to show that it exists. When it is more considerable, the horse is very apt to cut the fetlocks by striking them with the opposite foot. When they fly apart, the horse is almost always a worthless sort of heast, without action or energy. But it ought to be remembered that young unbroke horses, in general, stand loosely and awkwardly upon their legs, without any defect in conformation.

The Elbow should be broad in all horses. Its breadth depends upon the length of a bone which projects behind the line of support, and whose only use is to serve as a lever to certain muscles attached to its point. The longer this lever, the greater the

power of the mascles, and the more extensive the motion. The point of the clibox whold not be directed either inwards or outwards, but point directly backwards and upwards. It may be felt by the hand, or seen by the eye; but when examined, the hores should stand fair. When the point leass towards the client the toes are almost inwardally turned out, and the hores liable to injure the feldock; when everted from the east, the toes urm in, and the legt is struck higher up. In both cases the action is irregular, shuffing, and unightly.

The Fore-Arm should be long and broad, its breadth indicating uncountarity. A nucedual fore-arm has something to do with high and bold action. When this part is shrunk, sepecially on its posterior aspect, the horse always goes near the ground, and is weak on its fore-legs. There is much difference in this respect in different horses; but there is less difference in the Engds of the fore-arm. A long fore-arm is no the pleasantest to the rider, for it accompanies or confers a long during out of strife in the troi; and it has been said that in houters it makes them apt to strike to top of the fonce with their knees, when leaging ; but this is doubtful. The length of the fore-arm in tucgreyhound above how for-combut it is to rapid motion.

The Knee, in all horses, should be well developed, broad from front to back, and straight from above downward. Much of its lateral breadth depends upon a bone placed under similar circumstances with the point of the elbow, and of the same use; it is out of

the line of support, and is merely a lever for the muscles. In horses that have done much work, the knees are often inclined forward, and they are said to be hent, or arched before. This defect is not invariably the consequence of hard work ; hut whatever may be the cause, it is always, in the saddle horse, a serious deformity. When existing in a great degree, it renders him almost useless for any purpose, and even in the least degree it unfits him for the saddle. He is weak, tottering, and always ready to fall from the slightest cause. A defect of an opposite character is sometimes met with : the knees are hent a little back from the perpendicular. It is entirely attributable to natural formation. Such horses are called calfkneed. I am not aware that it produces any inconvenience ; hut it may possibly make the horse more liable to stmin of the back tendons, and perhaps diminish the power of the muscles which bend the foot.

The Showh, or Camono.— The space between the know and feelock, should be short in propertion as the forearm is long. It is composed of the hones, which space and pasteras. Viewed from the horne's side, the shank should be of nearly the same breakful all the way down. It is a had, and a very common full, to have want of breakful, or, as it is commonly expressed, *usant of fone*, immediately blow the knees. When the breakful of the log stand well out from the hone: and, helps removed a sufficient distance from the centre of motion, help removed a sufficient distance from the centre of motion.

18

which the tendons proceed, operates to most advaptage, and the motion of the tendons themselves is free. It is this removal of the tendons from the bose that constitutes what horemen call a fat shank. When the approximation is greater, the hores is said to have a little or a round hone. The apparent roundness does not, however, exist in the bone itself, but depends does not, however, exist in the hone itself, but depends upon its close contact with the tendon. A shank of this kind generally belongs to a horse with low and confined action.

But the worst fault the fore-leg can have, and there are few so common, is that in which the horse is said to want bone below the knee, or, to be tied below the knee; immediately beneath this joint the cannon is very narrow, much narrower than at any other part ; the tendon is much too closely bound to the bone ; and the horse is very apt to want action, and still more apt to bend over-that is to become bent at the knee. He begins to totter over almost as soon as he is put to work. The shank should be fine. free from that which, for want of a better name, is termed gourdiness. The skin is so thick that the shape of the internal parts, of the bones and tendons, is neither scen nor felt. This indicates want of breeding, and a tendency to swelling of the legs, and to grease from slight causes. The bones and tendons in wellbred horses are each distinctly perceived by the eye; they should be quite separate, and the spaces between them, formed by the dipping in of the skin, well marked.

The Fetlocks require no particular notice, as far as outline is concerned, for in this respect they vary very

little. Sometimes, however, they deviate from their proper relative position; instead of descending in a strught lite from the elbow towards the ground, they approximate; i and each becomes much exposed to injury from the opposite foct. Such hores always have the toes turned out; and besides, being determined eattern, have almost invariably an awkward shuffing gait. This improper approximation of the eloclost to each other usually arises from the elbow being turned invarish, but sometimes the mal-formation is allocether eening tokeds.

' The Pastern-the space between the fetlock joint and the top of the hoof. This part varies very considerably in different breeds, and in individuals of the same breed it differs in length and in obliquity. The heavy draught horse has short upright pasterns ; those of the racer are long and slanting, and between these extremes are many degrees. There are a few exceptions, but length and obliquity generally go together, and a short pastern is usually also an upright one. Long pasterns confer elasticity; they make the horse springy in his motions ; it is pleasant to ride him ; but he is weak, and very liable to strain and runture the back tendons. Length and obliquity of the pasterns are necessary to the racer in order that he may perform his rapid movements without concussion ; but the strain necessarily thrown mon the back tendons is often so great that the horse, especially when heavily burdened and passing over irregular ground, breaks down in the middle of his course. The tendons give way and the fetlock comes to the ground. The pastern of the racer would ill suit

the hunter, or indeed any other animal that had to carry much weight whether his own or his rider's. On the other hand, a pastern may he too short or too upright. In the heavy cart horse, whose motions are comparatively slow, there is little concussion to guard against, hut there is a huge frame to support, which the long and ohlique pasterns of the racer are not at all fitted to sustain. Here a short and upright pastern is requisite; hut it must be longer in those intended for quicker work. Short pasterns in a saddle horse render him very unpleasant to ride ; he is rarely gifted with any great speed ; hut such as it is the rider experiences a violent shock every time the foot comes to the ground ; and this is not the only objection : a horse with short pasterns is not very safe ; he is easily thrown upon his knees ; a little work makes him knuckle over, and renders him still more unsafe than before." Besides, such horses arc more liable than others to disease of the hones helow the knce. arising from the shock accompanying rapid motion.

It is impossible to state upon paper what is the proper degree of obliquity the pastern abould possess. It must way according to the purposes for which the hone is required, the weight he has to carry, and the pace at which he must travel. All that can he said is that weight requires a short pastern, speed a long one. If there must be access on either side, it had hetter he in favour of length; for a pattern too upgirth oftener produces knocking over and other evits, than a long one produces somin or ruputer of the hack tendoms.

* By knuckling or bending over, is meant flexion or inclination of the fetlocks forward.

It may be well, too, in examining the pattern to consider the horre's conformation otherwise. When the fore-lega are phased well forward, and the back rather long than short, the forner will confer the safety and the latter the disticity which short and upright paterns dimhish. But I know not what will make amends for a pattern too long and too oblique; art can in some measure provide against the effects by a particular mode of shoeing.*

The Foot ought to be nearly round, smooth, without any signs of brittleness, which is indicated by cracks, and vacuities, where portions of horn have been torn off with the nails. That portion of the hoof termed the crust or wall, which is seen when the foot is on the ground, should slant downwards at an angle of about fortyfive degrees. It may be more or less without any great detriment: but when very oblique the sole is more or less flattened, the heels low and weak, the horse will be subject to corns ; and he will be more likely to be irreparably injured should he ever be attacked by founder. When the hoof descends more perpendicularly the heels are high, the sole concave, and the horse is said to be more liable to grogginess. It is certain that a horse with such a foot is very apt to go much upon the toe, and to fall. But this state of the foot is often the result of bad shoeing, which the purchaser may consider probable if the action be good. The feet are sometimes very large, and much oftener very small in proportion to the size of the horse. They

· Keeping the heels of the shoe long and without calkings.

may be either, without any diseasc. Some consider a large foot advantageous for a horse that has to hunt over soft ground; but it often accompanies or produces very indifferent action. I know of no objection to a small foot except that it sinks deep in loose ground.

The Chest is never too deep in any horse ; without plenty of room for those important organs, the lungs, there can be but little speed, and no endurance. The chest differs much in width and in depth. In some horses it is narrow from end to end ; their forelegs stand close together ; their toes are turned out, and the fctlocks inwards; their shoulders are flat, belly small, loins narrow, and they want substance in the girth. Such horses often have a good deal of animation ; but they can stand no fatigue ; a little work takes away their appetite ; they are easily purged, even by a draught of water or a smart gallop, and among stablemen they are termed washy horses. Their legs appear to be far too long, and horsemen say that they are too light in the carcase, or that they have too much daylight below them. There are other horses in whom the chest is both deep and wide behind the elbow; but it wants capacity and depth between the shoulders ; it tapers too much as it proceeds forward. These stand with their forelegs close together ; the sides swell ont abruntly behind the elbows ; the head hangs low ; the withers are hardly seen, and the horse has seldom much energy or good action. It is difficult to ride him without a crupper ; the saddle shifts forward, and the girths cannot be kept off the elbows. Conformation of this kind very often belongs to ponics : they are generally good-

natured hardy sort of beasts, enduring a good deal of ill-usage, always ready for their food, however coarse, and often maintaining their condition on a scanty allowance; but they are lazy, mean in their appearance, and very awkward to ride.

Depth of chest between the shoulders belongs almost exclusively to the horse of speed. Like the greyhound's. it is deeper before than behind ; but it is wide too. Instead of running sharply to a point between the shoulders, it swells boldly outwards and downwards; the protuberance of the breast bone and the muscles by which it is covered, opposes the advance of the saddle by keeping the girths in their proper place. In very deep-chested horses, there is actually a little depression between the swell of the breast-bone and the rise of the belly, into which the girths are received and retained immoveable. This depression at the girthing place is a good criterion of the depth of the chest between the shoulders ; the depth of the shoulder itself is another : the width of the chest is indicated partly by the cylindrical appearance of the whole carcase. and partly by the distance between the fore-legs. The most of draught horses have wide but not deep chests. and it has been said that a circular chest, being that in which there is the greatest capacity, is the best adapted for horses of speed ; but it has been objected by others that when the chest is remarkable for width in front, the horse is awkward in his gait, having a partion of the rolling motion of the goose. This may be true as far as regards trotting ; but not, it is said, in reference to a horse, like the hunter and racer, that does all his work by a succession of leaps. It may be

observed, however, that the chest of the greyhound is more remarkable for depth than for breadth, and that he proceeds by bounds in the same way as the horse at the gallop ; had a circular chest been more advantigeous, there can be little doubt that He, who has given so much would have given that too. A roundchested horse is generally slow, but long enduring ; halthy, strong, easily kept, and apt to accumulate feab ; but the banter and racer must be remarkable for a deep obset rather than for a round one.

The Barrel .- This word is sometimes applied to all the body between the shoulders and haunches, and in this sense it includes the back, loins, belly, flank, and some of the ribs ; but most frequently the word is applied only to the sides. In the former sense, it may he observed, that the barrel should approach to a eylindrical form; the more it does so the better. Inthe latter meaning, the barrel, that is the side, should be deep, and at the same time round, not flat. When the sides are flattened, the belly is very pendant ; the spine, from the withers to the eroup, forms a sharn unscemly ridge. The ribs, instead of swelling outwards from the spine, as in round-barreled horses, run downwards. Horses of this shape are never famed for speed ; in general they are slow, lazy, have bad action ; are apt to over-reach the fore foot with the hind one; and they are never handsome. Among stablemen they are termed flat-sided, or flat-ribbed. They that place much stress on the depth of the ribs or belly are apt to be deecived with these horses. The fact is, they have too much depth and too little width

25

of carcase. They are only fit for slow work. The fault is very common among mules and asses.

The Back .- The part which the saddle covers may be too long or too short ; a short back is necessary for carrying great weight, a long one for rapid progression. Short-backed horses are, in general, very hardy ; they endure much fatigue, travel far, and carry heavy burdens; but on the other hand they are very seldom fast ; they generally over-reach, continually making that disagreeable noise termed forging, and their action is confined. A long back is favourable for an extensive stride and rapid motion, but it makes the horse weak, unable to carry much weight ; and even in harness he soon becomes fatigued ... It must vary in length according to the purposes for which the horse is required. A hot young rider of light weight should choose a horse with a back rather long than short ; he will have no patience with the slow yet persevering pace of one with a short back. Short-backed horses are unfit for ladies ; they are very rough in their paces, and they have no room for the side-saddle. In all horses the back should be straight : when sunk, whether in consequence of original form or of hard work, they are weak, unable to carry much weight ; yet they are casy to the rider. They are called saddle-backed horses.

The Loins reach from the termination of the back to a line drawn from haunch to haunch. Like the back, the loins should be neither very long, nor very short, unless the horse be wanted entirely for speed or entirely for power. That which has been said of the

back is equally applicable to the loins ; length accompanies greed and weakness, shortness a accompanies strength and confined action. The length of the loins is indicated by the apparent length of the grine, and by the space between the last inh and the hanneb bone. When these two points are near each other, the lorse is said to be well-ribded, ribded home, short-ribded, short-backed, or closs-coupled ; the shortness, howore, exists in the loins.

The loins should be straight. When arched upwards the hore is suid to be *ronch-honked*. Many well-bred borses are so, but it is more than an unightly defect; it brings the fore and hind feet too close toguther, confines the borse's action, and makes his puee rough and unpleasant; yet it confirs strength for carrying weight.

The loins should be broad in all horses; breadth here gives strength without interfering with speed ; and it always accompanies a round capacious barrel. The loins are best seen from some elevation, such as the driver's seat on a coach, or in a gig. When they are narrow, the chest and belly generally want capacity, and the horse is said to be light-carcased, or light in the flank, which is hollow and tucked up, Narrow-loined horses, accompanied, as this defect so often is, with many others, are always comparatively. weak and ineffective. They are often seen in stage coaches : and when counled with another of better shape, their weakness is apparent at a glance, especially to one who can compare them off the box-seat. It is painful to witness one of this kind towards the end of a long stage, trudging feebly at the side of a

bold vigorous companion; and it is a fine thing to see how this animal willingly spends his energy in doing the work of his feeble ally.

The Croup begins where the loins end, and terminates at the root of the tail. Upon the length and direction of the croup a good quarter depends. In all horses intended for quick work, the croup should be long, and proceed backwards in a direction nearly horizontal. In almost all well-bred horses, it is both long and straight ; but in ponies, mules, asses, Irish and draught horses, it is short, and droops suddenly as it proceeds backwards, so much so that the root of the tail appears nearly half-way down the buttock. The Irish horse is noted for this peculiarity ; and hence the prevalence in Ireland of that aboniinable operation termed nicking, which is intended to improve the animal's appearance, but which, in reality, makes bad worse. As the croup approaches to the perpendicular line, the muscles of the hind quarter are short, heaped together, and they have to act under disadvantages, the levers to which they are attached being comparatively short. The difference between the horizontal and the drooping croup is apparent to the most inexperienced eve; to obtain a striking view of the dissimilarity it is only necessary to place a well-bred English hunter by the side of a plain Irish horse, and stand a few yards behind them. Although the horizontal is always preferred to the drooping croup, it must not be supposed that the latter is an intolerable defect. It detracts greatly from the horse's appearance, however faulticss he may be otherwise: but many

of them are excellent horses, and those of Ireland are famous for being good upright leapers.

The Quarters can never be too wide nor too deep in any horse. They are much concerned both with power and speed, and it is essential for great exertion. that these parts be well developed in every direction. In some horses, the quarters want depth, in others they want breadth; but the most common fault is want of lateral development-the horse is not sufficiently broad across the haunches. Very often all the three defects exist together. The first-that, namely, in which the quarter wants depth-generally accompanies confined and slow action; the horse cannot take a long stride, especially in the canter or gallop ; and he is seldom remarkable for power either in carrying or drawing. The second fault-that in which there is want of breadth from the haunch-bone backwardsvery often accompanies a drooping croup. It is attended with nearly the same disadvantages as the other, unless when depth compensates for want of breadth. The want of lateral development usually accompanies narrow loins, &c.; and from a horse with such quarters nothing extraordinary need ever be expected. They that can, by mere dint of nervous energy, perform much labour, are soon worn out.

When the haunch-bone projects more than usual, the horse is said to have *ragged lips*. When not arising from poverty, it depends upon want to breadth in the loins, or it shows want of muscle on the thigh. There is yet another fault in the quarters; it is that in which they run to a sharp ridge at the croup. This

defect sometimes exists alone, but oftener it is combined with general narrowness of the whole haunch-always the sign of a weak horse.

The Position of the hind-leg varies as much as that of the fore-leg. When the horse is standing at ease, and the feet directly opposite each other, the toe should not be before a line falling from the stifle joint. For racers, the farther the toe is behind this line the better. - In long-legged, sparc-quartered horses, the hind feet generally stand too far forward, and the pace is much confined. The toe should point directly forward ; when turned out, the hocks approximate, and when turned in, the hocks are turned ont; and sometimes the whole limb, from the stifle joint to the foot. describes a curve, with its convex side outwards. This is always accompanied by clumsy, shuffling action. The horse wears his shoes very rapidly; and I am disposed to think he is more liable to disease of the stifle joint. Draught horses are most subject to this defect : when moving, the limb turns outwards upon the foot, as an axis. Viewed from behind the horse. the legs should stand well apart, proceeding directly to the ground without any inclination inwards or outwards, either of the hocks or of the pasterns. In many old hard-worked horses, and in some young ones, the interval between the thighs, at the upper part, is too great : it betokens want of muscular development, old age, or emaciation.

The Gashin-that is, the space between the stifle and hock joints-varies a little in length, and much in

30

volume. Like the parts above, it should he well furnished with muscle, and the muscles should descent foldly towards the hock. When they are short, want of length in the muscles is indicated by an ugly angle at the back of the gaskins; it up (quarter is rounded, stops short without passing insensibly into the thigh. This defect is best seen by a side view. The horse in whom it exists has a slow, creeping sort of gait, and his limbs have a naked hony appearance. Among stahlemen he is termed Anz-Amanded.

The Hock should 'be broad laterally ; the point, which corresponds to our heel, should he quite distinct from the body of the hock joint. It is altogether a lever to which the muscles placed on the back of the gaskin are attached ; and the breadth of the hock, taken altogether, indicates the length of this lever. The distance of the hamstrings* from the bone also indicates the length and position of this lever. In the most of draught horses it is comparatively short, and points more directly upwards than in horses of speed. For the racer it cannot be too long ; but, when very long, the hock is always very much bent, which appears to render it weak or unable to bear much additional weight. It is usually also comhined with smallness of bone immediately helow the hock joint; and such hocks are termed curby-that is to say, they are more liable to the injury termed a curb, than others differently shaped. On the other hand, when the hock is narrow and straight, it is more liable to thoroughpin ;

* The Tendo Achillis.

and, though the horse can carry more weight, he cannot take an actamist strike in the gallop. There is a form for different horses, according to the purpose for which they are required; i and the sys, by frequent comparisons, soon learns to distinguish and choose. The transverse breadth of the hock varies considerably, hough not so ollen or so much as the lateral hreadth. For all purposes, it should be bread from side to side. In fact, all the joints of the horse should be well developed: this, and the angularities of the bones compoing them, should appear distinctly through the skin.

When the bocks approximate, the horse, among stablemen, is said to be *cose-hocked*. It gives bim an ungraceful, unsteady-like appearance; but it is not certain that suce conformation is detrimental either to appead or power; but probably it disposes the horse to bone sparin.

The shank, fetlocks, and pasterns of the hind-leg, are liable to the same defects as those of the fore-leg; and they are more liable to that shapeless fulnces termed gourdiness.

Proportion.

Some of the continental veterinarians have attemptout or reduce the asternal conformation of the home to fixed rules, by geometrical measurement of the body, limbs, and other parts. Bourgelat, one who indoured with some success in the improvement of veterinary medicine, was the first, I understand, who completed acale of proportions. But admitting this scale to bo

constructed by accurate measurement of the parts to which it refers, still it must be of very limited utility. It can be applied only to one breed of horses; and suppose we had a separate scale for each of the different breeds-that is, one for the racer, one for the roadster, another for the cart horse, and so forth-vet very little would be gained. All road horses must not be of the same conformation; they must vary according to the weight of the rider ; the pace at which he travels, the distance of his journies; and the nature of the road and country which he has to traverse. If there were but a definite number of varieties in the form of thehorse, or in the purposes to which he is applied, then a scale of proportions might be constructed for each ; but the combinations of form are endless, and so also arc the modifications of the horse's work. In other words, a horse that will not suit one man, will suit another : a heavy rider, for instance, would consider a short back an indispensable requisite, while another, of much less weight, would regard it as a serious objection.

Moreover, though there may be rare circumstances in which difference of option as to a hone's shape might possible be reconciled, by an appeal to some recognised standard of parfaction, yet, for all avery-day purpores, the eye alone can distinguish good from bal combranation, and select accordingly. The eye can learn to do this by comparing the several parts of one horse with the same parts of others. He that cannot learn to do this need never expect to become a judicious purchaser by means of the French, or any other scale of proportions. It would be a cambrous and teilons a

To the curious, however, a few extracts from this French table may not be unacceptable.

The length of the head is assumed as the measure; it is taken from the summit of the poll* to the lowermost border of the lips.

"Three geometrical lengths of the head, give the proper height of the horse, measuring from his poll, down to the ground—that is, supposing the head to, be in its natural position.

"Two heads and a half, give the height of the body, from the withers to the ground ; also the length of thebody, including both the fore and hind quarters.

The entire length of the head, gives,

The length of the neck from the withers to the poll; The depth of the shoulders, from the withers to the elbow; and

The breadth of the shoulders from side to side.

The length of the head from the poll to the corner of the lips, gives,

The length of the croup, taken from the haunch bone (anterior spine of the ileum,) to the couples, (tuberosity of ischium ;)

The breadth of the croup, taken from haunch to haunch, or extent between the inferior spincs of the ilea;

The height of the croup, from the point of the stifle to the summit of the croup, the limb being at rest ;

The lateral length of the hind legs, measuring from the point of the stiff to the protuberant part on the side of the gaskin, thence, in a straight line, to the projecting side of the hock.

The height of the hock from the ground, measured from the point referred to above ; and

The distance from the summit of the withers to the insertion of the neck into the chest.

Twice the last measure-namely, that from the poll to the angle of the mouth-gives, pretty nearly,

The measure from the point of the withers to that of the stifle; and

The measure from the point of the elbow to the summit of the croup, or posterior spines of the ilea.

The distance from the elbow to the bend of the knee, is the same as

The distance from the same bend to the ground ;

The distance from the stifle to the bend of the hock ; and

From the bend of the hock to the coronet."-Percival; Veterimarian; vol. iv. p. 81.

Sainbell, the first professor of the Veterinary College, published an account of the geometrical proportions of Vetlipes and hether observes that this celebrated hores differed considerably from the French standard, which, according to Mr. Periyan, must be regarded as applicable to the hack or hunter, or even to the cart hores, rather than to the racer.

"Sainbell regarded the frame of Eclipse as 'almost perfect;' yet it was found to differ from the French standard in the following important respects :

Instead of three heads, Eclipse measured three and a-half from the foretop to the ground.

Eclipse's neck measured half as long again as that of the standard.

The height of the body-according to the standard

COLOUR.

-should be equal to its length : the height of Eclipse exceeded the length by one-tenth.

The toe should maintain a perpendicular line with the stifle: the toe of Eclipse stood half a head farther back

The distance from the elbow to the knee greatly exceeded the measure from the knee to the ground in the standard, it is said these measurements ought to be of equal length."—*Veterinarian*, vol. iv. p. 84.

I have little doubt but he differed in other respects ; the length, for example, assigned to the croup, is much too short for a race horse.

Colour.

It is an old and true observation, that there are good horses of all colours ; but it is not so true that a good horse cannot be of a bad colour : they that think so, may care nothing whether the horse be black or white ; but the most of people are less indifferent. The dealer well knows that a horse is often objected to for nothing but his colour, and, in consequence, it frequently influences his price. Speaking generally, light-coloured horses, such as duns, sorrel, and silver grey, or white, are supposed to possess less strength and endurance than those of a darker colour. The chestnuts are supposed to be, more than any other, liable to contracted feet; and blacks, it is said, are more subject to vice, disease, and blindness, than those of any other colour. The grey is a handsome and with many a favourite colour ; but they are objected to for

COLOUR.

the sadile, because, during the moulting season, they soil the rider's clothes. They are also liable to a disease which is not known to attack other horses.⁴ The dark brown, and the bright hay, with black legs, mane, and all, are the favouries for the sadidle. Pic-hald horses rarely look well; and they are so much the property of mountelanks and quack dectors, that for respectible folk like to have any thing to do with them. Much while on the face or on the legs is also væry generally objected to; merely, I suppose, because fabilion has said it is unhandsome. White-legged horses are said, howver, to be more liable than others to disease of the hecks, to grasse; but this, probably, is little or nothing more than conjecture.

The Hair can be dyed. The prejudice against white legs, and a large patch of white on the face, has produced attempts to change the colour. By means of certain dyes, white hair can be rendered black or red, approaching to dark chestnut. The deception, upon a close examination, can generally be discovered, either from the dissimilarity between the natural and the artificial colour, of by the abrupt junction of the two, when a portion of the white has been untouched. Sometimes, however, the cheat passes unnoised until the moulting season, when the dyed hair fails, and is replaced of its original colour.

* Melanosus-the formation of a black tumour under the skin, and in some parts deeper scated,

Sex.

Mares are generally supposed to be stronger, and possessed of more endurance than geldings. To the farmer, or others who can rear a colt at little expense, they have another recommendation : should they become lame, and require to be thrown out of work for a considerable period, the loss will be diminished by breeding from them. Mares, however, are very often low in the fore-hand, or, what comes to the same thing, they are generally higher behind than is altogether consistent with safety. This, though not always the case, is, so far, an objection to their use for the saddle. A few of them, too, have uncontrollable tempers during the spring of the year : they become dangerous to the other horses, and to the persons about them ; but this lasts for only a few days, and is by no means very common.

Age.

As far as the age alone is concerned, a hone is most valuable at five years old. Before this period he is not capable of extraordinary exertion, or he examot endure so much without faitgue, or without injuryfor several years after this age, he may continue in the prime of his speed and vigcour ; but then, every year after he is frue, is a year of his services gone, and he ainks in value accordingly. There are many people, however, who are too fond of young hones. They give too much statemint to the age, and too little to

other circumstances. They seem to forget that one horse at five may have received as much injury from work as another at eight, and that, after all, the oldest of the two may have the most work in him. Very few live till age renders them useless or feeble. I Hunters, hacknies, saddle horses of all kinds, and those employed in stage coaches, are worn out long before old age [approaches: The feet and limbs fail before the constitution generally experiences any decay. Agricultural horses, indeed, for the most part, retain soundness in their feet and legs, almost to the last. But a great many even of these have to be thrown aside long before age has in the slightest degree impaired their vigour. The period at which the horse begins to decline is not very well known ; the circumstances under which he has been placed in his youth, will materially influence the length of his life, and the duration of his vigour. But how long he would remain active and vigorous but for the influence of starvation and over-exertion, is not known with any degree of certainty. Horses have been known to live to forty and even to sixty-two years ; but these are rare cases. It is not a very rare thing to see them in active exertion at twenty years ; but probably they begin to decline in vigour a considerable number of years before this period.

Mr. Blaine says, that " a horse of five years may be comparatively considered as old as a man of twenty; a horse of the nears as a man of forty; a horse of fiteen as a man of fifty; a horse of twenty as a man of sixty; of äventy-five as a man of seventy; of blirty as a man of eighty; and of thirty-five as a man of einetw, So far," he continues, " from this comparison being too much in favour of the horse, I am disposed to think it too little.. Horses of thirty-five years of age are as common as men of ninety, provided it be taken into the account that there are twenty human subjects for one horse: and, unquestionably, a horse of forty-five is leas rare than a man of a hundred-and-ten."—Vzterinay, Outlines, p. 40.

The age of the horse is ascertained chiefly by the front teeth of the lower jaw : but partly also by his general appearance. The representations of the seller are generally received with doubt.

The horse, like many other animals, has two sets of teeth ; the first, called the colt, temporary, or milkteeth, are generally all above the jaws by the time he is six or eight months old. Soon after he is two years, these drop out, a pair at a time, and the permanent or horse teeth quickly fill the vacancies. The second set have all made their appearance by the time the horse is far years old; and he is then said to be *full*monthed, lawing twelve grinders, two tankes, and six appears in each jaw.

Each of the front teach, when they first appear above the gums, has an oval eavily in the centre of the wearing surface, which dips into the tooth like a funnel, becoming marrower towards the bottom. As the teeth war down by fuiction, this eavily gradually diminishes in depth and breadth, until it is altogether oblicited; and as this takes place at stated periods, in each tooth, is iffords a tolerably correct indication of the horse's age. It is improper to any that the eavily, or march, fills pj i it is own out by the attriction of the opposite teeth. The following refers only to the front teeth of the lower jaw.

About eight or ten days after birth, the colt has two nippers in the centre of the jaw.

Between the second and fourth month other two appear, one on each side of the first and central pair.

Between the sixth and eighth month another pair is added.

After this, until the horse-teeth appear, the mark guides us in determining the age.

At twelve months, the cavity is quite, or nearly obliterated from the central nippers.

At eighteen months, the mark is quite gone from the four central teeth; and the two that first appeared are becoming triangular on their wearing surface.

At two years the mark is gone from all the six, and the two central teeth appear considerably smaller than the others.

At about the years-and-a-half the two central teeth become losse, and drop out ; the first pair of permanent nippers spring up, and are speedily on a level with the remaining four milk-teeth. The horse-teeth with the remaining four milk-teeth. The horse-teeth are larger and draker coloured than their prodecessors, and their external surface has a well-marked furtow, less observable in the milk-teeth.

At three years and-a-half, other two permanent teeth make their appearance, one on each side of the central pair; and, before the colits four years old, they are on a level with the corner milk-teeth, which are now yellow on their wearing surface, and small at the neck, where it joins the gum.

At four and-a-half the corner teeth come up ; and,

by the time the animal is *fice years old*, they are on a level with the others. Before this time, if a horse, he has likewise two tushes in each jaw. At and after this period the colt is termed a horse, and the filly a mare. A few mares have small tushes, but the majority have page.

At six the mark is quite gone from the two central

At seven the four central teeth have lost their mark ; and

At eight the cavity is usually obliterated from all the six. After this time the horse is very improperly styled aged.

Up to this period there is little difficulty in determining the age. The changing of the teeth, and the wearing out of the mark are tolerably regular in all horses. There may be weeks or months of difference in individuals; but, as it is by the year or half-year that the age is counted, this slight variation is of no consequence. It may be observed, that colts who are warmly housed and well-fed, get the second teeth somewhat sooner than those that are half-starved, or much . exposed to cold : they reach maturity in every respect a little sooner. The wearing out of the mark, too, is influenced by the manner in which the horse has been fed; and by the length of time he has been stabled ; and, in a few, the teeth appear to be somewhat harder than usual, and longer resist the tcar and wear of friction. When the horse is kept much upon a sandy pasture, the mark is sooner obliterated ; and it is worn away at an earlier period in those that are crib-biters, or much in the habit of biting the manger. In such

cases the mark is often gone from the two central teeth by the time the horse is five years old.

The mark remains much larger in the testh of the upper jaw, and some horsenen have recourse to it after the mark is oblicented from those of the lower. It is said that, at ten years, the earity is worn out of the two central testh, at their years, the four in centre ; and at fourteen it is said to be gone from all the six. But this is not true. The mark of the upper teeth rarely disappears so soon : and as far as I have been able to observe, the warr is so very irregular that it affords no useful criterion whatever of the horse's age.

After eight years the teeth of the lower jaw undergo some charges. There is no cavity or mark to be worn out, but the teeth still wear. A their first appearance they were of an oral shape on the wearing surface; you, as ubey are ground down, they assume the shape of a transvense section of the fang, which tapers towards its extremity, becoming much broader from front to back, and narrower from side to side, than that portion of the teeth, and the explanations of them.) (See plates of the teeth, and the explanations of them.)

At about the years of age the two central hippers have assumed a form somewhat triangular on their wearing surface; the remaining four, at a have period, also undergo a similar change in shape; and at the age of twelve, or soore, it is apparent that, besides the alteration in shape, the teeth have changed their direction in both the upper and under jaw. Tustend of describing a curve, so that the teeth of the lower meet those of the upper jaw in a direction almost perpendi-

cular to each other, they shoot forwards. The jaws in front, become narrow and flattened; the teeth of the upper shoot over those of the lower; they are narrow, triangular, or almost square, huddled together, yellow and *long*; these alterations become more and more evident such horse grows older.

The tushes, as the horse becomes old, grow blunt, yellow, encrusted, and approach the nippers, but these changes are very irregular. They may indicate that the horse is old, but they never say *how*. old. Very few horsemen place any reliance upon them.

The general appearance of the borse is not the same at all ages. When very young, the body is light; is different parts are not developed; it wants breadth and depth. The legs are loog, the pasterns stright; and the forehand low. The head wants angularity; it is unfinibled like; the chead wants angularity; it is unfinibled like; the chead wants to want breadth. The deportment or earringe of the cost is somewhat slowerly. He is sometaulty stairing about him as if he had never seen anything before. His action is graceless, paywaling, uncertain. Taken allogether he looks as if he were loosely put together. The about all directions, as if each knew not where the others are going.

The Signs of old age, independent of the teeth, are much influenced by prior treatment, and by the hone's condition. They are not so very evident in the fat as in the lean. Hard work hastens their appearance. Grey honese generally become white soon after they are eight years of age; and a few lose most of the black hairs sooner. As old age approaches, in those of darker colour, grey hairs appear on the head, about the eves, muzzle, and face ; the cavities over the eyes become deep ; the cheeks, gums and palate shrink ; the jaw bones grow thin ; the eyes are weak and often weeping ; they sink in their soekets ; the lids are elevated and wrinkled at their inner angle, so as to confer an appearance of anxiety or suffering ; the lips hang apart loosely, and often a little averted. The legs grow fine ; tumours disappear from them, and they are often bent, weak and tottering. The spine sinks so as to form what is termed a saddle-back ; the flesh disappears from each . side of it, making the back-bone too apparent. The neck and withers also become thin and spare. In his mauner the horse is grave, deliberate; or listless ; his movements are slow, and the limbs rigid. He has some difficulty in getting the muzzle to the ground. and while drinking he flexes one fore-leg, so as to let the body sink a little. Old coach horses that have been long reined up; carry the head erect. In these poor animals the neck is sometimes so rigid that they would starve at grass.

Tricks of Dadars.⁴—It is conclines convenient for these gendemen to make a hone appear diler or romger than he really is. If they can sell a threeyear-old fora four-year-old, they save the price of nearly a year's keep ; and the purchaser gets an animal too young to do much work. To enable them to do this, wer forchild year whe teach that would naturally drop

* These tricks are practised only by dishonest dealers.

out in the course of seven or eight months. Then, the horse teeth, no longer opposed by the colt teeth, quickly rise and fill their places. A person well acquainted with the teeth may sometimes detect this piece of cheatery, by comparing the development of these forced teeth with the wear which the others have sustained; and sometimes the jurealle appearance of the animal will show that he is yet too young for work. It has happened, too, that the dealer has forgotten to draw the opposite teeth in the upper jaw; and a clumay operator has occasionally wrenched out two circumstances will show that some deception has been parelised.

To make the horse appear younger, they have another trick, which they term Bishopping, in order, I suppose, to perpetuate the name of its worthless inventor, who was called Bishop. It consists in scooping a small cavity in the wearing surface of two or more of the teeth, and afterwards giving a dark colour to the hole by means of a hot iron or lunar caustic. It is never necessary to perform this disgraceful operation before the horse is eight or nine years old. But at, or any time after, this period, if it be desirable to pass him off for a seven-year old, the corner teeth are operated upon. To make him only six, the next tooth on each side is marked in the same way : but I have seen all the six bishopped well and deeply, by some ignorant knave, who had not known that an equal depth of mark is never seen in all the tecth at the same time.

An experienced cye has no difficulty in distinguish-

ing between the natural and the artificial mark. The edges of the cavities are rough, irregular; the cavity is ususally dark; and a white ring of cancel, which always surrounds the natural mark; is avaning in that produced by art. These signs are sufficient; but the length, happe, and direction of the teeth may be such as to show that there should be no mark. The bishopped home is always unwilling to have his mouth examined; he is apprehensive of the pain he formerly suffered, when submitted to this mutilation.

13

Puffing the glims .- When the hollows over the eyes are very deep, an attempt is sometimes made to fill them up. They pierce small holes in the skin which lines the cavity, and blow a little air into them. This they term puffing the glims. It is not a very common kind of fraud, hut it is practised occasionally ; it takes away much of the aged cast of the countenance. The operation cannot he performed often in a short time ; and it must be done almost immediately before exposing the horse for sale; otherwise the air is taken away by internal agents, and the hollowness becomes as apparent as before. If suspicion is once excited, the cheat may be very easily discovered. The part yields to pressure ; it has a crackling sort of feel; by pressing upon it pretty firmly, and for a few seconds, the air is dissipated over the surrounding parts, where it remains till ultimately removed altogether. Attention may be attracted by some disparity in the fulness of the eye-pits. The operation may be overdone, or the quantity of air introduced may be greater on one side than on the other.

It ought to be observed that much hollowness over

the eyes is not a certain sign of old age. The cavity is sometimes remarkably deep in *young* horses. It is said to be so in all those that are the produce of aged parents.

Condition.

The word condition has different meanings, according to the person by whom it is employed. The dealer, or seller, first of all declares the horse must be got into condition before he can be shown for sale; then the buyer, if he know any thing about horses, says, the horse must be got into condition before he can be put to work. To persons unacquainted with stable affairs, there is much ambiguity in this. They know not that there is a wide difference between condition for sale, and condition for work. One man is solicitous only about the animal's appearance; he wants him to have a fine glossy coat, a well-filled up carcase, and a buoyancy of spirit, under the influence of which he will leap and prance as if gifted with surpassing vigour and activity. This is all the seller seeks to obtain. It is the appearance of the horse that makes his price. His ability for exertion forms no part of the bargain. It is not put to the test till the borse is sold : and, therefore, the seller, in preparing the horse for sale, cares nothing that his fatness incapacitates him for work. Every horseman knows that a horse that has been pampered in indolence and high feeding, has to be prepared for exertion. In the stables of the seller, the horse has probably stood for several weeks

till c; during this time he has received large quartifies or rich boiled food, and perhaps some medicines to hasten the fattening process. If taken on a journey in this state, he starts, indeed, as if he would never tire; but, after a few miles, he becomes breakthes; his step fatters; his shat, he starts, indeed, as if his would never tire; but, after a few miles, he becomes breakthes; his step fatters; his shat, is covered with thick white foam; and a very little more completely exhausts him, or does him irreparable injury. A hore in this state is said to be soft, wersh, made up for the morket, or out of condition—but is, out of working condition.

Mismanagement of the Purchaser .- Hundreds of horses have been ruined or destroyed by the first journey they have made, after being purchased. The buyer has been ignorant that, to command even moderate work from a horse, he must be prepared for it very gradually, and by a systematic course of treatment. The buyer has, again and again, destroyed the horse by neglecting this treatment : he has pursued the seller for the price of the purchase ; and there have been judges and juries ignorant enough to grant a verdict in his favour. The history of these cases is soon told, and it is nearly the same in all. The horse appeared to be well enough when sold ; he was ridden or driven a few miles out of town ; became dull and exhausted erc he reached the end of his stage; could hardly be got home; he lingered a few days under the absurd treatment of the groom or blacksmith ; he died ; was opened ; the farrier examined the body ; found the lungs quite black : declares they were rotten, and that the horse must have been long unsound. The parties then go to law ; and the evidence of the blacksmith and that of the groom, or others as ignorant, decides the

case at once. The seller is most unjustly obliged to refund the money, and pay all expenses.

In cases of this kind, there are always two parties in error, and very often three. The first is the buyer, who expects services from the horse, for which he hanson been prepared is the second is the legal autohyty, who admits the evidence of the blacksmith, farrier, or groom, cither or all, without inquiring whether or not they are capable of deciding rightly upon what they have seen. The third party in a corror is the seller, who ought to have sent one, or pethaps two, veterinary surgeons, to examine the body of the horse, and assertain the eause of death, and whether the cause existed before, or was mylied after, the horse was sold. So far as it extends, their evidence, and theirs only, should be relied upon in such eause.

The davier, or seller, is not to blame. He does not pretend to sell the horse in condition for work. At the most, he warrants only the soundness, freedom from vice, and extent of education. If he were to sell the animal as one fit for immediate exerction, as one in working condition, it would be sucher affair, both to buyer and seller. The price would not be the same i in many cases it might be doubled, or more than doubled. Every fox-hunct knows the difference between a horse in and a horse out of working condition.

Nimrod, so celebrated for his "Letters on the Condition of Hunters," well knows the value of a workable horse. He says, "A blank sheet of paper was offered to me about six weeks back, by a gentleman who keeps hounds, with a request that I would write my own

eleque (i.e. a cheque for my own price) on his banker and he would sign it, for a mare—which is certainly a model of the art of grooming, sa relatas to the condition of a hunter; but which offer I refused, aying, I should not refuse such an offer for the mare, but I. could not part with her condition."—*Hemarks on the Condition of Hunters*. 1834.

It cannot be contended that the seller öight acts to pumper and fatten bis hore for each, as he usually does, in order to make him look well. He is as fully emitted to make bis goods attractivg as a dealer in any other klud of merchandise. It is the practice with every merchant, all over the world, wherever it is not expressly prohibited by legal enatments. It there is decoption or dishonesty in the case of the horse-dealer, here must he the same in the case of every other.

Signs of Condition .- Assurance of the horse's condition may be obtained, partly from his general appearance and deportment, partly from knowing what he has been doing for several weeks or months back. but most of all from an actual trial. A horse that has been made up for the market, is fat and plump; his flesh, all over the body, is soft, flabby, impressible : his ribs are thickly clad ; the form and action of the muscles can nowhere be seen. When first brought out of the stable, and run in view of the buyer, he is very restless, eager to run, playful, throwing up his heels, rearing, and hounding from side to side. 'Taken on to the road, he starts cheerfully and eagerly, but too impatiently ; be requires the curb more than the spur. His vigour, however, is of brief duration. Very soon, he frets himself out of breath, and, if urged farther, he

perspires soon, and profusely ; the white foam of a soft horse covers his sides : the rider feels and hears the heart labouring with terrible violence and rapidity ; even after the exertion is over, the horse continues to perspire for a long time; and it is difficult to get him dry.

A horse in working condition is quite a different animal. He may be playful when first brought to the door ; but he has some grace in his playfulness ; the limbs, and every part of the body, appear to be under the most perfect control ; there is no sprawling hither and thither, as if the one foot had nothing to do with the other ; every movement is precise; energetic, rapid. He may, also, especially if he has been idlefor a day or two, he impatient to staff when mounted, but he proceeds as if he thought he had a long journey to perform ; and he puts off little or no time in uscless gambolling at the outset. The distance he proceeds, and the rate at which he travels, before he shows any signs of distress, indicate what he can do. The symptoms of distress, as has already been said, are, quickness of hreathing, early and frothy perspiration, unsteadiness of gait, and gradual diminution of the pace. These, of course, will appear in any horse, under severe exertion ; hut they appear much sooner in the ill-conditioned than in the good-couditioned. The character of the perspiration, however, is not the same in both; it is foamy and unctous in those that have not been prepared for exertion, while in those of condition for work, it is transparent, and less adherent: it merely wets the hair, or trickles off in clear drops; and afterwards the skin is soon dry, and easily cleaned. In the other case, the horse drys slowly, and the hairs

alhere together. This adhesion of the hairs, it must be observed, however, is much finducated, and sometimes altogether produced, by bad grooming, or rather want of grooming. A dusty road will produce nearly the same effect. The dust unitse with the matter perspired, and forms a pasty sort of substance which hardrens as it drives, and gloss the hairs into masses.

Sluggishness-Energy.

Unless a horse have the will to work, it matters little how great may be his power, or how well he is, formed. There are many, gifted with an almost faultless form, who are perfectly free from unsoundness and vice, and perhaps handsome animals to look at, yet, when tried, they prove the veriest jades. Some of this kind go well enough for a mile or two at first ; hut afterwards, neither whip nor spur will urge them heyond a very sober pace, which is performed with great reluctance, and requires the constant exercise of the lash. They often travel homewards more briskly, though still without any great hurry ; others may he induced, by company, to assume what, for them, is an unwouted degree of celerity in their movements ; hut yet if they manage to keep near a companion, they have no ambition to take the lead ; if he goes beyond a certain pace they are content to remain behind. There are various degrees of this laziness. Some are so excessively sluggish that neither company, the prospect of home, nor punishment will arouse them from lethargy. A horse of this kind may do his work well enough if he

is never required to go heyron his own pace. But hese should never to harnessed with another horse; for, though he may he dragged onwards, yet will he do nov work. There is no danger of the coilar gallag; his aboulders. The beast appears to have no feeling; he logs away under the lash as heedless as if he were coated in arrow. The spure possibly waken. him : hut it is only for a moment. He springs forward a few paces as if he next to hegin in good carnets; he lumhers away for forty or fifty yards, and then proceeds slower than ever, as if he tought this wonderful effort should entitle him to subsequent indugence. It is better to journey on foot than to ride such an inconrigible sluggard. It requires constant exertion of hand heel to keep him from standing stock still.

A sluggish horse cannot often he known till he is tied. But yet, in many cases, his dispoition or indisposition to lahour may he partly inferred before trial. The sluggard generally has a small sunken eys, called a gip or cow's eye; the cas move kally and seldon, and are pendant; the nostrikare almost always small, muzzle fishy, and the tail drooping. The hone pays lite attention to surrounding objects; he is slow in al his movements; does not readily obey the bridle or the voice; his action is slow, lingering, irregular; and, when shown in hand," the dealer, or hisgroom, lakes care to apply the whip smartly at starting, and afterwards. Instead of running with his head before the groom or showman, he can hardly be induced to follow. These

* Shown in hand-that is, when the horse is *ltd* before the purchaser.

signs, however, are not infallible; many sluggards have them not, and many active horses possess few or more of them. The trial on a strange road and without company, is the surest mode of ascertaining the point.

Sluggish horses are but little liable to disease ; they take very good care to save their legs ; and, not being so often hexted as others, they are not as subject to coughs. They have keen appetites, and often suffer from eating to nuch after long fasting. Neither food nor medicine appears to have much power over the energy of the habitual sluggard. Whether well or illfed, their torpor remains much the same. Altogether a rank sluggard is a most intolenhe nuisance.

Sluggisliness may proceed from starvation, fatigue, or any other cause producing exhaustion; but In these cases the evil is of temporary duration; and its cause apparent.

The willing or active horse is easily known on the round, or in the field. He does his work as if it gave him pleasure. In the stable he appears to take notice of all that is going on. He must not be confounded with the timb lorse, who freist and starts at every thing. The active and courageous horse looks and listens, but his manner is that of a calm observer of passing events, not of a startled coward. When abovy in hand at the door, he starts cheerfully obeys the bridle or the voice at once. On a journey he requires no purishment, he cheerfally responds to every thin of the driver or titler ; and, having ones received the infimution, he proceeds norwards with unshated activity like he required to stop. His cans are in constant

motion, his action bespeaks his spirit; it is precise, hold and frae. These horses generally have a large eye, fine muzzle, large nostrils, small ease, thin skin, and clean limbs. They may be ill-formed otherwise. It is to be remembered, that good conformation merely gives the power to perform extraordinary corritor; it will be easer that power depends upon something else, which appears to be as necessary for great feats as the conformation.

This energy, or disposition to work, may be too great for many purposes. The racer, indeed, can never have more than enough ; it is a combination of energy with good conformation that commands eminence on the turf; but in heavy draught borses, among whom, however, it is not very common, it may be dangerous or inconvenient. They are ant to be too quick, especially at starting ; and, on long journies, they wear themselves out by their haste. In double harness, their eagerness, when very great, destroys them. By doing the work of their companion, and their own besides, they injure themselves. They pull so hard that their mouth is always sore ; they never carry flesh, and their legs soon fail. All this, however, only hapnens when the disposition to work is in excess. It is very common among young horses, and many become less eager, though still willing and cheerful labourers, as they arrive at maturity.

Horses in whom the desire of moving is excessive, are often guilty of running away—not from fear, but merely to gratify the pleasure they seem to experience in running. They are very emulous too; it matters little whether they be departing or returning; they are

the same in both cases ; they become excited and fratful if another hore is allowed to pass them. In the ful if another hore is allowed to pass them. In the notatils and eyes widely dilated, and bloody foam pouring from the mouth, and the perpiration streaming off their panting sides, they dash onwards depite of all obstacles. Such hores often proceed till they drop down ; and sometimes they die on the spot, from shear exhaustion ; often under the weight of some shameless idiot, who disgraces humanity, both by his conduct to the nobler animal, and by the officaive evaluation.or codness with which he speaks for its roin.

Tricks of the Dealer .- An abominable practice prevails in the stables of some low, unprincipled horsedealers. In order to confer some appearance of energy or activity upon the sluggish, the aged, the starved, or the diseased, it is the usual custom to submit the. inoffensive animal to a severe flagellation, before he is exposed for sale. Some blackguard boy, or. a. manpossessing so little manliness that he feels no indignation when this disgraceful task is assigned him-is. appointed to flog, the horses until they become frantic. between fear and pain: Trembling in every joint, the terrified animal is then brought to the door ; where, fearful of a further application of the lash, he bounds away, at the slightest noise or touch. A few ignorant people: may be deceived; they may consider this agility as the result of vigour and natural activity ; but the terror expressed in the animal's countenance, and his unremitted bustling restlessness, inform all horsemen that. some ruffian has been at work, with the lash. The: practice, therefore, base under all circumstances, is

doubly so when it becomes useless by ceasing to deceive. It is most common at auctions and markets, and is termed *firing*.

Besides being adopted to produce a temporary appearance of advitty, of which everyholdy knows the cause, it is also resorted to for concealing lameness. The torture of the lash, or the more expectation of its application will, for a time, make a lame horse go sound, or at least, much sounder than be would otherwise; and he is not only flogged unsparingly in the stable, but, hen above not before the bidden or bayer, he receives constant punkimment from one who follows with a long whip, or fom the max who shows him in hand. Let the purchaser be sure that there is some bad thing to conceal, when he observes this.

Gingering is] another misenable and needless piece of folly-presticed in almost all dealer's stables. It makes the horse carry his tail, not well, as they say, and perhaps think, but abominably ill, occled 'op in the sir like a mod bull's. It anonys the animal, but does him no further harm. It never, in any case, makes him appear more graceful in his deportment, nor adds energy to his action; even if it did, every one knows the case.

Action.

When a horseman speaks of action, he refers in general to the movements of the forefect and legs during progression; and, when alluding to those of the hind limbs, he says, the action behind. The word action is very rarely applied to any pace but the trot.

Action is of several kinds. There are the good and the bad; the high and the low; the extensive and the confined; the precise and the disordered.

Good Action is extensive, high and free; the horse mores steadily, with ease and regularity: sets the foot finally, and almost fially, to the ground. He lifs it well up; throws is directly forward, and downward, and seems to excretise the most perfect coartio over its motion while in the air. The bold, free, and extensive stide which characterizes good action, indicates energy, and is rarely seem but in horses that possess speed and ability to endure much futigne. It not absolutely essential to the rider's safety, it affords him considerable searmace that, though the horse may full, he will he much less likely to do so than another without such action.

Bad Action signifies any deviation from the good. It may be low, confined, or irregular.

Low Action is that in which the house does not raise the flot sufficiently high. In stable language, he goes near the ground : and he is sometimes termed a dainy toper, or dainy catter. Such houses are usually regarded as being very apt to stamble, or trip; and generally, but not invariably, they are so. Much depends upon the manner in which the foot meets the ground; it should come down faily, all at once. If the house have low action, and dig the toe into the ground, wearing the shoe away very fast at the toe, he is particularly liable to fail. But a horse with low actions meetly, ones who places the foot findty, though he may forquering threaten to fail, but aver attrills?

come down. Low action is common to all horses of the racing kind; but in other breeds it is very frequently combined with confined action.

High Actions is the reverse of the lat. It is synonymous with the phrases, much have action, and showy action. It is a common ophion that the hore is less likely to stumble, in proportion to the height he lifts first. But this is an error. The action is sufficiently high if the foot clears all the ordinary inequalties and projections of the read. In French and Femish horses it is generally too high, and at the same time confined. The feet are lifted well up, but they are set down in nearly the same place. The nearly action the wars out the feet and limbs.

" In a hack," says Nimroid, " there is one essential quality, a sine qua non, which is, that he should go near the ground and yet go safe. Perhaps it may not be generally known, that a horse may go very near the ground, and never make a trip ; and that another may lift his knee up almost to his nose, and yet be an arrant tumble-down. Were I to say which were the safest animal, in all its paces, that ever came under my observation, I should have no hesitation in saying it was a mare, that was in my own family upwards of fifteen years, that touched every stone which she passed her foot over, but never made a mistake in all that time. Lifting up the leg. or what the London people call knee-up action, has nothing to do with a horse going safe on the road. It is not on the taking up of the foot, but on the putting of it down that the safety of a horse's action depends.

"When I try a horse with the view of purchasing infor fa hack, and loosing his head, let him walk a hundred yards on a foot path. If nature has designed him to stick his to into the ground, instead of putting it down quite flat, hy which alone he can go safe, he will do so two or three times hefore he goes that distance. There are little unduktions on a road of that description while messarely perceptiale, and which, for that reason, will immediately detect this sort foation. If on the other paces, and if I like them, have no seaso to fear hit numbing down."

Few horsemen will agree with Nimrod, when he contends that high action has nothing to do with safety. When travelling rapidly, a horse may he thrown down in consequence of the advanced foot heing suddenly arrested by a fixed stone, which in a horse of higher action, would have been cleared. It may he said that the horse's foot cannot, like ours, he caught by a projection on the road, except at the moment it is about to receive the superincumhent weight, when the whole limb is straight, and has completed its advance forward. But it must be remembered that the foot always procceds a little forward after the limh is straightened : and that, in this position, the toe comes perpendicularly against the projecting stone, and is arrested, while the body passes onwards, often before there is time to perform another stroke with the arrested foot.

It is, indeed, quite possible that a horse with low action may be safe as long as he puts the foot down flatly, but yet he would be still safer if his action were

higher. It is desirable that he clear the ground. It is a sad annoyance to the most of riders to have a horse tripping, and constantly threatening to fall, even to those who know he will not come down.

Estuarize Action is that in which the horse takes a long during stride ; he throws the foot well forward, and fearlessly. In the stables it is sometimes called *free or pitching* section. It is one of the ingredients of good action; and is rarely seen in horses that go very close to the ground. It requires great depth of aboulder, a muscular fore-arm, a fint shank, and a good deal of energy.

Confined Action is that in which the home takes a short step. It may be high though confined, hat in spectral, low and confined action go together. It is very common in hornes with low withers, upright, flathy houlders, round chest, and short back. They are unpleasant to ride, not over sure-flotted, and rarely fast. Vet they endme much work, such as they are fit for.

Procise Action is desirable in all hories, but essenial in the roadiets. It consists in exercising the most perfect control over the feet while they are in the alr. The action may be high and extensive, yet not precise. Few young, and no sleggish hornes have it. It cannot apprendly exist without considerable practice, and some concryy. It may be known in the dark. The trot of a horse with precise action has something musical in it when he is passing brickly over the stones. These horses are generally affa, active, and willing ; they have good for-legs, well-specied quarters, and are pleasant to ride. During fosty recaller their dexterily in keeping themselves together, is admirable.

Disordered Action .- The horse may he carcless, sluggish, or precipitate in his mode of trotting. He takes now a quick step, now a slow one, or he hreaks from one pace to another without going long at either. His movements are destitute of regularity. The limbs wander hither and thither ; they fly apart ; they cross or strike each other; they appear not as if all guided by one controlling agent, hut each by its own, without any reference to the rest. The action, instead of heing precise and graceful, is unharmonious and clownish. All uneducated horses, with hardly a single exception, have this shuffling, disorderly sort of action. All improve hy practice; hut some improve very slowly, and a few there are that never attain precision in their movements, whether they he fast or slow. Badly-turned fore-legs, or legs ill-attached to the hody, generally confer this defective action. Such horses are never pleasant to ride ; they frequently strike their feet against the legs ; very few stand a long journey; and even at the end of a short stage they become leg-weary. They are fit only for slow work.

Suffer in action has already been hinted at; but I have something more to add. It does not allogether depend upon the height to which a hores like his foot, nor yet upon the manner in which he sets it down. Many hores that have very good action upon the high road, can hardly be trated upon a rough, stony, byway i while others, with no apparent superiority in action, are perfectly safe; they never trip, go where they may. A carelies or integrationed horeman may not have observed this, but it is quite true. The difference is soon explained; it to one hore: pays much

attention to his path, the other none at all. The sure footed Highland pony never lays down a foot, on rough or strange ground, without previously seeing where he is going to put it. He desires to proceed cautiously, and he selects a resting-place for each foot with much wisdom. He performs his work like a good and careful servant; and it is no small matter that withdraws his eye from the ruts and the stones, the firm and the loose places, with which his path abounds. It is long ere a foolish rider can convince him that it is right to run helter-skelter over a had road. Even when urged beyond all forhearance, he still continues to think a little for himself ; and he exercises his judgment in haste. His action is not like that of a machine : he takes a short step or a long one as the case requires ; makes little leaps, and raises his foot sufficiently high; but no higher than the obstacle requires. He accommodates his action to the road ; and he has prohably learned to do this among the hills in which he was reared : repeated falls and hruises have taught him care. This accommodating sort of action is most common in ponies; hut many horses possess a large share of it.

The headlass horse is a different sort of animal. On the mooth turf, in the heading field, or even on the turnplike road, he may he unexceptionable y bat on a very bad hy-way, in winter, he may he altogetherunworthy of turns. He keeps gauing at the sky, or starting about him, when he should be picking, out his sings is all he thought the state of the road were the fiders affirin, not his, he gives it no notice. His foot of los on huge howless, or he sinks feliced-deep in pools

64 COURAGE-TIMIDITY-SHYING.

of me3, when the slightest exertion might avoid then;) the stambles every monet, as if would avoid avoid the stamble between the stambles of the stamble stambles without learning without learning to do better the meetries. It is without learning to do better does not stamble stambles horses, under these circumstances, might almost dibores, under these circumstances, might almost dite pense with their everysight, for the very make no use edipense with their everysight, for the very make no use of the the stamble stambles of the stamble stambles of the stamble of the stamble stambles of the sta

Courage __ Timidity __ Shying.

A horse that responds readily to the whip or spur, is said to have high courage; but this is more the characteristic of a timid than of a bold horse. By courage is here meant fearlessness of noises and objects. This is a quality of some importance in all horses. It is not to be confounded with the senseless inanimation of the sluggard ; he fears nothing, because he fecls nothing. The bold horse is more easily pained; he has more energy; his courage is derived from his sagacity. While a coward starts and boggles at every new or unusual object, suspicious of all, and eager to fly, the fearless horse shrinks only from that which has previously injured him, and he appears not to expect cvil where he has not experienced any. He pleasantly pursues his journey, observing the different objects on his way, as if curious to know something about them ; but he starts not, until injury is actually inflicted. He shows no hesitation about going into strange places; and when he encounters ill-usage, is attacked by dogs, &c., he revenges himself, or resists, rather than flics.

COURAGE _TIMIDITY_SHYING.

Such horses have some confidence in their power, and, when very bold, are often dangerous. When roused to resituate on revenge, by a sense of oppresion, their conduct is terrible. It is only a bold and skillsh horseman that dare take any libretles with them. The timil or inexpert are in constant danger from a very bold horse; and such persons often reder than visions. A single complete victory, over their groom or rider may render them unmanageable for life.

 \hat{A} Third Horse, howers, is a more diagreeos antimal than a bole one, yean after he isa learned-to cesisthis matter's anthority. He is alarmed and agitated when surrounded by many objects. Strange sounds always excite apprehension. Should any accident befall him when is harness, he strageles incessatif to every free, and before assistance can be rendered, he may do himself, and all around, serious injury. Geneally be is surgicious of strangers; and the most of timil horses are troubleome to shoe. In all cases they must be opproached without noise, and without any threat of panishment. To be manageable, they must be trasted with gentlenses.

But the greatest faulte of a timd biors, are blis propendities to run away, and to boggle at objects on the road. If ho be rather lazy, as well as timid, he will merely *shy*—that is to say, he will slacken bis pace as he approaches some nunual or threatening object, and perhaps, as he comes nearer, he will stop, and reflue to proceed any farther, or he will attempt to turn and refrace his stops or ji finpelled onwards, he will suddenly bound to the opposite side of the road. In this way an indifferent their is oble nussetted, or a gig:

hamshed into the ditch. But if the horse be active, fond of going \sim on the road home, he is very apt to run off, as soon as he has stolen past the terrifying object. These fulls often produce serious accidents. The purchaser can hardly ascertain whether the horse be free from them or not, with he has obtained a trial. It regimes an expert, cool, and sensible man to ride a timid home, ort of dive hin in single harness.

Shipng is not always the consequence of timility ; it is clocan arises from detective vision. Both eyes may be so discased, that objects seem by either, are imperfectly seen, and produce aharn from their apparent deformity. But when one eye alone is affected, the hore aby only at objects which are presented to the diseased eye. Many alying horses, whether the fault arises from want of courage of from imperfect vision, abandon the practice as they get older ; it may be greatly corrected by proper treatment.

Vice.

Definition.— The word vice is `used with much latitude among many horsemen. The majority scem to regard it as applicable only to those actions which arise from a perverse or miscliceous disposition these in which the horse opposes his own will to that of his master, or those in which he purposely attempts to injure his companions, or the persons about him. Others, however, mean something more. They include, not only such undoubted vices, us bitting and hicking, but also some peculiarities of deportment and habit; such as standbiling, shying, crib-biling, waving, &c., In general, however, fuilts of this find are termed habits, or nærely faults. It is important that the word should have the same signification by all parties : it plays an important part in the most of horse-dealing transactions; and much difference of opinion and Itigaion arise, which could have no existence, were the word clearly defined, and understood in the same sense by all who use it.

The kinds of vice are various, and most of them too well known to require any description in a work of this kind. Biting and kicking are the most common and, if not quite, are very nearly the most dangerous. They very often go together ; they may be the result of education, or of a bold determined temper. When occurring in a fearless horse, they are peculiarly dangerous, and most difficult to cure ; but, when the horse is learned these tricks, as he often is, by an idle and foolish groom, he is more easily managed, and oftener cured than the other. Those vices which consist in disobedience are most common in bold or lazy horses. The most of horses show their vice only under particular circumstances, and at other times they are perfectly quiet. For example, some resist grooming, others shoeing, and others bite or strike none but strangers. They may be quite docile in all other respects. But there are some who are vicious and dangerous as often as they have it in their power to inflict an injury. Though they are generally most hostile to strangers, yet they spare not even those with whom they are best acquainted. A horse of this kind is soon discovered.

A stable examination is perhaps the best for dis-

covering the views of kicking and hiting. The others can only he detected subsequent to sale, when the horse is placed under the influence of the circumstances which make him, exhibit them. Some dealers, are not at all willing to admit the purchaser within the stable; hut it is a point upon which he should insist, and, when refused, he should go elsewhere. Mystery is one of the signs of imposition.

Signs of vice .- Enter the stable with the man appointed to show the horse; observe the manner in which he approaches the animal, dusts him over, and brings him to the door. If it lie a dangerous brute, the groom will speak loud, and in a threatening tone :he will approach cautiously, and avoid stepping into the stall, until the horse is fairly placed on one side ;and then, keeping at a respectable distance, by makingwide circuits, he will slip up the other side, taking long and rapid strides, and keeping his eve turned upon the horse's heels. Sometimes the horse suddenly turns hisquarters upon the man; just at the moment he has reached the head of the stall. At other times helashes fairly out, showing at once his had purpose, and his determination to execute it. The horse may exhibit nothing of this kind ; but he must he watched a little farther. Let the groom take off, the clothes, dust over the body, comb out the mane and tail ; and, while this is going on, observe the conduct of hoth the man and the horse. During the process, some inference may be drawn as to the horse's disposition to be dressed. The purchaser may also make a request to sce the hind and the fore feet ; and the manner in which the horse permits the groom to lift them, will, to a

certain extent, show whether he is vicious while heing shod, and whether or not he will permit his legs and heels to he groomed.

If the horse he a biter, his head will he tied fast and abort to the hay-rack, in such a manner that he may have little command over it. Perhaps the groom will provide himself with a stick hefore he enters the stall. While unclothing the horse, he will keep his eye on the head, or he will keep out of its reach. When the home is hiddled, the man will seize the reins close to the bit, and he will held off at raw's length.

These signs of vice are not infallide. A habiling or cowardly groow will deen have and swear, and stand off when there is nothing to fair. The head is often tiel to the hay-rack, merely to prevent the horse from lying down; and some horses aim as if they were going: to lite or strike, in mere play, when they have no intention of inflicting injury. There are one or twoother signs.

Some consider the eyes and ears as affording some milication of the horse's doclity. Very many visious horses have a full, outstanding eye, with a considerable portion of white visible 1 and, without turning the lead, the eye is directed backward, ready to take aim, while the one bind-leg support all the weight, and the other 1 sprapared to fly out at an instart's notice. The ears are often laid on the neck, in which position they confer a sulles, scowing spparameet on the contenance. These signs are less certain than the others; they rery four indicate the existence of vice, but there are many cases in which they do not. There are few vicious horses, however, that do not exhibits some of them. The only way to be certain is to place the horse amid all the creumstances under which vice is likely to be shown,. This can seldom be done; but, when opportunity: offers, it should not be neglected; and though a complete trial may not be obtained, yet a partial one is hetter than none.

How hidds.—It is said that vice may, for a dime, be concealed by undimistering draws. I have heard of several that are said to be given for producing temporary deality, but, with the exception of optime, given fasting, none of them appear calculated to answer the operation. It is questionable if this will do it; and it is certain that there are others more effectual. But the dealers are not likely to become soon acquainted with them. It is more probable that they employ starvation and failing rather than drags.

A Warranty against vice should not be neglected. If the horse be worth warranting sound, he should also be worth warranting free from vice. A vicious horse is often a worse bargain than an unsound one ; but without his docility be guaranteed, he cannot be returned. Even with the written assurance, it is often a very difficult matter to return a horse for vice, because it, is not easily proved that he was vicious before he was sold. It is not sufficient to show that he bites, or kicks, or refuses to. draw ; it must also be shown that be possessed these vices when he was the property of the seller. Many horses become vicions, unruly, or obstinate, when they pass into strange bands ; but for this no vender can be justly liable ; and the law so considers it. Some horses appear vicious at first, but come to their work and docility, as they become better ac-

EDUCATION.

quainted with their new habitation, and the strangers about them. This is virtue, not vice ; but I know not how they can be distinguished, except by the lapse of time, and the effect of kind treatment.

Education.

By education is here meant the degree to which the horse has been trained to work. Besides exerting a material influence upon the virtues and vices already enumerated, it ought to bestow dexterity at work, implicit and ready obedience. There is as much difference among horses in point of expertness as among men. In either, one will perform his task in an awkward slovenly manner, often going wrong, and requiring constant watching ; while another quickly accommodates himself to varying circumstances, easily understands his master, and seems to distinguish between right and wrong, after he has once seen the difference. Among draught horses this dissimilarity is easily perceived by watching a few as they pass, heavily laden, over a very rough or crowded road. The welltaught horse selects his path, avoids the worst parts of the road, keeps his own side in passing others, and seems to experience little inconvenience from the shakes and jolts which continually threaten to throw the unbroke, awkward horse off his feet. This latter animal requires to be constantly led : he has not yet learned to choose his own road, or to understand the commands of his driver." In the saddle horse, education.

. In Scotland cart horses are chiefly guided by the driver's

EDUCATION.

besides altering the action, and thus rendering him more expert at his work, teaches him to obey the bridle. the spurs, and the whip. They that have been much among horses know the value of a good mouththat is, of a mouth not too tender, but sufficiently callous to endure a pull, and at the same time to be obedient. Much of the obedience, however, depends upon the practice the horse has had, and his disposition to comply with the rider's will. Before the mouth is formed, before the horse has been much accustomed to the bridle, he is awkward : he turns slowly, and rather as if he desired to proceed onwards. The neck yields ; and, instead of proceeding to the right or left, as the rein is pulled, the horse merely turns his head. Hc has not yet learned to understand what his rider wants ; and this of itself is a sign that the horse is not thoroughly broke, and it is probable that he is susceptible of much improvement. In regard to the education of a hunter. it need only be observed here, that the field is the only place to ascertain how far he has advanced in leaning, &c."

The eclocation of a horse exert considerable influence on his price. Until be has been broke it is almost inpossible to say whether he will turn out well or ill, and even at the best there is the expanse of his breaking and keep for several week, to be added to the original price, which, upon this account, is lower. There is no animal, however, more easily taught than the horse. In general he is very willing to obey as soon as he understands what is required; and after the first few

voice; in England I believe the whip is more generally used.

BLEMISHES.

lessons, he just needs a little indulgence and patience, until practice shall have rendered him expert.

Blemishes.

Definition .- By a blemish is meant some unseemly deviation from the original condition of a part, by which the horse's appearance is more or less injured, but not his ability to work. Such blemishes as exist in the skin only, consist chiefly in the want of the hair, and are generally produced by burns, blisters, firing, or wounds. Those excrescences, termed warts or angleberries, sometimes numerous and sometimes solitary, are merely blemishes. They offend the eye, but seldom make the horse less fit for work than if he had them not ; when they do, he is, or ought to be, regarded as unsound. The purchaser, however, should not, in general, consider an angleberried horse a desirable animal. Many say these warts are signs of durability. and of a good constitution, but that is questionable ; and in many cases they become more than blemishes ; they do not always remain stationary, or of the same number ; very often they increase in size, and new ones make their appearance from time to time. They require to be removed every now and then; and often the horse has to be thrown off work for a few days, every time he is operated upon. This is attended with expense and loss of time.

No part is oftener blemished than the knee; it is frequently injured by falls. Among ponies and the better kinds of saddle horses, this blemish materially Inducincies the price. The borie may be as fit for work as before, yet few can thick to γ ; and the bleminh is a serious objection with all. A good-dized horse may bring a tolerable price for a sugge-coach work, but a pony, thus blemiabed, loses this value much more considerably. He is only fit for the saddler and they that are willing or able to pay a full price for a pony will not buy one which blemiabed kases.

Habits.

By babits are meant, unusual and harmless peculiratities in conduct, such as verview, parsing, terring off the clothes, alipping the collar, wasting the hay, rolling in the stall, & A more extensive signification is sometimes given to this word, by including vicious habits, but it is certainly most advabate to adopt the former more lumiced meaning. The word vice and habits are by no means synonymous : the latter may indeed include many vicious propensities as well as harmless, but it must be qualified by an adjective acording to circumstances ; it must not include all, otherwise the word habit must be substituted for vice in the warranty.

None of these habits, or, if it must be so writen, these *karmicus* habits, are likely to be discovered before perchasing, unless a trial is obtained. The petty inconveniencies arising from them may, in a great many cases, be remediced or prevented as soon as they are detected. The most of the anoyance which they produce is experimende before they are known to exist.

The hidi, for example, of heaking losse during theinght, may cover once or twice, and he followed by some unplexant consequences; but as soon as it is known that the force is in the hidi of doing so, he can he prevented. The same may he said of several other hidis; none of them, in general, make the howe liable to be returned, unless, as sometimes happens, he be foolishly warranted fore from all faults.

Faults.

By faults are mant every thing objectionable, whether existing in shape, colour, age, temper, action, or any other quality. The word may be so used as to mean nothing, or to include every thing. It should never appear in a warrandles. There is no horize to which exception may not be taken, in some respect, however, faultees he may he in others.

Soundness.

Of all the words used among horsemon there is none once vaguely defined than that of soundness. Very few attach the same meaning to it. Some consider a horse sound if he is free from rottemess, herken wird ; others only require that he be free from lameness ; hat, a few consider a sound horse and w perfect once as the same animal. According to them, he is unsound if he hays a fault of any kind, no matterin what that fault consists. Legal and veterinary:

authorities have endeavoured to define a sound horse with more or less success ; but after looking over all that they have said or written upon the subject, it is yexations to meet with so much want of unanimity. That which one establishes another overthrows ; that which is received as good sound doctrine at one time, is rank heresy at another. Lawyers, indeed, ignorant, as they generally are, of horse affairs, can hardly be expected to assist us here, and they should not attempt it. The veterinarian is the fittest person to describe soundness in horses; and if, in doing so, he should commit errors, yet those errors are not likely to be so numerous or so important as if the task were undertaken by a stranger to the structure, to the powers, and the susceptibilities of the object he describes-the horse.

All the difficulty of definition, in this case, arises, partly from the number of circumstances which constitute soundness, partly from the difficulty of expressing these circumstances in a very few words, and partly, too, from the several meanings attached to each word employed in the definition—which is nothing but a short description.

Definition of Soundness.—A horse is sound when he has no disease about bin, nor any effect of disease, that renders, or is likely at any future period, to render him less useful than he would be without it.

Definition of Disease.—Any change in the condition of a part, attended with, or productive of, pain, dangor, alteration of structure, deranged function, or inconvenience of any kind, is a disease. I cannot at present think of any deviation from the healthy state of a part,

that is not included in this definition. Prohably thereis no disease, and certainly there are very few, that have not some of the characteristics embraced in the definition. Non-professional persons, in general, and a few veterinarians, do not, however, use the word disease in such a comprehensive sense. The former seldom use it but to signify some general loss of health, some fever or dangerous disease ; while a few, perhaps the majority, of veterinarians, apply it only to some active process, or to something that is proceeding from had to worse, or to something that requires medical treatment to avert, mitigate; or remove it. By these gentlomen, the diseased process once arrested, all that remains is termed the effect of disease.* This is not the place to discuss the propriety of this distinction. It need only he observed that there appears to he not occasion for adopting it, and that, if it is really useful, some general term, hesides that of effect, ought to he introduced, to denote that state of parts in which they are neither sound nor diseased. The above definition. of soundness, however, is purposely constructed to embrace both the confined and the limited meaning of the word disease, as used hy professional men ; and, as regards its very limited meaning among non-medical people, they must just consent, in this case, at least, to consider it as denoting all alteration for the worse, in: the structure or function of a part, whether the change:

 Thus, inflammation of the eye is a disease; it may procred to the total destruction of that organ; but after the inflammation is subdued, they will not have it said that there is any disease remaining; it is only the effects of the disease. But the horse may be stone blind.

be trivial or serious. This extensive signification will not at all render the definition of soundness more (ifficult of application ; for it is expressly stipulated that the disease shall be such that it is not likely to render the lorse less useful. Its *likelthood* must be determined by the examinant.

A borse, then, may have disease about him, and yet be sound. He may at least have the effects of disease; he may have splent, a bony or callous tumour, as wart, a speek on the eye, a scar any where; he may be blemished all over, and still be a sound horse.

Examination of a horse for soundness, is rather an examination for unsoundness ; we judge of his soundness by the non-existence of unsoundness. It is only negative evidence, but it is all we can ever have. He may have some unsoundness about him which may not be discovered even after he has been carefully inspected by a professional man ; and, knowing this, few veterinarians will grant a certificate, positively stating that the horse is sound. Few go farther than certifying that they bave found no unsoundness, and it is far enough. In some places, and in Ircland, I believe, more than any other, it is the custom to have a horse examined by a veterinary surgeon, either immediately before or after sale ; and it is a very good custom ; the seller and buyer generally pay the expense between them, if the horse be sound ; the seller paying the whole if he is not. But it is an error to suppose that the horse, once examined in this way, and passed as sound, cannot be returned if he should subsequently be discovered to be unsound. The law does not so consider it ; and it would be a piece of great folly if it

did : for there are some unsoundness, such as staggers, that cannot be discovered at such a cursory examination as the veterimarian is compelled to make, and the purchaser may have the horse in his possession for several days, weeks, or even mouths, before any thing occurs to excite suspicion.

The professional charge for examining a horse for soundness, and granting a certificate, if required, is ten shiftings-and-sixpence—supposing the borse to be brought to the veterinarian's place of business.

Unsoundness.

A definition of unsoundness is hardly necessary after what has just been said; yet, considering the importance of the subject, it may be better to leave no part in doubt-

A horse is unsound when he has about him any disease, or any effect of disease, that renders him at present less useful than he would be without it, or is likely to do so at any future period. Or, in other words:--

To be unsound, a horse must have a disease, or some effect of disease, and it must be of sucb a character that, according to the opinion of a qualified judge, it does or will make bin less useful than he would be without it. It is not necessary to repeat that which has been said on the word disease.

By legal authorities there has been some difference of opinion as to whether a curable disease or temporary injury renders the horse unsound. In a causo

decided before Chief Justice Eyre, that learned Judge, when addressing the jury, said, " A horse labouring under a temporary injury or hurt, which is capable of being speedily cured or removed, is not for that an unsound horse, within the meaning of the warranty." But this doctrine is hardly admissible in practice. In very many cases of injury, or disease, it is impossible to say what will be the result; whether it will be partly or wholly cured, or not at all, and the purchaser must thus run great risks. Subsequently, however, Lord Ellenborough decided that-" To constitute unsoundness, it is not essential that the infirmity be of a permanent nature ; it is sufficient if it render the animal for the time unfit for service, as, for instance, a cough, which, for the present, renders it less useful, and may ultimately prove fatal." There is some ambiguity in this doctrine, introduced by speaking of the present. There are many diseases with which a horse may be fit for present use, and yet of such a nature that they may ultimately render him worthless, or even destroy him. A horse with spavin, or ringbone, or mange, may do his work well enough for a time. but he fails sooner or later, and it is well enoughknown that many glandered horses work for an indefinite period before their vigour fails. Lord Tenterden, ina recent lawsuit, has given it as his opinion, that " a horse that cannot go through the same labour as before. the existence of the defect or blemish in dispute, and with the same degree of facility and safety, is unsound," From such examples it will be seen that these great lawyers know too little of the horse, too little of his, diseases, to construct any thing like a firm and useful

definition either of soundness or unsoundness. Many causes, however, will likely be yet decided by such as they have made; but it must be confessed that, especially in the English courts, much influence is now yielded to the evidence of the veterinarian.

Kinds of Unsoundness .- For several reasons, it would be very desirable to have some classification of unsoundnesses. The most useful would be that which would be founded upon the degree to which they influence the horse's value. We might arrange them into those which depreciate him by a tenth, a fifteenth, a twentieth, and so on ; but many years must clapse, and much must be added to veterinary knowledge. before any useful classification of this kind can be made. It need not be attempted until we have a complete list of all the causes of unsoundness. And even after this is done, the most difficult part of the task will still remain ; that is the task of arranging and dcfining all the different degrees in which each cause of unsoundness may exist. Dealers, indeed, talk of soundness of wind and soundness of limb ; or, in other words, they say a horse is sound in wind and limb. And a veterinarian to whom we are much indebted* sneaks of unsoundness in constitution, and unsoundness in action ; but any classification of this kind is quite useless. Soundness of constitution, when the phrase is properly applied, or susceptible of any meaning at all, can only mean that state of the body in which there may be disease, but the disease is not of such a nature as to impair the powers and susceptibilities of

• Mr. W. Percival, the author of several valuable veterinary works.

organs whose health is essential to vigcour or comfort; in other words, sumondness in constitution just means want of general health; and this, though the connequence of many uncoundnesses, is such, that few hores are, or can be offred for sub, while their general health is in a prevarious condition. Unsoundness in action can mean onbing but difficulty or pain in progression, the result of disease. These two kinds of uncoundnesses do not embrace all; and so far the classification is defective. Every other, founded upon this, or similar grounds, must always be uncless.

Examination of a horse for unsoundness .- This process is, in almost all cases, conducted in a veryslovenly manner. Even among professional men, agreat many go about it with less regularity and dexterity, than might be expected. Horse-dealers are a great deal worse; they know more about the shapethan about unsoundness ; but private purchasers set all rules and system at defiance : they examine the horse, indeed, but they do not know very well what they examine him for. The majority look only for those unsoundnesses which they have bad some cause to remember : one man has previously had to do with a groggy horse, and he is careful to look at the feet; another has been sadly annoved with a spavined horse; and he is very suspicious about the hocks of his intended purchase: others yet, that have had more experience of these affairs, may examine the animal's wind, his eyes, his feet, back tendons, and hocks : but not one in ten thousand examines a horse for all the apparent causes of unsoundness, or knows the half of them, even when before his eyes. More than once,

82 .

a dealer, who is supposed to know these matters pretty well, has heen seen to purchase a horse, warranted sound, that had a cause of unsoundness, which could be discerned at ten yards from the horse's side.

To inspect a borne with care, the examinant should always begin at a certain point and proceed step thy specific bars southaited crégin part in which disease is usually found. To do this well, it is necessary that he have some tatic fig orign shout horses , he should be bold, hut at the same time prodent. In minutely cambing a strange borne, there is always some risk of injury ; hut the risk is matorially increased if the examination be timeld, or antward. This process, too, coquires the ory of a horseman-of one that has long been familiar with the healthy appearance of parts. Practice produces expertnass.

The following table is a mere list of the parts to be examined, with the names of the diseases to which each part is liable. It may be useful as Indicating the order line within the examinant is to proceed. It mentions certain fault that do not constitute unnounderse, but which are, or ought to he, noticed, as denoting your elementance that diministive the borne's valoe—mech as windgalts, blemishes on the knoce, &c. The exposition, however, which follows the table, will give some explanation of the nature of each fault, whether an unsome fault which is it anot explain the signs, by which the fault may be discovered, and in some cases mentions the extent to which it interference with the horde s utility. List of Parts to be examined, and for what.

The Eyes are to be examined for specks, inflammation, cataract, and amaurosis.

The Nostrils, for tumours, glanders, gleet, and the discharge which accompanies a common cold.

The Glands, between the branches of the lower jaw, for enlargement.

The Threat, for marks of the crib-biting strap, and the tenderness of a common cold.

The Teeth, for the age and marks of crib-biting.

The Vein of the neck, on either side, for obliteration.

The Withers, for bruises.

The Shoulder, for tumours, and marks of setons, blisters, &c.

The Counter, for similar marks.

The Elbow, for tumours.

The Knees, for blemishes, and stiffness of these joints.

The Shank, for speedy cut, splent, and sprain.

. The Fetlocks, for enlargement, windgalls, cutting, and unnerving.

The Pasterns, for ringbone.

The Foot, for sidebones, sandcrack, contraction, difference in size, thrush, corns, flat soles, and founder.

The Shoe, for signs of cutting.

The Sides, behind the elbows, for marks of rowels, blisters, &c.

The Haunch-bones, for fracture.

The Stifle, for enlargement.

The Groin, for rupture.

85

The Testicles, for enlargement.

The Hock, for capped-hock, curb, thoroughpin, bonespavin, and bog-spavin.

The Action, for lameness, groggyness, stringhalt, palsy, shivering, and staggers.

The Breathing, for broken-wind, different kinds of roaring, and grunting. Lastly,

In the Stable, the horse has to be examined, or rather watched, for vice, crib-biting, windsucking, and chronic cough.

The Causes of Unsoundness.

The Equation 1 is not every person who can examine the eyes. To examine them well requires some anatomical knowledge of their structure. Disease, indeed, often exists in such a form, as to evident to all, but it also often exists in when a non-professional man cannot nee it. Any horeman can deteria should behave by the in the most of cases, there are disease and defective vision long before the sight is out to lot.

Specier on the transparent portion of the eye, are generally hor ensuit of external jointy. When very small, and near the circumference, they produce no apparent inconvenience, and do not constitute unsomedness. When large, or placed near, or on, the centre, they generally produce disordered vision, and make the horse shy. In such cases the is unsound. These specks are small white spots. They are seen at once, and are solitary. There is selfour more than one. In different places, a spot of this kind is termed a *feather*, a pin, used, a along.

Inflammation of the Eye is indicated by redness, weeping, partial or complete opacity, and irritability. The eye of the horse is liable to two kinds of inflammation. One is the result of external injury-such as a blow, or the introduction of some irritating matter; and this usually disappears altogether, by proper treatment, or it only leaves a speck. The other kind arises from some unknown cause, and usually ends in cataract, and that in blindness. It is termed specific ophthalmia. It appears all at once. The eye becomes slightly, or intensely, inflamed ; and, after romaining so for a few days, the inflammation subsides; the weeping ceases, the redness goes away, the eye clears up, and the horse keeps it open. After a time, however, the eye is attacked in the same way, and perhaps recovers its brilliancy and strength as before; but at last these attacks lay the foundation for another disease, and the horse quickly or slowly loses the use of the eye altogether. Now, the horse may be sold between these attacks of inflammation ; and, knowing the nature of the disease, it is important to ascertain whether he has had, it or not. In a few cases, the eye recovers its original healthy appearance so completely before it is again attacked, that it is impossible to say that the disease has ever existed : but in the majority of cases, the temporary recovery is not so complete. For days, wecks, or possibly months, after the worst of the inflammation has subsided, the eve remains weak ; it appears smaller than the other : the lids are not fully opened : the eve cannot bear the same degree of light ; the transparent external part, has not its original brilliancy ; it is somewhat muddy, and sometimes it smokes, and has a

greyish colour. The pupil,* too, is small, indicating a diseased susceptibility to light.

An attack of specific ophihalmia renders the home uncounds. But there may be some difficulty in proving that he had the discuss before sale. It may appear in the course of a single sight, and the probasical man will be unable to any whether it is the first, or a subsequent attack, or whether the horse had it twentyfour hours before. In that case there can be no proof but the evidence of persons who have known the horse for some time back. The eyes, indeed, should be well examined on the day of sale. This specific inflammation of the eye is sometimes termed moon-bindness, from its tendency to come and go at certain periods.

Cataract.—This consists in the partial or complete oparity of a depensented part of the eye, which was originally transparent. At first, it is a small, while, partly-like spot, situate, not on the surface, but towards the bottom of the eye. It increases in size, isolvy or rapidly, according to octromatances, until it completely excludes the light. When it has proceeded thes far, it is easily recognised by it is then seen. Ike a white hall, placed very near the centre of the eye. The external surface may be perfectly transparent, and free from the slightest biensis, but on looking deeperthere is the opaque bail plain cough, filling up the space called the pupillary opening. When the eye is copaced to a strong light, this opaque body often

* The pupil is that bluish oblong opening, surrounded by a dark hazel-coloured margin, which, in the wall-eyed horse, is white, and in men, black, blue or grey.

appears to grow less ; but this diminution is not real ; the cataract is partially hidden by the concentration of that dark curtain called the iris, which surrounds and hides it. Upon taking the horse into the shade, the cataract becomes more visible. When the cataract is very small, it may escape the observation of a nonprofessional man. In all cases, it is best seen in tho shade. The horse's head should be so placed, that a moderate light will fall upon the eye of the horse, and very little upon those of the examinant. If there be no back or side windows, the eyes may be examined very well just as the horse comes out at the stabledoor ; his head should be within, while the examinant stands in the doorway. This is the place usually chosen. By bringing the horse more or less forward. the quantity of light thrown on his eye can be regulated, and it all comes in the most favourable direction. When there is too much light, the pupil is contracted. and a full view of the interior of the eye cannot be obtained. When there are side or back lights, they embarrass the examinant ; the rays run between his cycs and the horse's, and prevent him from seeing distinctly.

Care must be taken to distinguish between a catarate and a more reflection. Any white body opposed to the sy_0 —such as a white wall, a white hat, yett, or nockcobh-may produce a mark, having much resemblance to a catarate. This may be guarded against by holding some black body, as the crown of a black has, against the eye, and observing, at the same time, if the mark disappears, which will, if mercula a reflection.

Cataract, in all its stages, whether large or small, whether in both eyes, or only onc, renders a horse

unsound. It is possible that he may not become blind from it, but in the far greatest number of cases; the disease proceeds till it destroys vision.

It is not known how soon a estanct may form, sona to hence withit a nat smoog professional men here is some doubt whether it even appears without the pre-existence of specific ophthalmin. Until lately is was suppood that the latter was the only cause of the former, and that it was never cured a but later invesigation have thrown some doubt apon the trath of both of those propositions. It is stated by some English preditioners, that catastance may form without any previous attack of specific ophthalmin, and that is may cure itself, is that enalytic requires further investigation. In the meantime, it is just to consider a catareat as constituting unsoundness, the probability that i will sconer or later destroy the eye, is not to put in opposition to the possibility that it may not.

Amurois--sometimes termed guita scenaeconsists in the permanent loss of vision in one or hoh eyes, without any apparent disorganization in the structure of those organs. The horeman may discover that he animal is quite or nearly hind, but he will see nothing wrong with the eyes. Yes the performant and the pupillary openings are very peculiar about them. The pupillary openings are very larget they do not vary in size as they do in health, according to the intensity of light; the eyes have a greenish tinge, and they do not aim at any object. When a man is looking towards several objects, it is not difficult to perceive which of them his eyes are articularly directed upon. There is something in the

eye itself that tells us what it is looking at; and this peculiarity, which I cannot describe, exits in the eye of the horse, as well as in that of man. For the sake of hereity, it may he called the aim of the eye. In the bind horse, it is awanting; hence, I thick, has arisen the term glass-eye. This disease may come on in an instant ; a fall, or a blow on the head, may produce it at once : often it approaches more gradually; but from a mere examination of the eye, without any previous knowledge of the horse, it is impossible to say whether he has had the discusct two days or two wars.

The blind horse generally lifts his fact high, see them down as if he would feel the ground, before he would throw his weight upon it, and he obeys the hridle very readily. A person not much acquinted with horse may discover complete blindness at once, by leading the horse directly up to some obstude, and observing if he stops, or attempts to go over, or avoid it.

Blindness, whether it he the blindness of cataract or of accident, and whether existing in one eye, or obth, is allowed by all to be an unsoundness. The profession and the public appear to regard this as a thing sottled beyond all doubt, and it is not for me to say any thing against it.

But, for many purposes, a hlind horse may answer almost as well as another. In stage coaches, there are many who do their work perfectly well. Then, there are horses blind of only one eye, that are little the worse, for certains kinds of work. They have even been seen in the hunting field, taking their leaps with as much precision as if hoth eyes were entire. The purchaser, therefore, may consider whether a good

horse at a low price, may not suit his purpose, though blind of an eye, almost as well as another. A blind horse is not safe at night, when the rider or driver cannot see the road very well; he cannot be turned to grass, and, under all eincunstances, he is more liable to accidents.

The Nostrils are to be examined for tumours in them; for the symptoms of glanders, for gleet, and for the discharge which accompanies a cold—or as it is more properly called catarrh.

A Tumour, in surgery termed apolynus is sometimes found in one of the notrik. When small and seated high up, it may escape detection, but when larger, it is discovered by some difficulty of breaking, and by comparing the volume of air which escapes from the one notrik with that of the other. By abuting, first one notrik, and then the other, so as to compet the horse to breakine through only one at a time, it will be seen which we not hese passages are clear. Sometimes a polypus may be seen by the eye upon looking into the nose. However small, a tumour in such a place always constitutes unsoundness; it increases in size ill is completely blocks up the passage: and if not removeable, it ultimately renders the horse quite sudess. These tumours however are not often met with.

Glanders.-- Comparatively few glandered horses are offered for sale. The principal signs are, discharge from, and ulcers in the nostrils, swellings under the jaw. The discharge is offener from one than from both; it

92

is generally thick, white, or yellowish, and very adhesive. This discbarge may be hidden. The seller may manage to keep the nostrils clean by the frequent application of a bandkerchief ; or be may give the horse a brushing gallop, to make bim clear his nostrils, and then inject some astringent wash to restrain the discharge ; or, after doing these things, he may thrust a piece of sponge up the affected nostril. When, however any of these abominable tricks have been played; there is always some abrasion or ulceration of the red lining, particularly on that part which covers the partition between the nostrils. This may be seen by bringing the horse's head to the sun, and opening the nostrils so as to get as bigh a view as possible. A plug, of sponge or of other material, in the nostril may be detected in the same way as a tumour. If there be any sore reject the horse. Sometimes there are several little tumours or ulcers on different, parts of the body. They are termed farcy buds; and, when existing in combination with discharge from the nose, the horse is surely glandered.

Glanders renders a horse unsound in all its stages. It is a common opinion that a glandered horse is returnable, bowver small bis price. I have, not been able to ascortain whether there is any law expressly forbidding the sale of an animal with this disease ; but I am disposed to think that there is none.

Gleet.—The horse often has a discharge from one or both nostrils, when it is impossible to decide whether he is glandered or not. The discharge may be thin, adhesive, and whitish, or it may be thick,

aseller gran be the they

yallow, short, ourdy ; it may proceed continuously, or it may be ejected only now and them it may addner to the borders of the nostrils or it may not, there may be enlargement of the glands under the Jaw, or there may be none. If the discharge is not constant, it appears after, or while dividing, or after the horse is taken out of the stable ; and often, if he has been reined up at work, a large quantity of matter is ejected after his head is freed ; when it is found that such a horse is not glandered, the discussi is termed a maal elect.

A discharge possessing or accompanied by any of these signs is always to be regarded with suspicion. It may be nerely the dregs of a common cold, it may be carable by medicino, or it may curre itself, but yet the horse may possibly be glandered. There may be oridence that the discase is the result of catarathe, or the borse's history may be known, and in such cases it may be decided that he is not glandered. But it very often happens that the history of the horse cannot be got, and that there are no symptome of disease but the discharge, accompanied or not by enlargement of the glands under the jaw.

The purchase' howver can return the hore, although no professional man may grant a certificate that the best is glandered. Howold be very unwise who would keep such a doubt'ul bargain. Until the discharge is renored, no one can positively say that the hores is not glandered. After it has been cared, or after it has disappeared of itself, it is then known that it was morely nasal glocd. Among professional men it isgenerally, though not universally, considered that glanders is not carable, and any suspicious dis-

charge from the nostrils is regarded as another disease. as soon as it is found to be curable.

A hone with near glock is unsound. His appetite may be good; ho may be choceful; and equalito of doing a considerable quantity of work. But he nevers stands hard work: he toon loses then's the discharge hnecases, and at last he becomes very weak, and has to be thrown off. All this, it if then, happens and when he is put to work of the severest kind ; but it is quite sufficient to render him unsound.

Sore Throat .- Also termed a cold, cough, and catarrh. In travelling from fair to fair horses are very apt to catch a cold by the way ; and to have discharge from the nose, cough, and soreness of throat. This is particularly the case with the Irish horses that are brought to Glasgow ; very few arrive here that have not suffered more or less from their exposure to the sea air on one side and the heat of the steam-boat furnace on the other. In the most of cases these colds are trifling affairs. A little care and management soon restore health to the greatest number ; but a few require medical treatment and are in some danger if neglected. The signs are, cough, some tenderness about the throat when compressed, and a thin watery discharge from the nose. This is so common among horses that have travelled and especially those that are young and badlyhoused on the road, that few purchasers object to it. But for all this it is not a thing to be neglected. Now and then the horse never recovers; the cough may become permanent, or the inflammation of the throat may extend to the lungs and possibly destroy life. At all

events the horse must not be used as if he were in perfect health.

A hope with a cold upon him is unsound. The coller, indeed, will warrant him sound, and say that the cought is of no consequence; but if the purchaser would avoid any possible had consequences of the cold, he should have a special warranty against it, or no warranty at all. The law of Socialand requires that the hores be returned as soon as he is discovered to be unsound; and if is could be proved that the byer knew of the cough on the day of sala, and did not offer to return for several days after, he is held liable to keep the hores as he is. In Englandit is different : the purchaser may, if he pleases, try to care the hores i and though he dis, yet it is sufficient to have proof that he had the cold, or cause of diath, when sold.

Although a cold is an unsoundness, yet, as has been said, it to soldom produces any permanent incorreniesce that very for regard it as of much consequence : it is remedied in general by a short and simple comes of treatment; and when it assumes a more serious aspect, the subsequent management is perhaps as much to be bland as the original intensity of the disease. The will arises from treating the horse as if he wore quite woll.

All the signs of a cold may appear in the course of a single night. There are no signs indicating the age of the disease; hence if the purchaser would return the horse for the cold, he must do so immediately: after two days, the vertermains will be comhet to say whether the horse caught the cold before or after sale, and the only proof that remains is the verdence of those who

intimately knew the horse at, and for some days before, sale. From evidence of this kind it is very difficult, and in general impossible, to procure the truth. Those who know it have an interest in concealing it.

The gloads situated in the channel and adhering to the inside of the lower jaw hones, are calaryed in strangles gloaden, and sometimes a little during the continuance of a common cold, when the nostills are much inflamed. This enlargement sometimes, though very soldom, exists as a consequence of strangles; and in such cases is of no importance whatever. But in the other cases, though the enlargement does not of isself constitute unsoundness, yet it is a symptom of discases that do.

The Nuclei at its junction with the head, is sometimes marked by the orib-hiling strap in the mark is morely a slight depression, shout two inches broad, all round the nock; and at this part the hair is a little shorter, and lies closer than elsewhere; it is produced by the frequent or constant application of a tight strap to prevent orib-hiling. It is never seen but in those that have worn the strap for a long time—a year at least.

Oribibiting has been termed by some a discase, by others a vice, and a few have regarded it as merely a habi, little or not at all periations. Hence have arisen many disputes as to whether or not it constitutes unsoundness. Not all, hut a great part of the veterinary profession, however, appear disposed to regard it as

an unsoundness; some suppose that it is occasionally a cause of disease, and others that it is an effect. Horse dealers entertain as much diversity of opinion on the subject, but all allow that it depreciates the horse's value so much, that it must, if possible, be concealed from the purchaser. A great many think lightly of it, unless the horse be much addicted to it ; but although it may do no mischief in a slight degree, it must yet be remembered that it is always increasing by little and little, until in time the most insignificant becomes the most determined crib-biter. Even those that affect to disregard it, take very good care to prevent it, as much as possible, by applying a strap to the throat. It is true that crib-biters have been known to live to a good old age, and without appearing to suffer any inconvenience from the habit; but these, for the most part, were horses of slow work. It is well enough known that the majority are apt to fill the stomach and bowels with air to such an extent as to impair digestion, impede the breathing, and produce frequent attacks of colic. Old crib-biters that have much work are generally lean, and have a dry, staring, coat. In Scotland crib-biting has been considered an unsoundness in a court of law ; and in England, a horse warranted sound and free from vice was held to be returnable because he was a crib-biter.

Crib-biting consists in swallowing air. The animal takes hold of the manger, or some other fixture, with his front teeth is the then dilates the upper part of the gullet and gulps over the air, making a granting sort of noise. During the time the horse is crib-biting, he stands with his feet gathered together, and the back

slightly arched. This can only be discovered by watching the horse in the stable. Before purchase, the teeth, as well as the neck, should be examined i in old cribbiters the outer edges of the front teeth are worn away and little pieces are broken off by attrition against the manger.

Horses do not become confirmed orib-biters all at once; with some the habit is much sooner established than with others. In no case are there any signs indicative of the precise time it has existed. Those that erib five or six times a -day, may be supposed to have practiced it for several weeks.

Winduction is a half producing nearly the same effects as crib-biding. In both, the horze swallows sir, but there is a difference in the mode of availowing it. The winducker does not require to sake any fixed body with his testh. "I be makes a possible and the mode with his month, as if drawing in finds or air. He drops his under lip, which he keeps in continual motion, at the same time saking his head as if in concert with the movements of his lip." This may be observed any where if the horizer is left at liberty, and disposed to practise the habit; but the fear of correction will prevent him. He must be watched in the same.

I am not sure that either windsacking or crib-biling are included in the definition which I have ventured to give of unsoundness. It requires to be proved that there is discase in these cases, but there is no proof of the existence of any discase during the early stages of crib-bilong. At a later period there is reason to believe that the stonake, and perhaps some other organs lose

a portion of their original energy. But even though future investigation may find that there is no disease necessarily attending the halits termed cribiting and winducking, yet they will prohably continue to he regarded as constituting unsoundness as much as they are at present, or it may he more so.

The Poins of the Neck.—One of the jugular venus is sometimes partially oblicated in consequence of bacoming inflamed after the operation of bleedings. Such a defect may be easily discovered by placing the finger on the lower part of the neck, and compressing the vela sufficiently to stop the passage of the blood j th the vein he entire, it will be seen to fill and swell upward, from the point of pressure to the head. When not entire, it risc only to about half-war un the neck.

The loss of a vein's an unsoundness. All practitiones, however, do not consider it as such. It is true that, if it has been long lost, other veins have had into to increase so much in size that, among theor, they do the work for which the other has become unfit. But for a month or two after the vein is closed up, the eyes are apt to heccome inflamed, the head to swell, especially if the hores is turned to grass, or suffered to feed of the ground ; be is also disposed to staggers, that is, to apoplexy. All this arises from the accumtation of hlood in the head; after the other veins have enlarged sufficiently there is no danger of this scenariation ; but previously, if h vary accident the remaining juguar should become inflamed, the here's life is hold by a precedous term.

But for all this there are worse unsoundnesses than

the loss of a vein. If the horse has not to be turned to grass, the purchaser may run all hazards for an abatement of a few pounds off the horse's price.

The Shoulder-Disease, unaccompanied by lancness, rarely exist in this part. Callons, and other tumours, produced by the collar, are, indeed, often 5 mon immediately under the skirs j turk they seldom, perhaps never, produce lameness. If the horse the bought to run in harness, and these tumours, from their size or situation, are such as to unfit him for wearing the collar, they then constitute an unsoundness. In a horse bought or used for this saddle they are mere blominhes.

The despert-sealed parts of the shoulder are sometimes injured, and the horse is lane. The lameness is so very apt to return, even after it has been removed by blistering and other remedies, that the horse is often soil as soon as the lameness has been removed. The owner chooses to sell him rather than run the risk of realing the lameness by patifies the horse to work.

But though the bone becomes lame in the shoulder soon after purchase, yet it is generally difficult, and often impossible to say with certainty, that the cause marks of rowels, setons, or blisters on the skin, it is then very probable that the horse has provioutly been have in the shoulder, or at least it is pretty certain that he has been treated for shoulder lameness. It seldom happens that deep-sented disease produces any alteration in the external appearance of this part. There are certain are cause, however, in which one or two

of the muscles are shrunk and wasted away: and this, which is evident to the eye, is sufficient testimony that the horse is, and has been for some considerable time usesund.

Marki 4ft by Blöters, Rowels, ec. - A seton and a rovel, that is, a kind of tent or issue, produce nearly similar marks. Both leave scars, small or large, at the place of their insertion, is ut in many cause the blemish is so triling that it cannot be discovered without hadding the hair and ordide. In other cases, a small, knotty, bald itherede is left, which can be seen, or left by drawing the hand over the skin.

Blisters, when well made and properly applied, leave no permanent mark ; but in the majority of cases, an experienced eye can, for a certain length of time, detect the place where a blister has been applied. The hair stares a little, it is rather short, strong, bristly, and it wants the fine, glossy tinge common to the hair on other parts of the body. Sometimes it is not exactly of the same colour: it is a shade darker or lighter. These signs are most observable when the part has been blistered more than once : when it has been recently blistered, and when the legs have been the parts operated upon. Over the body, as on the shoulder. the signs are still good, but they require better eyes. to see them. After the first moulting season they generally disappear altogether; but in one or two cases the hair of the blistered part remains fixed, whileall the rest falls off, and a slight difference in colour is observable. When the blister has been bad or improperly applied, it often leaves large puckered scars,

devoid of hair; and the hair remaining, is thin, staring, and irregular.

The mark of the firing iron is well enough known. It produces longitudinal, callous, elevated seams, without bair. Time, bowever, often removes these as well as the others.

The Point of the Elbow is sometimes the seat of a large and ugly tumour, produced by repeated bruises from the beel of the shoe, when the borse is lying, with the leg bent under him.

I have never seen this produce any alteration in the horse's action; and unless it do so it is a mere blemish. I believe that such is the opinion of the majority of veterinarians.

The Front of the Knee is invariably examined with great care by every purchaser at all acquainted with horses. If the hair be rubbed off, or the part be bald, it is a symptom that the horse has, at sometime, fallen and injured himself; and it is a common, though erroneous opinion, that if he has once come down, he will ever after he most liable to the same accident. This error has been produced and perpetuated by observing that some horses fall very often ; and although in a few cases, subsequent falls may be attributed to some preceding falls, yet, in general, this stumbling propensity arises from defective conformation, or disease, having nothing to do with any previous mistake. The horse may stand too much over his forcless, or he may be bent at the knees, or too straight in the pasterns ; he may be too low at the withers, or he may

have an upright shoulder. Any of these defects render him very apt to stumble; and so do certain diseases in the fore-feet. None of these, however, except the last, render the horse unsound. An injury of the knee of any kind is usually termed a broken knee.

Stiffness of the hese joint—This is often produced by repeated his, to by one statended with avere and extensive injury. The extent of motion which the joint possesses is the best test of its freedom from disease. If it can be so far bent that the hoof may touch the elbow, and, at the same time, the felicic the foraru, there is no stiffness in the knees. If it cannot be bent so far, and without producing any pair, the joint is stiffned, the herse unscand, until for quick work, and liable to fall at any work, whenever the ground is rough or depp.

The extent of this incapacity will vary according to the degree in which the knees is stiffened; but the alightest is sufficient to make the horse unsound. Some work on for months, olters of years, without becoming quite uscless, but it is an evil that seldom remains atstionary. The probability of its getting any better, A knee-joint cannot be perceptibly and permanently stiffened in a day or two. The disease proceeds slowly, and its not always accompanied by lameness.

Speedy Cut.--Immediately below the knee-joint, and on the inside of the leg, the skin is sometimes found abraded, or thickened, and the bone a little enlarged at the same point. This is produced by

repeated blows from the opposite foot, when the highactioned horse is trotting fast. When not accompanied by lameness, it is not an unsoundness ; but, in general, it indicates bad action.

Spiint or Spient.—This is a small heavy tunour, found sometimes on the outside, but offenest on the inside, of the for-leg, between the knew and the follock joints. Ut generally, naver the highest. It varies in size, and is most common, or rather allogether confined, to fast-working hornes. For, that we been some months at work, and especially in the town, or a hard roads, are free from it. At first, a spient usually produces more or less immensis but affer a time this goes doeme very large, and it is suid that it may even interfere with the motion, of the backtandons ; but this happens very marky, if at all.

A splent, without hancens, is not an unsoundness; but should hameness appear as a consequence of the splent after sale, the horse is returnable. All largemesses, that after from causes existing at the time of sale, make a horse unsound. The hanceness which commonly precedes the formation of a splent, may come on after a single journey; but sevend day weeks, or mothis, may elapse before the splant itself become apparent. The time varies according to the fastness of the vork.

Sprain or Strain of the Back Tendons .- This is

an injury, or the effects of an injury done to the fermdons, which are attimated at the back of the leg, between the kace and the fedlock. Recent injury is always accompanied by more or less Insames, some swelling, pain on pressere, and heat. By time and reatment, all these may be removed, is tot done the swelling remains after the other symptoms are gone. The swelling or thickening of the tendons, shows that nomepermanent mischief has been done ; and though it is possible that Inameness may not again recur, yet experience say that it is very probable it will, especiallyif the hone be put to violent certain.

In examining the tendons, or, indeed, any other part, for enlargement, it is not enough to feel and to look at them. When enlargement is suspected in any part, it should be compared with the same part of the opposite limb, and the eye, and the hand, should both be used for this purpose. The same parts are not always diseased in both legs, and even when they are, both are very seldom equally so : the difference points out a deviation from health. In comparing the tendons of one fore or hind-leg with those of its fellow, the eye is seldom sufficient : it detects enlargement only when it is considerable : the hand is a better guide ; pass the thumb and two first fingers slowly down each leg alternately. Any enlargement of the tendons constitutes unsoundness, even though there be no lamonoss. These parts have so much to do, that they can ill afford to lose any of their original strength. Any marks of firing or blistering, as indicating previous treatment for injury, real or supposed, will make the purchaser cautious.

105

The Petlock Joints are frequently the seat of bony or toulinous onlargements, which is almost every case render the horse unaquad, even where there is no lanceness but these joints are subject to enlargements, which are neither tendinous nor bony, and which do not constitute unsoundness. Windgalls and callosity produced by blowm, are merely blemishes.

Windpalls are little puffy tamours, without pain, scated on each hide, and almost on, the fellock joints of both the fore and hind limbs. They are little bags containing and confining a labricating fluid, for preventing friction between parts that more upon each other; and an increase. of this fluid, which dilates the bags, and brings them into view, iall that a windgall consists of. Very few flat-going horses are without how; ithy above that the azimal has done some work; bat, except when very large, they are never regarded as constituting unsoundness.

Cutting,--When a home is in the halist of striking, the feltoks with the opposite hoch, during programsion, he is termed a cutter; thickening of the skin and parts beneath, is the consequence of these repeated biorn. The enlargement is always seated on the inside of the joint; it haver produces unscondiness, till the hory or tendinous parts are injured, which perhaps they never are, from estings. The habit of cutting is a serious objection to a horse. In a few cases it may arise from wakness, fulgue, or bad shocing, but in general it proceeds from bad setion, or malformation.

The signs of cutting are found at the fetlock and

the foot. Besides the enlargement already mentioned, there is some abrasion of the skin : and there is a particular mode of shoeing horses that are cutters. When very bad, the inside hranch of the shoe is made much thicker than that of the outside, and the nails are all driven in the toe and the outside. With those that are not so had, the shoe is nailed in the usual way, but the nail heads and the edge of the shoe are rasped very smooth and close to the hoof; and sometimes the hoof hangs a little over the edge of the shoe. Cutting, however objectionable, cannot he called an unsoundness. Among cart horses it is never seen, except when their toes are turned very much outwards. Among those of quick work it is a great annoyance ; after striking the fetlock a severe blow, the pain is so great, that the horse often hops several paces on three legs, and sometimes he falls.

Unserving, or neurotany.—The arrors on each side of the fuelcels of the fore-lags, are sometimes divided to destroy or deaden sensation in the foot. The operation is performed by professional mon, to tenore the pain attending an incurshie disease. The lameness is removed, but the disease goes on ; the horse may work for months or years ; but should be get the foot injured, matter forms, and, spreading in all directions, destroys the whole of the foot. The injury produces these effects, hecause the borse shows no signs that he has sustained any, and he works on unscided, ill it is too late to take any measures for arressing that which might have been stayed in a few hours, had the horse shown any lameness to attract

107

attention. Besides this possibility of destruction to the senseless foot, from external injury, there is a possibility, or, rather, in many cases, a probability, that the original disease will proceed so far as to produce similar effects.

Sometimes one and sometimes both foct are unnerved. The incluious nerver heal so well as to leave no trace of their having been made; the sear in the akin should be sought on each side of the feltoket; it is generally under, though sometimes above, that joint; the skin beneath the sear is insensible, or nearly 40.

The mere section of the nerves would make a horse unsound : but in process of time, their ends reunite, and sensation is restored, to all appearance, as completcly as before ; and then, as far as the operation is concerned, the borse is sound. By pricking the skin with a pin, it can be ascertained whether or not sensation be restored. If it is, the horse cannot justly be returned for unsoundness, even though it can be proved that he bas at some time been unnerved. These observations are necessary, because blunderers have performed the operation for curable diseases, when it was not demanded : and it has been practised for canker, which in some cases is curable. But in the most of instances, it is resorted to for that which -cannot be cured ; and then, indeed, the horse is unsound, from the continuance of the original disease, whether the nerves have remnited or not.

Much money should rarely be given for a horse that has been unnerved. Even though that which made the operation necessary should have been removed,

109

still, until the nerves are united, the foot is in danger of destruction from slight causes. To preserve it, it must be constantly watched by a person who can, by signs independent of lameness, discover an injury before it has done irreparable mischlef.

The Pastern, or space between the fetlock joint and the top of the hoof, is the seat of a bony tumour. termed ring-bone, from its tendency to surround the pastern. It differs greatly in size and extent in different horses. It may be discovered by its prominence, and by comparing the one pastern with the other. Among horses that are kept at slow work, the disease may exist for years, and attain a very large size without producing any perceptible lameness. A few are lame or tender only when trotted, and some are evidently lame only when trotted on the stones. But many others, with much smaller ringbones, are lame under all circumstances. Some become lame only when brought to town. Very few post horses go sound with them. In all cases, a ringbone, however small, makes a horse unsound. The horse may at the time be free from lameness, but no man can say how long he will continue so.

Tde Foot is liable to many discases, some of which are attended with constant laneness, and these we ascratia the existence of, by this symptom, more than from any peculiar appearance of the foot itself. Such is the case in that discase termoid groggress, or malady of the navicular joint. Others are not consandry accompanied by lameness, but are apt or

certain to produce it when the horse is put to work. It is chiefly for these that the foot must be examined.

Sidebones .- Immediately above the hoof, at the heels, and stretching forward on each side, and having the hollow of the pastern between, are two elastic bodies, which the anatomist terms the lateral cartilages. Their situation is marked by the letter E in the diagram of the fore-leg. There is one on each side of both the fore and of the hind-foot. When in health, they yield inwards and a little outwards, to the pressure of the finger and thumb. They are liable to a disease which renders them partly or wholly inelastic, and frequently makes them so prominent, as to invite attention. The cartilages are converted into bone; and stablemen say that the horse has got sidebones ; among veterinarians, the disease is called ossification of the lateral cartilages ; and sometimes it is denominated ringbone. The hind-feet are rarely affected ; in the fore-feet, the cartilage of one or both may be ossified. Draught horses are much more liable than those of less weight. The disease comes on slowly, Any perceptible ossification will require some weeks to form.

Side-bone, however small, makes a horse unsound. If does not invariably produce lameness, yet, much work over the stones very often makes the horse tender, if not actually lame; and few fast-going horses are without more or less, when they have got this disease. But when the ground is soft, and the pase slow, the suinal may be serviceable for many years.

Southerach is a fracture of the hoof, a partial or complete separation between the fibres of which it is composed. The fissure is generally found on the inside quarter of the hoof, or directly in front. It varies is length, from half an inch, to the whole depth of the crast, and in depth it may pass to the quick, or be confined to a small thickness of the surface. When quice through, however short, the crack always produces harness.

A sunderack is anyays an unsconducts, as long as it lasts. It often increases in deputh and length; often makes the horne lame, and always requires particular mangement in ahoeing, s.c. It may take place in an instant; and, unless there be some marks of the sulfixkinfe or rap about it, to show that the foot has been under treatment; it is impossible to say how long it has existed. If the erack is quite through to the quick, and hiseding, and the horse lame, and no marks of pervious paring or dressing, the crack is recent.

Contraction.—This word is applied to any dimination in the nature lbcadth of the foot, which may be said to be contracted when it is narrower from side to side, than it is long from the point of the toe to the heel of the frog. The hind-iset are not liable to contraction. Most people regard a contracted foot as being a great detriment to the horse; but it frequently hoppens that the persons who do so, have a horse whose foot is very narrow, while they are not at all aware of it. This circumstance is sufficient to show that the evil is not of such a serious naure as is commonly inaginol. Indeed, there are very few light, well-heed

111

horses, above the age of seven, that have not more or less contraction, and yet they may be perfectly sound. The fact is, contraction is not a disease at all. For many years it was blamed for producing lamences ; but Mr. James Turner, of London, has shown us very clearly that the lameness arises from another cause. without which the contraction is of no consequence. When the contraction comes on slowly, the parts within have time to accommodate themselves to the diminished capacity of that which contains them. But in no case can the hoof be suddenly diminished in size, to such a degree that the diminution is apparent to the eye. Whatever fetters the natural motions of the foot, or prevents the horse from freely throwing his weight upon it, will, in the process of time, produce evident contraction

Pain, whether seated in the foot or in the limb, is one of these causes; hence we have contraction as a consequent, not as an antecedent of lameness.

Contraction, then, alone, is not an unsoundness. If there be lanceness also, find the cause, and reject the horse for that. There is as much impropriate in returning a lame horse for contraction, as in returning one half-blind for shying. It ought to be observed, howver, that there are veterinarians who think otherwise on this affair. They hold contraction as a sufficient cause to return a horse for unsoundness. They are men who heed not the suggestions and improvements of their professional brethren. At school they get a something, but that of others is nothing.

A difference in the size of the feet is a more supjiclose matter than an equal degree of smallness in both. When one is smaller than its neighbour, it is a proof that there has been pain in that foot or limb for a long time; and it is neighild to inquire whether the cause of pain be entirely gone, or whether it has produced any permanent injury.

Thrush .- This is a disease of the frog, of that triangular protuberance of horn which fills up the vacuity between the heels of the hoof. The disease occurs very often in both fore and hind feet, but is most common in the latter. It exists in very different degrees. It may consist in the discharge of a small quantity of foctid matter from the cleft of the frog. without any destruction of the texture, or alteration in the shape of this part ; or the frog may be shrunk in volume ; the horn spongy, ragged, or rotten. When neglected, the discase usually proceeds thus far, and, in process of time, the frog and the surrounding parts occasionally become cankered. When put under treatment during the early stages, thrush is cured with case and certainty ; but when it has proceeded to canker, the cure is often impossible, and at best, it is tedious and expensive.

A threah is an unsoundness. Some retorinarians, towever, are of a different opinion. They, and perhaps the seller, argue that the disease is, in very many cases, insignificant ; that it does not produce lamonest ; that it may be cured by two or three dressings ; and that, being so common, it would be unfair to condoma a horse free so trifiling a cause, when, a ditervise,

he may be unexceptionable. All this is true; but at the same time, these men admit that thrushes may exist in such a degree as to constitute unsoundness. Here is the difficulty ; one may consider this thrush as of no consequence, or as of very little, while another may broadly call it an unsoundness. None can say at what particular stage the disease has proceeded so far as to make the horse unsound. If we could do this, we might, as in some other cases we must, say that the disease may or may not render the horse unsound. To avoid inflicting any peculiar bardship upon the seller we are sometimes compelled to consider some diseases as unsoundness only in certain stages. But there is no need of this concession in reference to thtushes. If they are so insignificant as to be of no moment to the buyer, it is surely much better to have them cured before the borse is sold at all. The cure cau be so easily and quickly performed that the seller has no just ground of complaint, if the purchaser, in fear that it will be a more serious risk than be chooses to incur, returns the horse as unsound. It is the punisbment his negligence deserves.

But there never was a thrush, however slight, that could truly be termed quite barmless; besides its tendency to proceed and become a nuch worse disease, it is at all times apt to make a fast-going borse failt. The diseased frog, though painful on pressure, produces no lameness on a level read, because it is raised from the ground by the heels of the shoe; but when it comes yopn a rolling stone, the pain produced is so great as to make the horse lame for a few paces; and sometimes he fails; in making a suddlen effort to raise the

foot, when it should be firmly placed to receive the weight.

Still, notwithstanding these possible or probable evils, it is not every house that should be rejected for thranhes. The purchaser may run all risk for a small abatement of the price, sufficient to pay for the expense of treatment, and for a peculiar mode of shoeing, by which the danger of a fall is much diminished.

I think, however, that, all things considered, it would be well it veteriarianians would all agree to regard thrush as an unscoundness in every case. Unanimity on this point would, no doubt, sometimes compel a selfer to take back a horse for a thrush, when the *real* objection night be some fault for which the horse could not the pegally returned; such as defective conformation, lasiness, or some other fault not discovered dill after sale, and not of such an attrare as to constitute unsoundness : the bayer in anch cases might make the thrush a sufficient plea for return; but this is an evit not likely to happen often, and it is not so intolerable as that unso often observed in a court of justice during the trial of horse causes.

Corns.—A corn is a bruise at the heels of the forefoot. The hind feet are so little liable that we never look for, or expect to find a corn in them. It is found oftener in the inside than the outside heel; and is indicated by more or less discolonition or redness of the horn. This is rather the effect of the bruise, and may remain long after the sensitive parts are completely restored; that is to say, after all the harmeness and the

heat of the part, which usually attend a recent bruise. are quite gone. A corn may he produced by a single shoeing, and perhaps cured by another shoeing. If the foot be good, and the horse free from lameness, a simple discoloration of the horn, which is only the effect of a cause that may have ceased to operate, cannot in justice make the horse unsound. But if the heels he so low, weak, and thin, or tender, as to require more than ordinary care in shoeing, the corn renders the horse unsound. Horses frequently get different parts of the sole bruised, from stones becoming fast in the foot ; and for weeks or months afterwards, the horn covering the parts hruised remains of a reddish colour ; it is stained by the blood which was effused into its pores at the time the bruise was inflicted. After the lameness is gone. nobody regards this as an unsoundness, and it is not different from a great many corns. Many horsemen. however, reject a good, serviceable animal, because he happens to have a corn, that is, a bruise in the heel. They make no distinction between the horse that, from the construction of his feet, must always have corns. and the horse that has got them by accident, and need not have them again as long as he is shod with ordinary care. In the latter case the smith may remove the discoloured horn with his knife, and then no objection remains : hut in the former case the born is red from the surface to the quick, and the foot is so formed "that to keep the horse free from lameness his shoes must be often removed and carefully replaced.

Flat Soles-In almost all horses with sound feet, the sole is more or less concave; in those of light

weight the concavity is more considerable than in heavier horses ; but in some, especially the latter kind, the sole is nearly or quite flat. There is little or no concavity at all. This is not always the result of discase : the sole may be quite flat, and the horse still free from unsoundness. It is not every smith that can shoe him as well as another in whom the sole is concave a but the flatness is a mere defect in conformation : there is no disease and the horse is not unsound. The horse may be refused for this, as for any other defect in conformation, but be cannot, or at least ought not to be, returned for unsoundness. The great evil of a flat foot is the danger of its becoming convex from an attack of founder. The horse is more likely to be permanently injured, just as a horse with a narrow chest is more likely to suffer permanent injury from an attack of inflamed lungs.

Founder—But there is another kind of fantess of the sole. It is produced by founder, by inflammation in the feet. A horse may have this disease and be perfectly cured by proper treatment, but in some other cases the treatment is bad, or the disease obtainate, and the feet remain more or less injured. When founder has done may mischief to the structure of the foot, the gait of the horse is peculiary in goos on the heels ; the heels come to the ground a little while before the toe; and in process of time the foot itseff undergoes some alteration in hape. The solo becomes less comaver, quief fat, and altimately peculary, buyings downwards. It is conver, and termed a puncied foot. Horses with feet of this kind are rarely fit for mach

work : the feet seldon improve, and they are in great danger of becoming worse. They require constant attention, and much skill in shoeing. Even in alghet cases, the hores can never be much trusted at quick work. When the pace is slow and the back-burden light, he may be serviceable for years ; but much of this always depends upon the shoeing-smith. Horses of this kind are usenound.

Flat soles and founder are almost as rare in the hind feet as corns.

The Withers are often bruised by the saddle; and as long as the heat, pain, and aveiling continue, the horse cannot be used. I have known this overlooked in making a purchase. The horse is unsound as long as he is muft to carry the addle; as long as there is any pain in the part

The Chest on each side, immediately behind the point of the elbow, should be examined for marks of scions, rovels, and blisters. Any marks of these indicate that the house has had infimed lungs, or at least they show that he has been under treatment for this or rome other disease of the chest. It is possible that the disease may have produced some permanent missing, and the lungs should be well tried by a smart algolo peteror, or immediately after purchase.

The Counter and space between the forelegs should be examined for the same marks. Remedies, such as rowels and blisters, are often applied here for obest disease, but they are also often applied for disease in

the shoulder, and sometimes for nothing at all, save some foolish notion of drawing away the humours. None of these marks, wherever seated, make the horse unsound; they only indicate the pre-existence of something that may or may not have been an unsoundness.

The Haunch bones.—By an accident, a piece, large or small, is sometimes broken off one or other of these bones. In consequence, there is a want of prominence on that side, which is best observed by the eye, when the examinant is standing a few paces behind the borse.

A large portion is sometimes broken off the haunch bone without producing any apparent isconvenience. The deformity may be considerable, hat unless there is some deficet in the horse's action, arising from this injury, it is probable, he would not, by veterinarians, he considered as unsound.

The Stifle is rarely diseased; hut any hony or tendinous enlargement about this important joint is very likely to cause unsoundness.

The Grain is now and then the seat of a noft, elastic tumour, varying in size from three or four to revelve or fourteen inches in diameter. It is formed by the except of a portion of howel from the helly, and is the same with what is termed rupture in the human heing. It is oftenest met with in the stallion, and occupies the same hay as the testide. But altogether it is or rare in the horse that it is very seldom looked for. The discase is, without doubt, an unsoundness.

The Testicles.—In purchasing stallions these ought to be examined. Sometimes one becomes uscless from disease; and occasionally both are affected. They can be examined only by a professional man.

The Hock.—It has often been said, that the foot before, and the hock behind, are liable to more disease than any other part of the body. It is an observation founded upon experience, and should not be forgotten by the purchaser when examining these purts.

Capped Hock.—This is a swelling on the point of the bock, often, but not always, produced by the borne kicking in the stable, or in harrows. After the inflammation, which accompanies its commencement, is subdeed, there is no lameness ; and the horne is not, from this cases, unsound. He is only hleminhed; but it is a bleminh of a very bud kind, most of people know that it generally belongs to a vicious horse. Both hocks are unsulty affected.

There is another kind of capped hock. Externally, the sculling is little different from the preceding; but it is known to arise from disease much deeper-scated, and it is attended with more or less laneness; and the horse finches when the part is pressed upon. In general it is only one bock that is affected. The horse with this kind of enped tooks is ansound; but he often does much work, whether fast or slow; and frequently be laneness disappears after he is fairly on the road.

A Curb is a longitudinal swelling, found at the back of the hind-leg, three or four inches below the hock

joint. It is bost scen at a yard or two from the hores's side. The swelling generally consist of some tendinous sulargement at this place; but sometimes it is merely an increase in the quantity of a full which bloricates the tendons. In either case, its commencement is commonly attended with some lameness p but fart time and treatment have removed these, the horse appears to suffer no incovereince, although the swelling still remain.

Veterinarians are not unanimous in their opinions of curb. Some insist that it is always an unsoundness ; others that it is not, except when accompanied by lameness. It is well enough known that those horses that have what are termed curby hocks-that is, a hock predisposed to eurb, from its shape-are almost sure to have this disease, and to be lame from it soon after they are put to work ; and that these horses are seldom lame from this cause afterwards. The first attack, when properly treated, seems to render the parts less liable to any subsequent attack. And it is also well enough known that horses often do fast and hard work after they have got curb, as well as before they got it. These things considered, perhans the nurchaser will run little risk. But on the other hand, horses do oecasionally become lame from a second attack of inflammation in the eurby swelling. In such cases the horse may have been put too soon to work. before the parts were quite well, or he may have undergone excrtion that would have produced eurb whether he had had it before or not. If the purchaser could learn that the horse has been at full work, and continued sound for a month or two, or even a fortnight,

he need not object very strongly to the curb. If the horse continues free from lameness for three weeks, he may, as far as the curb is concerned, continue so for ever.

Therough-prise is a tumour of the same nature as a windgall. It is situated on each side of the hock joint, about an inch above and behind the centre of motion. Few hornes, perhaps none that have done any work, are without it. Unless it be so large as to indicate ropture of the synovial bag, or disease of the joint, or to interfare with motion, it is not an unsoundness. The veterinarian is the proper person to determine whether or not is does any of these things.

Bone Spavin .- This is a disease of frequent occurrence, especially among fast-going horses. It consists in a diseased state of the small bones and joints which enter into the formation of the hock. The commencement of spavin is indicated by lameness, some heat in the hock, by a peculiarity in the gait, and by the absence of any other cause of lameness. In the process of time, if the disease proceeds, a small, bony tumour appears on the inside of the hock, and after this, sometimes sooner, the lameness in general subsides, and the horse is only stiff. It is now that he is offered for sale. It is known that the lameness is very likely to return ; and to increase, probably, after but a little work, and certainly after a great deal. Among horsemen the existence of spavin is not admitted until there is an external enlargement, evident to the eye or hand: but the process by which the bony tumour is produced, has been going on for a long time antecedent to the

1

appearance of the spavin. Previously, the only signs of the existence of this process, are the lameness, the heat in the hock, and a neculiarity in the action, which consists, for the most part, in dragging the toe near the ground. Now, the lameness generally goes off after the horse is a little heated by exertion; and the purchaser may be deceived unless he watch the horse before he is terrified and excited by the whipping and shouting of the dealer's groom. After the bony tumour has appeared, the lameness may be less evident ; but the swelling may be perceived by comparing the inside of each hock with its fellow. The enlargement is best felt by drawing the hand gently and slowly, first over the one and then the other hock. It is best seen from behind the horse or from between his fore-legs, having him standing equally on both behind. The toe of the hoof and of the shoe is often worn away in spavined horses.

Bone sparin fn all case constitutes unconducts. It is very true that many provided horess work well and hardly for years, without becoming actually lane; they may be a little stiff, and expecially so at starting, but there are a few that have spaving of consideness. But its quide impossible for any man to say how long they will remain that. We cannot distarquish between hose cases that will and those that will not produce laincness. If the hores has been tful work for sometime since the appearance of the spavin, and without lamoness, it is probable that he any conflue so, but it is by no means certain.

123

Bog Spania is a svelling on the front, and rather towards the inside of the heck; joint. It is of the same nature as windgalls and thoroughpin, and only to be regarded in the same light as those two indications of work or over-exercise. When large, however, it may require the skill of a professional man to determine bow far it interfrees with soundaces. If there be any heat in the part, or the horse be lame, he is unsound, no matter how small may be the tumour.

Blood Sparin—Over the middle of the tumour constituting beg sparin, a vior max, which, by the distantion of the bag benanth, is always pushed a little out of its place; and, appearing more prominent than before the existence of loog sparin. Dissection and measurement, howevers, show no trace of disease; nor when filed with wax in the dead subject, does it appear to be any larger than in other horses that had neither beg nor blood spavin. In some modern books bog sparin has been described under the term blood spavins, but earlier writers and horsemen of the present day consider them an quite distinct.

Below the hock joint the leg should be examined for enlargement of the back tendons ; the felock for windgalls and cutting; it he pasterns for ringione ; the foot for side hones, thrushes and sanderasks. The other diseases mestioned as belonging to the fore-leg and foot, are rarely, and some of them never, found in the same parts behind.

The Action, as indicative of disease .- There are

one or two unsoundnesses, whose principal, or only symptom is some defect in the action. Hence, besides minutely examining all the parts mentioned in the preceding paragraphs, it is necessary to put the horse in motion.

Lameness .- Three things must exist before a horse can be called lame. There must be pain ; that pain must be aggravated by motion ; and the horse must show, by his movements, that he tries to prevent the augmentation of the pain. We see the last, and we infer the existence of the two first. We know that he never pretends to feel that which is not. When he is lame in one of the fore-legs, the head is alternately raised and depressed ; as the weight is thrown upon the tender limb, the head rises ; and it sinks as the weight is transferred to the sound leg, which is thrown forward much quicker than the other, in order that the weight of the body may rest as transiently as possible upon that which is diseased. When the pain is seated in any part of a hind leg, there is little or no un-and-down motion of the head : but the affected limb moves more slowly than the other, which is ierked forward by a rapid or convulsive effort. The body also rises a little as it is passing over the diseased leg. When lameness exists in both fore or both hind-legs, it is not so easily detected, especially if the pain be equally great, or nearly so, in each. But the sten is short and cautious, and the foot is placed gently and timidly upon the ground.

Groggy horses, that is, horses having disease of a

small joint of the foot, are very often kmoon both, and the lameness is much less evident than it would be, were only one foot affected. They have a peculiar kind of action; it is low and confined. Their steps are short; the foot skins the ground; they set it down very gently, and they go much upon the too. They have been called *daig:-outtors*. Bealdot the lamences, there is an unnatural degree of heat in the hoof, which is often much contracted. This, which is sometimes termed groupg lameness, is very common, and is seldom cumble. Light or fast-working horses are much more liable than others ; and the diazee occurs only in the fore-feet. Many work for a long time, even in stageconchers; but it is spinful to see them.

Tricks of the Seller .- Lameness may be more or less evident according to the mode and place in which a horse is shown. In the stables of the low, unprincipled dealer, the lame horse, before being shown for sale, is subjected to a piece of barbarity at which humanity shudders. The horse is fired, that is to say, he is excited by the lash to such a degree that his attention is withdrawn from the disease in his feet or legs. Some hired ruffian is employed to horsewhip the poor crippled animal, and perhaps it is the only task he performs so completely. The punishment does not always cease in the stable ; it is often repeated in the yard, before the eyes of the purchaser. The lash is re-applied or it is threatened ; the horse, glad to escape from his torturer, scts off at a trot, heedless of his lamcness, or at least showing it much less than when he is not under the influence of this

terror. It is chiedly at auctions that this disgraceful conduct prevails. A humane man would willingly believe that the hy-standers know not the reason of this low trick ; or ho may hope that they indignantly express their disapprobation. Nothing of the kind, Upon these occasions there are always many who know the panishment, and why it is indiced, but so nurmur escapes their lips. They appear perfectly unconcerned. The horse is not theirs. A mong all that surround him, no one will say, be mereful. 'It is anxious look and trambling limbs may implore ad b, but there is no payment either for sympathy or assistance, and therefore none is rendered.

This gring, as the villains call it, is not the only means by which lamcness may be concealed or diminished; the head is held so finally by the triville that the up-and-down motion, which shows lamcness of a fore ford, is partly prevented. Against this I have enothing to say, it may deceive a purchaser; but it is atcaded with no inhumanity to the hore. He may require the groom to let the hores's head be free, by giving more vin. While exposed for sale, a lame hores is kept in continual motion. He is not permitted to stand still a moment. The follow pretends to southe the hores; but he is, in cality, agitating him by certain manœuvres with the whip and bridle.

When a borse is lame on only one leg, the seller sometimes endeavours to make him as lame on its follow. This tirck is oftener practised on a fore than a hind limh. It is very frequently played off, with complete success, upon those horses that have the groggy lameness in one fore foot. Just before going

127

into the market, or before being exposed at an auction, the horse's shoes are removed, his feet dressed, and the shoes replaced. The sole of the sound foot is pared till it yields to the pressure of the thumb. After the shoes are on, and the sound foot thus prepared, the dealer takes a small peeble, or a piece of wood, shaped like a wedge-the stone, however, is oftenest employed -and he thrusts it under the shoe, at the toe or the quarter, so as to rest and press upon the sole. It is forced in with a pair of pincers, until as much pain is produced in the sound as in the diseased foot. Then the horse throws his weight equally on both limbs. The pressure is increased by little and little, till he does so. This process is very appropriately termed balancing, and sometimes wedging. Although it renders the lameness less evident, yet a man accustomed to, borses easily perceives that the animal has pain in both feet. Besides the peculiarity in the action, already mentioned, the horse, while allowed to stand undisturbed, frequently shifts his weight from the one limb to the other.

He must be a very bad buyer of horses who could be cheated by a trick like this.

In many cases slightlanenesses are not shown upon soft ground, or at a valking pase, or when the lorse is unburdened. The seller, when he can, usually chooses soft ground to show his lorse on, us often, parhaps, to prevent slipping as to conceal lameness. But the bayer, if he would test the integrity of the limbs, should see the horse shown on hard ground; or, if possible, over the causeway. First of all, the lorse should be wulked, and then throted in hand two or

here times; then he may see the horse mounted, walked, and rotrot, always abovy at first. This will suffice, as for as soundness is concerned, but the horse may also be trooted quiekly, or galloped, to alowe what sort of speed and actiop he has got. After the purchaser is astilled as to the soundness of the limbs, he may follow the horse to some piece of soft ground, where he may be put to the top of his speed without danger of slipping. Here, also, the horse's wind is most conveniently tried, but before proceeding so far, the horse should be examined for palay of the hind leers, for staggress, stringhalt and founder.

Stringhalt .-- In this disease, the eause and seat of which are not known, the horse lifts one or both hind legs to an unnatural height, and in a convulsive jerking manner : sometimes he throws the leg a little outward. In slight cases, it is best observed when the horse is cool, and when he is turning. It diminishes, or goes off by exertion, and may not appear at all, after the horse is somewhat heated. We have no evidence that the texture of any part of the limb is altered or discased, nor is it generally believed, either among stablemen or veterinarians, that the horse is at all injured by it. A few call it an unsoundness, but the majority do not. It is, however, a blemish which all dislike : even those who think it a sign of endurance would rather want it. In some parts of Seotland stringhalt is termed click or eleek-snavin.

Partial Palsy .- By palsy is meant partial or complete inability to make certain muscles contract. From

129

an injury done to the loins, or perhaps to the head, the horse is sometimes unable to exert his usual control over the muscles which move the hind legs. His hind quarters swing from side to side ; and when compelled to retrograde or turn suddenly, he threatens to fall, Some will not be put hack ; when urged they rear the body on the hind legs. In all cases this disease forms an unsoundness of a had character. Few horses thus nalsied are fit for much work : and in general they can hardly earn their food. The injury by which the palsy is produced, may take place in an instant. If there be any marks of blistering or setons over the loins, it may be supposed to be an old affair, and that the horse has been treated for it. These horses seldom lie down : and when down they generally require assistance to rise. Among stablemen they are said to be chinked in the chine, shook in the loins, or swayed in the back.

Shierung.—This disease is very rare. It consists in a shivering or trembling motion of the bind legs when the hores is made to retrograde. He is very mwilling to go backwards, and when urged, the hind legs transite more or less violently, just as they are lifted, or before the foot is raised from the ground; and they are lifted with great retrokence. Otherwise, the hore appears to be well. He is termed a *shiretry*. Som have supposed it to proceed from disease in the head, others from disease in the still joint, but nothing is known with cortainty. At present I think it should be regarded as an unnoundness; but, at the same time it ought to be observed that we are notestilliciently

131

acquainted with the extent of evil attending this peculiar affection of the nerves.

Stoppers.-Horees are liable to a kind of apoplexy, which, among stableman, is termed staggers or meagrims. They drop down all at once, without sense or motion, and after a little time day recover. A hone that has once had an attack of this kind is very much disposed to others. If he should have a fit of meagring son after purchase, is is difficult, or rather it is impossible to any whether this is the first or a subsequent attack. The best, if not the only, evidence that can be procured, is the testimony of some person who knew the horee for some time before how vars sold.

Nimrod, in his Remarks on Condition, hints at a symptom that is either not common, or not well known. He says that horses who have had disease of the brain, show by a peculiar twitching of the head, that some permanent mischief has been done. " I saw a mare last week," says this writer, " whose brain I knew had been considerably affected. I had her brought out for inspection ; admired her action much ; and, had I not been apprised of it, I question whether I might not have overlooked a convulsive twitch of her head, which she gave at about every tenth stroke in her trot, which was perfect." Elsewhere he says, "I was once possessed of a hunter which had had a slight affection of the brain : but I did not know it at the time. He twitched his head in his slow paces, much like the mare I have spoken of; but no excitement was left, and an admirable hunter was he. I purchased him for thirty pounds, and, after summering him well, sold him to

the Hon. Mr. Bathurst for one hundred and thirty." p. 282, 283, second edition, 1834.

I have not mct with any other authority by whom this twitching appears to have been observed. It is certainly not present in all horses that have had an attack of staggers, nor even in those that have been frequently affected.

It is questionable whether one fit of the staggers would make a horse unsound. A five are never more troubled with it; but a second attack is almost were to produce a third, a furth, and so on, ill one some hot day the house falls, never again to rise. The first attack may or may not be followed by others. If the horse continue at work for two or three nomulas wills, out the occurrence of a second fit, the selfer may fairly warrant him sound is but even at the distance of three months, should a second fit appear, the purchaser is parely entilled to return the horse, provided it can be proved that he had a similar fit before sale. One at tack seems to produce a particular state of the brain, by which it is rendered numawally susceptible of those cause which disorder or indences its functions.

Internal Diseases.—The hore is liable to many internal diseases, some of which cannot be known to esti until he has been closely observed for two or three days. These diseases must be such as to proceed solwy, and without interfering very materially with the hores's general health. He may have a stone in the badder, disease of the kinety, whe liver, bowels, lamg, the blood vessels, the heart, or other particular the disease may not be observed, unless in particular

stages, in which it produces symptoms so marked, that an attentive stableman may perceive that there is something wrong. In cases of this kind a veterinarian ought to be consulted ; and it will be his business to discover the nature of the disease, and to give bis opinion as to the time it bas existed. Yet there are one or two diseases of internal parts, the existence of which may be ascertained, even before purchase. Such is the case with certain parts of the complicated apparatus concerned in the purification of the blood. The organs connected with breatbing are very liable to disease in all fast-going horses; to some extent the integrity of these organs may be estimated by the freedom, the ease, and regularity with which the horse breathes. The respiration can be quickened by a gallop; but it must be remembered that a fat horse, or one that has been doing slow work, or one that has been doing no work at all, is very soon distressed. A little smart exercise will make bim puff and blow as if he were short-winded ; but this is to be attributed to his want of working condition, not to disease.

<u>Broken Wind</u>—This disease is supposed to reside in the lungs. It is characterized by some peculiarity in the breakting, and in the sound produced by coughing. In health, the flank alternately rises and falls, and in nearly equal times; but, in the broken-winded hores it rises about half-way, pauses a moment, proceeds; and then it drops in an instant, as if suddenly and forcilly thrust downwards. In this way the flank falls in less than half the time it occupies in rising. Expiration is performed by a double and prolonged effort; in-

spiration by a rapid convulsive movement. This is the principal symptom of broken wind. In the most of cases it is easily seen while the horse is at rest; but in general it is more completely developed after he is alightly agitated by exertion.

There is another symptom. The horse has a very peculiar cough. It is short, how, grunking, and frequently repeated, not unlike the cough of an old and fabble asthmutic. It is not the clear sonorwas cough of health; once heard it is afterwards very easily recognised. In general it can be elicited by compressing the head of the which pipe between the fagers and thamb : but some horses that are sound, as well as those that are broken-whiched, cannot be mode to cough at all. The molons of the flank must be more narrowly watched in such cases. It roometines happens that the horse may be made to cough more readily effort his invenhing is all lite hurried by exertion. The most of broken-winded horses always have a cough, but some have none.

Broken-wind is an unsoundness. About this there is no difference of opilon. But it may be difficult to ascertain how long the horse has had the disease. Some say that it comes on all at once; that the horse may be well in the morning, and broken-winded at hight. This may happen in many cases, but it cortainly does not in all. The usual history of the horse is, that he has long been snowshat touched in his wind, but that it is only within two or three days that he has become so very bad—so widently broken-winded.

This discase does not render the horse quite useless. Even in the worst of cases he is fit for some work ;

THE CAUSES OF UNSOUNDNESS.

some, more alightly inflexed, are able to follow the hounds with iolerable vigcors, and many run for a long time in stage coaches. But they must be well managed ; and often, in spite of the greatest care, they will, on particular days, be found very inefficient, or quito uscless for fast work. They never last long, and they are greennily very lean while at work.

Drugs and other things are sometimes given for the purpose of concealing broken-wind, until the horse can ho sold. There are certain remedies by which the hreathing may he rendered more tranquil and regular, but they soon cease to operate. The cough however, cannot be altered by any means.

Rearing.—The head of the windpipe is sometimes distorted, or dissensed, and the apenture through which the air passes is contracted. As the air traverses this narrowed part of its passage, a sound is produced, varying in loadmess and character according to the degree in which the obstruction exists. When the distortion is considerable, the noise is load and deep; it is bart perhaps expressed by the word roaring. The horse is called a roarer. When the head of the windpipe is much contracted, the noise is load and admitted the horse.

The olatroction is range so great as to produce any unusual noise in the breathing, while the home is standing at rest. In a few, it is heard as soon as they are pat to a trot; but in the majority of eases it is not heard unil the hores is pat to exertion, which quickons the hreathing. He should be mounted, and get a smart galloo publik or in deeg round_i or sufficiently

136 THE CAUSES OF UNSOUNDNESS,

far on any ground, to increase the breathing. If the examinant does not ride himself, he should stand close to the horse at the moment he comes in.

When the dealer wants to conceal the noise of roaring, piping, or whisting, he takes the horse out a considerable distance before putting him to the gallop; and, in returning, he slackens the pace, so that the breathing may become tranquil before the horse reaches the examiner. This is called *the long trot*.

There are other diseases in which the horse makes a noise in his breathing. *The velocere* breathers thickly and with difficulty. There is some noise, but it is not, loud nor arhill, it is not, and increased by exertion, but is often heard even when the horse is at rest. This is do depend upon some atteration in the shape or calibre of the windpipe. *Thick wind* differs but little from wheesing; it he horse breathers with difficulty; he is soon distremsed; the flanks heave much, and rapidly; here is some little noise, but it is not that which attracts attention so much as the laborious heaving of the flank.

The Highldoncer utters a load, irregular, mixed produced by a rearer and a piper; at other times, it is something like the noise of a blastformace heard at a distance is the nostilia are vuided dilated. The highldoner is not always the same. On some days the noise is not solud, and in a few cases it almost disappears after the horse becomes hasted. In these it may possibly arise from temporary spasm of the muscles connected with the head of the windpipe.

THE CAUSES OF UNSOUNDNESS. 137

duced by some obstruction in the nostrils; possibly also it may, in a few cases, arise from some peculiar motion of the nostrils. It is nover heard but during quick exertion.

Rouring is an unsoundness, whether it exists in the first-mentioned form, or in any of the others; most of which are mergy modifications of the same disease. Professor Coleman, in his lectures, used to mention a hores that became a rearer in ten days ; and Nimord, in his Letters on Condition, tells us of one that contracted the same disease while standing in the stable, during the continuance of a frost.

Granting—Some hores, when suddenly struck with whip or spur, utter a short, single sound, resambling the grant of a log. These are termed granters. Dealers shon them. They usually regard them as use-and. Little or nothing is shown of the cause, or of the consequence 3 and at preient veterinarians appear not to have made up their mindes as to whether this benes it unsound or not. It may often be a symptom of discase, but its met with in hores that show no sign of discase, unless this sound be regarded as one. The prudent purchaser, however, will avoid a granter. The noise may be elicited by stuffing, or flegning to strike, the hores on the side 1 but he must see the coming blow, which should fall suddenly.

Examination subsequent to sale ... After the horse has been purchased and delivered, he may undergo another examination, more minute than could be per-

138 THE CAUSES OF UNSOUNDNESS.

formed prior to the sale. His speed, power, docility, and education, and his soundness, may then be made the subjects of inquiry much better than when the horse was the property of another individual. If the horse has any defects-if he be unsound, or vicious, or have any other fault for which the warranty entitles the buyer to return him-it is probable that they will be discovered in the process of time ; but the sooner they are discovered and challenged, the less is the chance of their pre-existence being disputed. A careful examination, according to the directions given in the preceding pages may detect that which might escape casual observation for weeks or months ; and after the lapse of so much time, it may be impossible to prove that the horse had the defect complained of before he was sold. Besides. the price of the horse is not usually paid until a few days after delivery, and as it is often very difficult to get it refunded even after the horse is completely proved to have been unsound when sold, it is better, if it can be so managed, for the purchaser to retain the price until he has become better acquainted with his purchase; and he may use the interval to examine the horse for unsoundness, and for placing him under the influence of all those circumstances which usually make horses exhibit their vices. The stableman, too, should be instructed to give immediate information of any peculiarity which he may observe, whether it have reference to lameness, unusual habits, or viciousness, Among other unsoundnesses that cannot always be detected before purchasing, are crib-biting and windsucking. These are best discovered by the man who is oftenest in the stable, or most employed about the horse.

Chronic cough is rarely discovered until the horse has been several days in the possession of his new owner. He may cough once or twice, or oftener, when offered for sale, and yet he may have no disease, or he may have caught a cold. But chronic cough is another affair. The horse coughs very frequently; the sound is loud, harsh, dry, prolonged, and often repeated. When severely affected, the horse will ofton stand for several minutes, coughing as if he would shake himself to pieces. It is most common immediately after going into the stable, or upon coming out of the stable, or after eating or drinking. Many horses work well and hardly for years, with chronic cough ; they appear not to suffer from it : but frequently they become broken-winded. This circumstance is sufficient to make the cough an unsoundness.

LAWS RELATING TO SALE AND WARRANTY OF HORSES.

Sale.—A contract of sale is an agreement between two parties, by which the one engages to convey to the other a certain subject for a certain price.

Thut each may be compolled to perform his own part of the contract, it is necessary to have some proof that the bagnah was really and actionaly made. When the terms are arranged, it is usual for the parties to join hands in token of their mutual agreement, and in some places the buyer gives a seller a small piece of money, as earnest, or part of the horse price; or each gives to the other a written note of the contract.

In England, it is enacted by the statute against

frauds, that "No construct for the sale of any goods, waters, or merchandiae, for the price of ten pounds or upwards, shall be allowed to be good, unless the hyper accept part of the goods so sold, and actually receive the samo, or give something in earnest to bland the bargain or in part of payment, or that some note or memorandum in writing of the said hargain be made and signed by the parties to be charged by such contact, or their agents theremoto haveling subriefs."

In Scotland, the law is somewhat different. There is no statutary enactment similar to the Statute of Frauds in England; and transactions of this kind are subd by the common law, according to which the contract or bargains is fully completed, so as to prevent resiling, without either earnest, delivery, or note of sale.

The conditions of sale are of two kinds ; they are implied or express. The former arise out of the nature of the contract, and are presumed to be a part of the agreement, if it be not otherwise stipulated ; the latter arise from the introduction of some stipulation not usually or naturally understood in the transaction. Thus, if a borse be sold, and warranted, it is an implied condition that be may be returned within any reasonable time, if he is discovered to be unsound : but if it be stipulated that only three days are allowed for discovering unsoundness, it is an express condition, and the purchaser must abide by it. The conditions of sale may refer to the time of payment, the time and place of delivery, or to the qualities of the horse, or to any other point usually or unusually connected with the contract of sale. In all cases, they must be

strictly complied with by both parties : a breach on the one side entitles the other to sue for performance or for damages, or to annul the bargain altogether.

The pasting up of the conditions of sale on the auctioneer's box, or on the walls or doors of the auction-room, or the publication of them in printed catalogues to be had in the room, is sufficient notice. of the conditions.

Warranty.— Those conditions of sale which relatto the qualities of the horse, form the warranty. A horse might possibly be warranted lame; but when the seller says he warrants the horse, he is understood to say that the horse is sound, and that he will be taken back if he about dbe otherwise.

Kinds of warranty .- By the law of England, warranties are express or implied ; the latter, however, differ in no respect from the former, except in the circumstance of proof. The intention to warrant is collected from the whole tissue of circumstances proved, and as a legitimate deduction from them, like the presumption of any other part not established by direct evidence; while the express warranty is proved by direct and express testimony to the fact itself. To give a single instance :--- In Jones against Bowden, it was proved to be the uniform course and habit of dealing in a particular place, if the articles were seadamaged, to state that fact on the sale of it : a sale was made without any such statement, and it was therefore held that the article was warranted not seadamaged. This was an implied warranty.

But in Scotland, warranty is always implied in the contract of sale-unless perhaps excluded by the

practice of particular tracks.* If the selen intend not to warrant, he mut tacknessly as sole. Those faults, however, which relate to temper, steadinass, timidity, use, &c., are not within the limits of an implied warranty. They must be guarded against by express undetaking: and it becomes a question of evidence whether such engagement has been sudertaken, and how far it has been complied with.

In Scotland, then, the warranty of soundness is always implied, in England it must be expressed.

A qualified warranty is one in which the horse is warranted sound, with the exception of something pointed out at the time of sale,

Price.--It is a common opinion that no horse sold for less than ten pounds can be held as warranted ; but this is a mistake. There is no fixed price. A pony

 In Scotland, and I believe in England, the most of dealers never buy a high-priced horse without demanding a warranty but a great many prirate persons never think of inquiring whether the horse is warranted or not. Some ask if he is all right, and appear content when the seller replies that he is, as far as he knows.

may bring eight or nine pounds if he is sound, but the same animal may not be worth one, if unsound : and the nurchaser of a pony at eight pounds, is surely as much under the protection of the law as the purchaser of a hunter at a thousand. The court requires to know, not only what was paid, but what the animal would be worth, if sound. Thus, in a dispute about a mare that had cost twenty-five pounds, and was sold, after six months, for eight, it was held that she could not be warranted. In England the payment of a sound price does not of necessity warrant the horse ; in Scotland it does, and this law gives rise to much litigation and knavery. A horse evidently unsound may be purposely bought at a sound price, and the buyer, after taking much work out of the animal, may return him and demand the money, or refuse to pay it, and the seller has no remedy unless he can fully prove that he said he did uot warrant.

Form and extent of Warranty .-- The warranty is usually included in the receipt for the money, after the following manner :--

" Glasgow, 22d February, 1836.

Received from A. B. the sum of thirty pounds sterling, for a Bay Gelding, warranted Sound, and free from Vice.

C. D."

It may be much more extensive; the age, the fitness for work, and freedom from blemishes, might also be included. But, however lavisbly the seller may praise the horse before purchase, few are willing to certify all this upon paper. Indeed, it can hardly be expected

144

that he should, considering to what an extent it makes him responsible—and considering also how liable horses are to change, when they pass under other management.

The warranty should be written—it may be verbal, and proved by oral testimony i but, in case of dispute, witnesses may be out of the ways, they may forget; they may be tampered with; and their attendance in court adds much to the expense. None of these objections apply to the written guarantee.

The written warranty should contain all the important conditions of the bargain. In Pickering against Downon, Chief Justiee Gibbs said, " I hold that if a man brings me a horse, and makes any representations whatever of his quality and soundness, and afterwards we agree in writing for the purchase of the horse, that shortens and corrects the purchase of the horse, that shortens and corrects the representations ; and whatever terms are not contained in the contract, do not bind the seller, and mart be struck out of the ease." It is the same in Sociand.

A servant or agent, such as an auctioneer or livery stable keeper, may warrant, and his warranty binds the principal, unless he gave express orders to the contrary.

Duration of warranty.—Some people entertain a very erroaceas notion of warranty. They imagine that it makes the granter responsible for whatever may happen to the horse for a definite period *efter sails*; some say three days—some three weeks—others three months—and others, still more foolish and inconsiderate, would have it extend to six months. But the exthi is, the warranty has no reference to any future

event, except such as may arise from causes existing before or at the time of sale.

Breack of warranty.—Should the hore be discovered to be uncound, or vicious, or to have any other fault guarded against in the warranty, the buyer is catilited to realls. He agreed to buy the horse upon condition that he wars sound, docids, &c., and he finds that the conditions have not been compiled with ; and the haw affords him a remedy.

Return .--- Before he draws back, however, he should be certain that he has sufficient reason for doing so. In the first place, he should ascertain whether the unsoundness, or whatever the fault be, really exists : and next, he should learn, if possible, whether it existed before, or was produced after, sale: If this book does not afford him the requisite information, he must apply to a veterinarian. And, that there may be no suspicion of partiality, or, as it should be called, of dishonesty, his opinion as to the cause and age of the unsoundness should be obtained before he is informed. of whom the horse was purchased. He may know the horse for an old natient ; but if he is honest he will cither give an impartial opinion, or he will refuse to examine the horse at all-which perhaps is the best way, as long as he has to deal with people who cannot understand why he should hesitate to sacrifice his self-esteem and professional reputation for their paltry interests.

The buyer is sometimes too much influenced by the reports of his stableman. He may be told that the

heres has got the lampa, worns, humours, and a hundred otherill things about him: bathe should make further inquiry before he proceeds against the seller; and it may possibly be found that the fault is not in the horns, but in the man who sold him. With unpartonable negligence he has omitted to pay the initiatory fee; and there is nothing wherewithal to christen the poor beast, and to drink long life and good luck to him.

Breach of warranty, however, having been ascertained, the bayer is at liberty to aunul the contract. The horse is returnable. The English law punishes a breach of warranty more severely than the Scottish.

In England, the bayer may return the horee, and domand or pursues for the price j or he may retain the horse, and bring an action on the warranty for the difference between the price and the real value. If he offer to return, he may also recover the expenses of the hore's keep j but in this case a positive offer to return is said to be necessary.⁴ To cutile the bayer to maintain the action, no notice of the unsoundness need be given ; nor in it necessary to bring the action immediately on discovering the unsoundness.

But though a notice is not essential, yet it ought

• As in the case of Caraveroll e. Corav, where, upon breach of the warranty proved, into tender made of returning the horse, it was objected that the buyee could proverse subling for the keep. Lord Mansfeld side, "The contrast lesing broken, the seller must give back the money, and the buyer must return the horse [but unless he has previously tendered him, he cannot recover for the keep.

always to be given, as the omitting so to do will furnish, at the trial, a strong presumption that the horse at the time of sale, was free from the defect complained of ; thus rendering the proof of a breach of warranty more difficult. Common justice and honesty, it has been remarked, require that the commodity should be returned at the earliest period, and before it has been so changed by lanse of time, that it may be difficult or impossible to ascertain what were its original qualities. The law indeed requires that the horse be returned in as good condition as he was in at the time the unsoundness was discovered ; if the animal fall in value subsequent to this period, the seller cannot be compelled to take him back ; and the purchaser in such a case can only rely on his action for recovering a proportional part of the price.

In Scotland, the law, with regard to return, in different, and fairer. The purchaser cannot, as in England, retain the horse, and bring an action to recover the difference between the price and the real value. He must either keep him at the price paid, or roturn him on getting repayment; and if he have suffered direct damage from the unsoundness, fee, of the horse, will also here an action of damages for reparation.

Moreover, the return must be immediate. So soon as the unsoundness is discovered, the parchaser is bound to give notice to the seller, and offer to return the horses and failing to do so, he is held to have acquisced in the defect, and is barred from an action on the seller. The exact time, after coming to the knowledge of the defect, within which the purchaser must offer to terum, has never bese precisely fixed 3 but there must

be no undue delay, and the sooner a purchaser gives notice the better.

In Scotland, it is the usual practice among dealers, after discovering manondness, to get the horse caamined by a veterinarian, who gives a written certificate, containing his opinion as to the cause of the uncondenses, and the time it has existed. The hayer sends this certificate to the seller, at the same time requesting that the horse he taken away, and the money returned. If this notice he neglected, the horse is then put up at livery, and the seller informed of where he is standing. The purchaser then suce for the horse's price, and the express incurred.

The certificate of unsoundness is usually couched in the following terms :--

" Glasgow, 22d February, 1836.

"At the request of Mr. A. B., 1 have this day examined a Dark Brown Gelding, five years old, said to have been purchased, three weeks ago, from Mr. C. D., of Edinburgh; and I hareby centify that I find the horse lame from spavin in the right hock, and that, in my opinion, he was unsound at the time of sale.

" E. F., Veterinary Surgeon."

 The charge for the examination, and this certificate, is ten shillings and sixpence, supposing the horse to be brought to the premises of the veterinarian. The manes, it will be observed, ought to be written at fall length; and the description of the borse may be more complete. A certificate, however, of this lind is useless, unless it come from a qualified veterinarian. The

seller may and should reject the opinion, or at least refuse to pay for the opinion, of a quack, or as he generally calls himself, a farrier. The fee is payable by the huyer, who demands it from the fielder.

Delivery .- Delivery may he made to the huyer, his servant, or anthorized agent.

Delivery may he made by putting the horse into the stahle of the buyer;

And he is delivered if the seller transfer him from his sale to his livery stable.

The seller is bound to offer immediate delivery, and if any expense or loss is incurred by the hayer's refusal to accept, it must be borne by the bayer only.

The seller may refuse to deliver till he receives payment ; but after delivery, he can only sue for the price, not for return of the horse.

And if the price be paid before delivery, the buyer can only insist for delivery, not for return of the money.

On the seller refusing to deliver, the price heing tendered, the buyer may either annul the contract, or raise an action for performance and damages.

And if the buyer refuse to pay the price, delivery heing offered, the seller may, after the lapse of a reasonable time, either sue for payment or annul the bargain, and resell the horse.

Rish between buyer and seller.—The contract of sale heing concluded, and the seller not refusing to deliver upon tender of the price, the whole risk is the buyer's. The horse may meet with an accident, he

150

may fall lame, or take disease, and die in a day or an hour after sale; but the evil falls altogether upon the buyer, unless it can be proved to have arisen from some cause existing at or before sale, or from some fault or neglect of the seller.

Conclusion .- It may be well to observe that the preceding articles on sale and warranty must not be expected to furnish all the information which may be desired in every case of disagreement between buyer and seller. Disputes beyond number may arise, and the principal transaction may be obscured or complicated by such a variety of circumstances that no written laws can anticipate and provide against the whole of them. In general, it is only cases of this intricate character which are carried into a court of justice. When it can easily and clearly be shown that wrong has been suffered, the offender is usually willing to afford redress as soon as he finds that the aggrieved individual is determined to seek it from the law. But there are a great many disputes in which each party thinks himself on the right side. When there is any doubt about the matter, the aggrieved should consult a professional man, a lawyer, as to whether he is wronged or not, and as to his chance of obtaining redress. The complainer should give his agent a full and explicit account of all the circumstances, and he should endeavour to do so as briefly as possible. It should also be known, before adding other expenses to the loss already sustained, whether it be possible to obtain the amount of damages from the defendant, even though it were proved that he is entitled to pay

them. Of course it is needless to prosccute a man for money which be has no means of paying, or one who can make it appear so.

Into a lawsuit, regarding a horse, no man should enter without consideration. The delay in the oroccedings, and the expense attending them, are abundantly vexatious; and it is seldom possible to foresee how the cause will end. Many are willing to suffer the wrong, and to sacrifice a few pounds rather than encounter so much annoyance, and they cannot be greatly blamed. Looking at the decisions that have been made in courts, there can be no doubt but many of them are erroneous. This is not to be wondered at. The judge, in general, is wholly unacquainted with stable affairs; he hardly knows the language of the principal witnesses; and when the testimony of one contradicts the testimony of another, he knows not to which he sbould give the most credit. I have no doubt but he is frequently embarrassed by technical words, which the witness can neither explain nor do without. The most important witnesses are often stablemen and farriers, who always speak their own slang language without considering that it is intelligible only among themselves; and when they are desired to explain any word, they may attempt it, but they seldom succeed. Professional men are not so bad ; yet they, too, very frequently produce error or confusion by using technieal words-that is, words not in general use, whether they are confined to a class of learned, or to a class of ignorant persons. When a question is asked as to the nature of a disease or unsoundness, it is not the mere

name, scientific or vulgar, that is wanted, nor yets a scientific account of the disease in all its forms and stages, hot a very short description of the disease as it exists in that particular case. I admost very instance this may be done most explicitly without the use of a single amhigeous word. The description had better be to short than too long; it should resemble a defidition. Further information may be obtained by inquiry; and all questions should he answered directly to the point. It is much hetter to deliberate for a moment, in arranging an answer, than to utter a string of disjoint of todions nonzense.

When the evidence of one witness is in opposition to that of another, the judge, from certain circumstances, is very often able to distinguish hetween the true and the false. But he also, especially in Scotland, often overlooks a very material difference in the professional education of the witnesses. A mere quack, who knows no more of anatomy and medicine than a butcher, is sometimes summoned into court, and his evidence pitted against that of a man who has studied his profession as regularly, and received the aids of other sciences in the same manner as a medical practitioner. This is far from heing common, hut it sometimes happens. The agent, however, on the other side usually takes exceptions to the evidence of the quack, and gets it thrown aside altogether, or he takes such advantage of it as to make it subservient to his own ends. The quack usually styles himself a farrier. hut one or two have dared to assume the name which properly belongs only to the qualified man-the veteri-

CAUTIONS RELATING TO BUYING. 153

narian. The lcss either purchaser or proprietor has to do with them the better. They are always bringing vexation or loss to some one.

Besides the above circumstances which complicate horse causes, or render the nature of the ultimate decision uncertain, there are various others arising out of the liability of the animal to rapid changes, the difficulty of procering positive proof, the difference of opinion on the same utiget even among probasional men, and the case with which unprincipled longers about stubles may be made to swear to any thing. Low dealers have always plenty of these characters at command.

General Cautions relating to Buying.

Never purchase a horse from a friend; nor from a litigious man; nor a petty lawyer; nor from one who cannot pay the expenses of a lawsuit.

Never, before purchase, show that you are exceedingly well-pleased with the horse.

Hear all that the seller and his grooms say about a horse ; but be certain of nothing till you have ocular demonstration.

Never appear to know any of the tricks of dealers, unless they be attended with crueity, when it may be proper to discourage and punish them by expressing disapprobation, and refusing to have any transactions with such men.

154 CAUTIONS RELATING TO BUYING.

But never be so rude as to betray any suspicion of want of faith in the dealer. It is always very offensive, quite useless, impolitic, and it may be erroneous.

If you discover an unsoundness, or vice, before purchase, it is needless to point it out. To say that the hores is too good for your purpose may serve as well. You need not offend the owner; and you have no right to give the horse a bad character, even when you are quite sure that he deserves it.

Seldom give the price first asked. Twenty, or thirty, or even forty per cent. is no great abatement in horse-dealing.

Be cautious when a seller warrants a hores, and at the same time candidly tells you of some defect. All tild tenderness, produced by a had alos, may mean incurable lameness : a slight cough, of no consequence, may signify broken wind, or chronic cough; and when it is said the hores is a little translessme to go about, it may often be concluded that he is notoriously videous.

When an auctioneer says that the horse is not warranted, but that he will warrant him for a guinea, his offer may sometimes be taken, but upon condition that a fair trial be allowed before payment.

Always, when possible, delay payment until the horse has been minutely examined and tried.

Be suspicious when delivery is refused until the price is paid, or a certain portion of it deposited—that is, when you are known to be credit-worthy.

When a horse has many faults, object only to that for which he can be returned. To object first to the price, then to windgalls, and last of all to spavin, is to





ENGRAVINGS OF THE TEETH. 155

say that, right or wrong, you are determined to break the contract.

To a person of doubtful character never, and to a dealer seldom, roturn a *paid* horse until the price is refunded.¹ There are men who manage to keep both the horse and the money.

Engravings of the Teeth.

These four figures were drawn from the teeth of horses known to he of the ages represented; the soft parts, the gums, had been removed from them all except the five-year-old, which was put into the hands of the delineator the day after the horse's death.

The first figure shows two of the temporary in contrast with four of the permanent teeth. The mark in the central pair is unusually faint; hut the oval form of the wearing surface is very evident when contrasted with any of the older mouths.

The second figure shows the shape of the tushes, and of the corner teeth, soon after their appearance.

In the third figure, age has altered the shape, and the direction of the teeth. It is not common for a nine-year-old mouth to have so much mark. With people who guous the age entirely by the mark, this would pass very well for a seven-year-old, while others, who look also to the shape of the veraring surface, and the elongation of the teeth, and their direction, would come nearer the truth.

156 ENGRAVINGS OF THE TEETH.

The fourth figure is introduced to show, in an extreme degree, the alterations which the teeth undergo in their shape, length, and direction. It shows the diminished breadth of the jaw, as well as of the teeth from side to side ; the smoothness, the round, triangelar, or equilateral form of the wearing surface, and the elongation of the body.

A Las

Action, kinds of, 57; as indicative of disease, 124. Age, at what, the horse most valuable, 37; Blaine's calcu-

lation concerning, 38.

Aged ; a horse is so called after he is eight years old, 41. Agility, tricks to conceal the want of, 56.

All-abroad; said of a horse when his forefeet fly apart in progression, 15.

Amaurosis ; a kind of blindness, 89,

Amberry ; a synonyme of angleberry, and wart, 73. Angleberries, not commonly constituting unsoundness, 73. Apoplexy, more generally termed staggers, or megrims, 131.

в

Back, length of the, 325, jury of the, 130. Back sizew, position of the, 71 (lury of the, 104. Balancing, a mode of concealing harmens, 127. Barrel, the, meaning of the word, 84. Beauling worst a defect of the fetucks, 20. Beauling worst, 20. Bitter, signs of 6, 93. Bitters, wards of , 90; an unsonadnes, 90. Bitters, wards the Jp. (10).

Blood spavin, not a disease, 124. Bone spavin, always an uncondness, 124. Bone spavin, always an uncondness, 124. Bone, want of, blow the kness, 184. Brokes, a synopen of educated, 72. Brokes is aryonene of educated, 72. Brokes in synopen of educated, 72. Brokes is aryone of educated, 72. Brokes is aryone of educated, 72. Brokes is arguing of the synopen of the synopen Brokes arguing arguing and a synopen of the synopen Buck eyes, ixquely applied to several defects of the eyes, which see, to and 85. Buyer's 11 treatment of his purchase, 43; often does not know what he wants, 1.

Buying, general cautions regarding, 153.

C.

Calf-kneed, what horses so called, 17, Canon, defects in the form of, 17; diseases seated in the. 103. Capped hock, a tumour on point of the hock, 120. Capulet ; a tumour on point of the elbow, 102. Cataract in the eye, au unsoundness, 87. Catarrh, a common cold, 95. Certificate of unsoundness, 148. Channel, the space between the branches of the lower jaw. 10. Chest, the, varieties in its form, 99, Chest founder ; sometimes applied to grogginess, 125. Chronic cough, an unsoundness, 139. Cleek spavin ; a Scotch synonyme of stringhalt, 129. Clicking ; a synonyme of forging, 25, Cold. a. constitutes unsoundness, 95. Colour, natural and artificial, 36. Colt ; a horse under five years of age, 41. Condition, meanings of the word, 47. Conformation, external, defined, 8, Contraction, that is, of the foot, not an unsoundness, 112.

Corns, what horses most liable to, 21; nature of, 113. Cough, from size threat, an unsoundness, 50. Counter; synonymous with breast and boson, 14. Courage, a opposed to timility, 64. Courage; a frem used synonymously with energy, 55. Cow-hocked; having the hocks approaching each other, 30. Creat-failen, applied to a creations need, 12. Creat-failen, applied to a creation of the 32. Creation of the applied to a creation of the 10. Creation of the hock, 100. Carby hocks, form of, 50.

D

Daisy cutter ; what horses so called, 36.

Dealer, the, sometimes unjustly treated, 48; entitled to prepare bis horses for sale, 50.

Dealers, tricks of the, firing, 126; balancing, 127; gingering, 57; bishopping, 45; puffing the glims, 46; stuffing the nostrils, 92; the long trot, 196; dying the hair, 36.

Delivery of a purchased horse, laws relating to the, 149.

Digging the toe, a sign of unsafe action, 59,

Disease, definition of, in relation to soundness and unsoundness, 76.

Diseases, internal, remarks on, 132.

E

Earnest money, must, in England, be given to make a bargain binding, 139; not so in Scotland, 140.

Ears, motions and form of the. 9.

Education, influence of, on the horse's price, 71.

Elbow, the, its breadth and position, 15; tumour on the point of, 102.

Energy, or desire of going, 55.

Ewe-necked ; wanting the crest, 12.

Eyes, natural defects of the, 10; diseases of the, 85.

Examination of purchase after sale recommended, 137.

External conformation, mode of learning to perceive varieties in, 8.

F

- Farcy-buds; ulcerating tumours on the skin; a sign of glanders, 92.
- Farrier; a veterinary quack; his testimony not to be depended upon, 49; his certificate of unsoundness good for nothing, 148; sometimes confounded with the Veterinarian, 152.

Far-side, the right side of a horse.

Faults, meaning of, 75.

Fetlocks ; faults in their relative position, 18 ; enlargement of, 106.

Fiery horses ; those having an excess of energy, 55.

Figging ; synonymous with gingering, 57.

Filly ; a mare under 5 years of age, 41.

Firing ; a trick of the dealer, 56, and 126.

Firing ; a surgical operation ; marks left by, 101.

Flank, light in the; wanting belly, 26.

Flat-sided horses, defects of, 24.

Flat soles, objections to, 116.

Foal; applied to the young horse, whether male or female, till he is one year old.

Foal teeth, sometimes forcibly drawn, 44.

Foot, form and size of the, 21 ; diseases of the, 109.

Fore-arm ; the space between the elbow and the knee-joints, 16.

Fore legs, position of the, 15.

Forging; striking the shoe of the fore foot with the toe of the hind one during progression, 25.

Foul, or foulness ; applied to glanders, 92.

Founder, effects and signs of, 117.

French table of proportions, extracts from, 32.

Frog, the seat of thrush, 11S.

Frush; an old term for thrush, not quite obsolete, 113. Full-mouthed, when a horse so called, 69.

÷G

Gaskin, depth and volume of the, 29.

Gaunt hellied ; having the flank tucked up ; wanting helly, 22 and 26.

Gingering, needless folly of, 57.

Glanders ; a contagious and incurable disease, 92.

Glands under the jaw, enlargement of, 96.

Glass eyes; the vulgar term for amaurosis, 90.

Gleet; a discharge from the nose, of long standing, 92.

Gourdiness, swelling of the legs which disappears during exercise, and predisposes to greases, hut does not render the horse unsound, 18.

Grease; a swelling and rawness of the legs attended with a fetid discharge; not an unsoundness.

Grogginess, renders the horse unsound, 125.

Groin, the seat of rupture, 119.

Gruuting, what meant by, 137.

н

Habits ; meanings of this word, 74.

Hair, changing the colour of, by dyeing, 36.

Hand; a measure equal to four inches, by which the horse's height is calculated.

Haunch bones, fracture of the, 119.

Haunches, breadth, width, and depth of the, 28.

Head, form, size, and expression of the, 9.

Hernia, an unsoundness, 119.

High blower, what horse so called, 137.

Hind legs, position of the, 29.

Hip-shot ; having the haunch hone hroken, 119.

Hips, ragged; applied to horses whose haunch bones project, 26.

Hocks, breadth and bend of the, 50 ; diseases of the, 120. Hoof; applicable only to the horny covering of the foot, 21 and 109.

Hoof-bound ; a synonyme of contraction, 112.

Humours ; applied by grooms to almost every disease, and often tonothing, 146.

т

Interfering ; synonymous with cutting, 106.

Jack, a ; synonymous with bone-spavin, 122. Juvenility, signs of, independent of the teeth, 43.

к

Knce, defective forms of the, 19; blemishes of the, 73 and 102 ; stiffness of the, 10S.

Knee-up action, synonymous with high action, 59, Knuckling over, what meant by, 20,

Lameness always renders a horse unsound, 125, Lampas; a name for which the veterinarian finds no disease, 146. Law-suits regarding horses; remarks on, 150; decisions in, why so often contradictory or erroneous, 151. Lazy horses, worthlessness of, 52, Leaf-eared : synonymous with lop-eared, 14. Legs, position of the fore, 15; of the hind, 29. Light bellied, or light carcassed, wanting depth at the flank, 22 and 26. Lob-cared, what, 10, Loins, length and breadth of the, 25: injury of the 130. Long-jointed ; having the pasterns long, 19. Long trot, the, what, 196. Lunatic blindness, applied to specific ophthalmia, 86.

M

Mal-conformation, any defect in conformation.

Mange; a disease of the skin attended with itchiness, loss of hair, or rawness, and, by some, considered as an unsoundness.

Meagrims, the staggers, apoplexy, signs of, 131. Moon blindness applied to specific ophthalmia, 86. Mort, the ; applied to glanders, 92.

N

Navai gleet, a chronic discharge from the navtril, 92. Navicani-gloin discas, terrood groups [lancease, 123. Navi aide; the left side of a horse. Neck, various forms of the, 11. Neck veries, sometimes one of them awanting, 90. Newro operation, or nerving; used for unnerving, 107. Neurotomy, section of the nerves, renders a horse unsound, 103. Nigh side; the left side of a horse. Nigh side; the left side of a horse. Nicking, why so common in Ireland, 97. Nostrils, size of the, in long-winded horses, 10; tumours in the, 91; discharge from, 92.

0

Off-side; the right side of a horse. Ophthalmia, common and specific, 86. Over-reaching; striking the heels or pasterns of the forefeet with the toe of the hind-foot, 25.

Р

Palsy, partial, of the hind legs, 129.

Pasterns, length and obliquity of the, 19; ringbone on the, 109.

Pig-eyed ; having small sunken eyes, 10.

Piping, what, 135.

Points of a horse; used, with an adjective, to denote good or bad conformation, 8.

Polypus, a tumour ; nostrils sometimes the seat of a, 01. Proportion of part to part, 31. Paffing the glims, what 4, 46. Pumice foot ; a foot in which the sole is convex, 117. Pumil of the eye, what, 67.

Q

Qualities of a horse, in what consisting, 3; how ascertained, 4.

Quarters, hreadth, depth, and width of the, 28.

R

Ragged hips, what horses said to have, 28.

Return of an unsound horse; laws relating to, not the same in Scotland as in England, 145; caution regarding, 146.

Ribbed-home, meaning of, 26.

Ring-hone, an unsoundness, 109.

Ringle eved : synonymous with wall-eved, 87.

Risk hetween huyer and seller, 149.

Roach-backed, a defect in the loins, 26.

Roaring, kinds of, 185 ; an unsoundness, 187.

Roman-nosed, what horses so called, 10.

Rowels and setons, marks produced by, 101.

Running thrush; a discharge from the cleft of the frog, 113.

Rupture in the groin, an unsoundness, 119.

s

Saddle-hacked, having the spine sunk, 22. Sade, English and Seotch havs regarding, 189. Sanderack, an unsoundness, 111. Serew y a worn-out horse. Seller, someituse unfairly treated, 48. Senility, signs of, healdes the teeth, 43. Setons, marks, produced by, 101. Sets, objections to mares, 67. Shapes; synonymous with points and external conformation, S.

Shank, defects in the form of, 19; diseases seated in the, 10S.

Shivering, what, 130.

Shown-in-hand, meaning of, 53.

Short jointed ; having the pasterns short, 19.

Shoulder, conformation of the, 13; tumours on the, 100.

Shving, what, 55; causes of, 56.

Sidebones, constituting unsoundness, 110.

Soft horse, a, one not in working order, 48.

Sluggish horses, character of, 52.

Sore throat constitutes unsoundness, 94.

Soundness, vagueness of the word among horsemen, 75; definitions, 74; error regarding examination of horse for, 78.

Spavin, hone, 122, bog, blood, 124.

Specks on the eyes, not in general an unsoundness, 85.

Speedy-cut, meaning of, 103.

Splints, without lamencss, no unsoundness, 104.

Sprain of the hack tendons, an unsoundness, 104.

Staggers, renders a horse unsound, 131.

Star-gazer, a horse that carries the muzzle much proiected, 12.

Stifle-joint, enlawement of, 119.

Stringhalt, not an unsoundness, 129.

Stumhling, action concerned in, 59,

Swaying of the back; applied to a half palsied state of the hind legs, 129.

т

Teeth, natural marks, numher, and shape of the, 57; tricks of dealers on the, 44; engravings of the, explained, 154. Temper; see energy, 55; courage, 64; and vice, 66. Tendons, the hack, injury of, 104; relative position of, 17. Testicles, the, sometimes diseased, 120. Thick wind : difficulty of breakhing. 136. Thorough pin, seldom an unsoundness, 122. Throat, soreness of, 94.

Thrushes, onght in all cases to constitute unsoundness, 113. Tied below the knee, meaning of, 18.

Tottering; a trembling of the fore legs observable in some horses after exercise, and especially in these that are bent at the knees or have upright pasterns, 17.

Trial, a, always, when possible, to be obtained before purchase, 6.

Tushes, or tusks, give but imperfect signs of the age, 43.

U

Unnerving, renders the horse unsound, 107.

Unsoundness, definitions of, 79; examination of horse for, 82; list of parts to be inspected for, 84; certificate of, 140; on the causes of, 85; classification of causes, 81; examination for, subsequent to sale, recommended, 137.

v

Veins of the neck, one sometimes obliterated, 99.

- Vertigo, synonymous with staggers, megrim, and apoplexy, 131.
- Veterinarian, the, sometimes confounded with the uneducated practitioner, 132; the fittest person to inquire into the causes of unsoundness, 49.

Vice, meanings of the word, 66.

Vision, partial or complete loss of, an unsoundness, 90.

w

Wall-eyed; having a part or the whole of the iris white 87.

Warranty, what, 141; kinds of, 141; what constitutes, 142; form and extent of, 143; should be written, 144; duration of, 144; breach of, 145.

Warts, often very annoying, but seldom constitute unsoundness, 73.

Washy horses, what kind so called, 22.

Weed, st m BL-made workhies horse. Wall-shield hourse as i, one out of working condition, 45. Warding, which hourse as i, one out of working condition, 45. Whinting, a hind of rearing, 135. Winds-making, an unconnelness, 98. Winds-shift, and unconnelness, 98. Winds-shift, and unconnelness, 98. Winds-shift, and the the institution, 18. Winds-shift, and the law shift, 18. Winds-shift, and the law shift, 18. Winds-shift, and, 106. Work, dispedition to, waries greatly, 55.



POPULAR WORKS

PUBLISHED BY

W. R. M.PHUN, 88, TRONGATE, GLASGOW; N. H. COTES, 139, CHEAPSIDE, LONDON.

SOLD BY ALL BOOKSELLERS.

I.

Dedicated to the Hon. Jomes Ewing, Esq., M. P. Wi'Phun's Guide through Glasgow, Neatly hound in pocket Size, 2s. 6d.

Pocket Map of Glasgow, In a Case, 1s., in Sheet, 6d.

• Transmissions from a system in which we are more immediately intermediate has been of Mr. Kulayr, They are published in Giagow by the ionse of Mr.Pinny, and a second with the diffusion of much annear which was associated with the diffusion of an entry of the ionse of the second secon

"This is an exceedingly useful and respectable little Work. * Numerous as have been the publications of Mr. Mr.Phun, this is undoubtedly one of the best of them." Dumfrite Convier.

⁶ This is a nest and well-excended little volume. From the distinct and graphic manner in which M-Phan's Guide is written, we can sufface with the lites and localities of vision of the second state of the second state of the second second second second second second second second second lites of the second second second second second second factor.

" M. Phun's Guide through Glasgow is a beautiful little volume."- Glasgow Chronicle.

THE HORSE, THE DOG, AND THE COW.

' FIFTH EDITION. (Making 5000 Copies.)

Printed on a very large sheet to hang upon the wall, 1s. 6d. ; on stout pasteboard, 2s. or folded in a neat ease for the pocket, 2s. 6d.

Small's Veterinary Tablet,

Being a Concise Account of the Diseases of Horses, Cattle and Dogs, with their Cause, Symptoms and Cure; to which are added numerous valuable Recipes.

The very flattering reception which this work has met with from the public and the press, is the best proof the Pablisher can give of its "meritang," as he originally announced, "the attention of all proprietors of demesic animals."

"The work is quite original, portable, and valuable ; and if there be a jockey, groom, cow-keeper, cattle-dealer, or dog-funcier, who shall not possess a copy of it before this day three months, all we say is-let not that mank is trusted." -Lingrood Standard.

"Of the many cheap and useful things which Mr. M Dhun has published, this is perhaps the cleapest and most useful. It is the best specimen of much information comprised in small compass we ever saw."-Dumfrice Heraid.

""The disease, cause, yrappens and cares, are arranged in different columns; and heige of yrampi, and easy reference, the sheet cannot fail to be highly useful for all the proposed having interest in the clause of animals to which proposed loss have also given for distinguishing the ages of horses, and the author have every provider current al openitors, which, as the author have every provider current along which, as the author have them in practice." Aborden for marks and the mark of them in practice." Aborden for marks

"It is not too much to affirm it is the most concise systom of Veterinary Surgery that has yet been offered to the public."-Sents Times.

⁶ Here we have at one view in fact, the useful essence of all that has been written or practised on these subjects, and Mr. Small, the anthor, though *little* in name, has succeeded most admirably in a great undertaking, and for the small price of half-asymw." Bell's Lift in London.

Price 1s. 6d., 2s. bound.

The Mother's Pocket Medical Guide:

Or"a Treatise on the Physical Education and Diseases of Children. Compiled for popular use, from the writings of Drs. Elserle, Dewees, Burns, Ryan, Kennedy, and others. By, a Physician.

Part I.—OF THE PROPHYLACTIC & PHYSICAL MANAGEMENT OF CHILDREN.

Chap. 1. Of the conduct of mothers during pregnancyin G. B. Die during pregnancy. 2. Of Dress and excition of Morel Influence. 4. Of Blood-letting. Of the Breasts. 6. Of Paruritian-Chem. Data 1. Of the Managment of new horn Infants. 1. Of Wahing and Dressing. Of the Dress-Chem 111. Of the Scote of Thush. Of the semijorment of Nurses. Science. 2. Science 2. Diff. 2. Science 2.

Part. II .- OF THE DISEASES OF CHILDREN.

Chap, Lof Synonye, Asphysia, and Imperied Respirationefforp. II. Of the Alecontum-Chap. III. Of the Tourgesta-ac-hap. IV. Of Inflammalan of the Brause of Nyton-Chap. Nytone Chap. And Alecontum III. Synon-Chap. Chap. Suppression, and Difficulty in volitlog, and Incontinence of the Urine.—Chap. VII. Of Testining—Chap. VII. Of Daletts, Trypichar, Takana, 3. Granton & Uscration of the Month—Chap. IX. Of Collechap. XII. Of Constraints' and Younghing. I Longingtion, 5. Vomiting—Chap. XI. et al. Interter Darkess —Chap. XII. Of Constraints' and You S. J. Interter Darkess —Chap. XII. Of Cophenalty. IV. Of Intestinal Werms-—Chap. XII. Of Cophenalty. IV. Of Intestinal Werms-—Chap. XII. Of Cophenalty. XIV. Of Intestinal Werms-—Chap. XIII. Of Cophenalty. XIV. Of Intestinal Werms-—Chap. XIV. Of Cophenalty. XIV. Of Intestinal XIV. Of Intestinal XIV. Of Intestinal XIV. Of Intestin

The Pocket Medical (Phune, and the Mather's Pocket Medical Gusta.—Mr. elsevant elsevant elsevante elsevante for bringing out case.—Mr. elsevant elsevante elsevante for bringing est case and than the two now before us could well have been given to the public. The contents are arranged an an excellent plan, besides being in a form which includes much practically useful information in a small space, and they are astonishingly understate in price.—Attenda Journal

The Highlands of Scotland

Embellished with Plates, and illustrated with Maps of the Western Coast, including the Hebride Islands.

Price only 2s. 6d.

The Scottish Tourist's Steam-Eoat Pocket Guide ;

Being an account of all that is worthy of the Stranger's notice in the Western Highlands and Islands of Scotland.

⁴ No courist in aversh of the picturesque range glue node and romanics sensery of our Vestmen Highbands should be without a cory of this animizable little publication, which months, regregating the We of Sound institution protonation, regregating the We of Sound institution of the months, regregating the We of Sound institution of the rivers, looking monthains and isles, than was ever compressed in sorth diminutive hundra before. We look upon the small size of this Picelet Guidge as one of its best recommendations we struct from the preface 1 we struct from the preface 1—

** The ruth of the shape—" a pred hook, a prest citl,"—is such dirounstatues in ordinary active, or even faishbable such dirounstatues in ordinary active, or even faishbable community. No consist on confined by "failed the void" with a hook in his poster kenceding surf-local dimensions. Under this conviction we have arranged our materials in the smallest convenient form. The limits we have preformed the state of the state of the state of the state of greats confinction on the verify, yet we are not asyme that we have, in a single instance, withheld any really use it will perhaps be thought, use in Gleeronie pivilege, and the moders under our guidance, failed indicated on the two theorem of the state of the state of the state of the state it will perhaps be thought, use in Gleeronie pivilege, and theorem on the state of the indicate of the state o

⁴⁴ But although 'torvity is very good', and particularly in works which are to be consulted while we are engaged in a pleasure trip, and are more desirous of using our eyes in contemplating page, it is, neverabless, necessary that the notices is however plane while it doubt be in this is the norther bar of the area of the area. A second area of the area. A second area of the area. It is an area of the area of the area of the area of the area

⁴⁴ The volume is dedicated to the Royal Northern Yacht Club, and is embellished with three well excented engraving-representing some of the most interesting scenes ou the Clyde, while its value is increased by two maps of the part of Scotland referred to in the text. *Generode Intelligence*.

and to account for the superiority is not difficult. The utility of the work is now established, and clergymen, appreciating its merits, and knowing its extensive circulation, select with care the sermons they wish to appear in its pages. The Scottish Pulpit is a publication in which Christians of every denomination are interested. With party it has nothing to do. The diffusion of Christianity is its object, in a mode cheap, convenient, and elegant. In this age of cheap publications the idea of furnishing two sermons for twomence seemed to be merely the speculation of an ardent mind. The attempt, however, pleased the religious public -the variety of the work continued to excite attention-its substantial matter ensured approbation, till, from ranking as a weekly production, it has assumed the loftier station of a standard publication of practical divinity. Nor is this strange. The sermons generally are, what such productions should be, calculated to improve the understanding and affect the heart, and from the peculiar circumstances under which they are furnished, they baye an unction which few printed sermons possess. This publication, therefore, has just claims for general diffusion. Is the Christian foud to possess a sermon of his beloved minister? In the stillness of the Sabbath evening does he wish a work suitable for that day. and in unison with his feelings? Does the father, in the domestic circle on that evening, require a publication to instruct the minds of his household, and improve their hearts? Is the Christian, in the seclusion of a sick chamber, desirous of spiritual comfort ?- to ail-these classes, how diversified seever their circumstances, the Scottish Pulpit is peculiarly adapted. The religious saller, will find this work most suitable for a spare hour on Sunday. It will remind him of home, of his duty to himself, to his neighbour, and to his God. The plous shipmaster, who assembles his crew for religious purposes on Sabbath, would consult his own interest, and the spiritual welfare of those for whom he is deeply responsible, by adding to his religious exercises a selection from the pages of this work. We heartily recommend this publication to the patronage of the religious public : known, its merits will be acknowledged ; and we are proud to have this work associated with the literature of Scotland. It is wortby of her press and of her pastors ; and the publishers merit the warmest thanks for the manner in which the Scottish Pulpit has been conducted, and we sincerely trust their past and continued exertions will be fairly appreciated."- Greenock Advertiser.

The Church of Scotland Magazine.

CONTENTS .--- 1. To Readers and Correspondents :-- Union of Orthodox Seceders with the Church of Scotland-Protestantism-Atheism-The Union of Infidels with Voluntaries-To the Editor of the Record-Missionary Biography -Psalmody-Revenues of the Church of England -2 Scripture Evidence in Favour of Establishments. By J. E. Gordon, Esq., late M. P. for Dundalk-No. 2. The Patriarchal Dispensation .-- 3. Extension of the Church --- St. Andrew's Church, Ramshottom, Lancashire .- 4. Extraots from Distinguished Writers .- 5. Church Property not Originally the Exclusive Property of Roman Catholics .--6. Dissenting Endowments .-- 7. Voluntary Church Principles both of a Revolutionary and Infidel Nature .- 8. Present Condition of the Established Church .--- 9. Notices of Books: -The Expediency of a Secure Provision for the Ministers of the Gospel-Speeches delivered at a Meeting held at Arbroath-Wisdom of the Secession Magazine-Memoir of the Rev. Elias Cornelius .-- 10. The Church of Scotland, the Friend of Freedom .--- 11. Voluntary Denouncement and Reverence for Scripture.

⁴⁴ We are pleased with the whole series of this year pectiding, is addressibly adapted to the times in which we live, databased by the Charch in Sockhod. It is considered with the series of the

XXI.

America at One View.

On a very Large Sheet, beautifully printed at the Glasgow University Press, Price 1s. 6d., or varnished on canvais and roller, Price 6s. 6d.

Bell's Statistical Shoot Atlas of the United States of North America.

AN INDISFENSABLE WORK IN EVERY COUNTING-ROUSE.

Dedicated to ALE XANDER GOODSIR, Esq. Secretary to the British Linen Co's Bank

The Merchant's and Banker's Commercial Pocket Guide;

Being a Manual of the Principles of Banking, Braking, Fairs, Foreign coins, Foreign Exchange Insurance, Market Prices, Public Funds; and commercial Transactions in general.--Price is, 6d. sewed, 2s. Hound.

From the Type Mercury.—" The title almost sufficiently expresses the vast utility of this little, cheap, and degent work, ** and all this in a volume not a quarter of an much thick, and in size 5 inches by 31. When conside of volue is contained in so small a compass, and to be had as a very reasonable rate, well may use consider these the times of economy and sequences."

From the Belfart Northern Wrig,—"" This is a little volume through every person connected with commercial purume should possess. The publisher deserves well of the public for this and several other popular works in which chappens, convenience, variety and accuracy are admirably combined."

From the Glasgow Chronicle .- " No young man in a counting house ought to be without it."

From the Sociensen-" This is an exceedingly nest and until little void. It is judiciously compiled, and its matter so judicionaly condensed, that though exceeding small is contains a very great deal of useful and even interesting information on all the established and fundamental institutions, rates and the usages of the mercanitic system."

From the Edinburgh Evening Post .-- "This is one of the most useful and hest executed little works of a practical kind we have ever met with."

From the Duades Chronicle —" Mr. M⁴Phun has done good service to the mercantile interest by the publication of this pretty little volume, which carrys with it ample evidence of having been compiled with the greatest care."

The FIFTH EDITION, in Foolscap Svo. Price 68. Boards, of

The Anatomy of Drunkenness;

By ROBERT MACHINH, Author of "The Philosophy of Sleep," and Member of the Faculty of Physicians and Surgeons of Glasgow.

Coversen. - Chap. 1. Preliminary Observations 9. Canase of Drunkenness S. Phenomen of Drunkenness 4. Drunkenness modified by Temperatest. 8. Drunkenness like common Instantiation, Argunt 1. Action of Opium and Alcohol 5. Physiology of Drunkens 8. 5. Method of caring the Prof Drunkenness. 10. Judicially considered. 16. Method of caring the Prof Spontaneous Combustion of Drunkerds. 18. Drunkenness Judicially considered. 16. Method of caring the Flash Drunkenness. 18. Vengeranze Sodelins. 16. Advice to Drunkenness. 18. Vengeranze Sodelins. 16. Advice to Oran Naress and Chilton. 18. Lingues not al wave hurful.

"This little book is evidently the preduction of a man of genins. The style is singularly near, terms, concles, and viguous, far beyond the reach of any ordinary mind; the atils of sentiment is such as desc infinite hearders to the Author's heart; and the observation of human life, by philesphilpinghilpinghild and service of a philesphilping and the sentiment and to those who stand in need of advice and warning it is worth a hundred servers." *Bulkespecify* Magnetic Service and worth a hundred servers." *Bulkespecify* Magnetic Service and service hundred servers." *Bulkespecify* Magnetic Service and the service hundred servers." *Bulkespecify* Magnetic Service and the service hundred servers." *Bulkespecify* Magnetic Service and Service and Service Serv

⁴¹ If every man addicted to this dreadful vice could be induced, in even band interval, to read this volume with attention, it would go far to pat him out of conceit with the practice. If bit own observation and experiments had not aught him what a complicated evil drunkenness is, this volume would at least hring to bits remembrance many things which it is of the greatest importance he should know before he is for ever runed."—*Buttenting Press.*

V11.

SECOND EDITION,

In One Volume Foolscap Svo., Price 7s.

The Philosophy of Sleep;

By ROBERT MACNISH, Member of the Faculty of Physicians and Surgeons of Glasgow.

CONTENTS.--Claspier I. Introduction. 2. Steppin General. 3. Dreaming. 4. Frephenik Power of Dreams. 5. Nicht Miras. 5. Dyr. Marz. 7. Stepp. Walking. 8. Step-Tabling 12. Steppissense. 10. Drowingness. 11. Portracted Dreama, 15. Spectral Illusions. 16. Reverte: 17. Abstraction. 18. Steep of Plants. 19. General Management of Stepp.

"The Second Edition has been enriched with many important additions; in particular a long chapter on Spectral Ilusions—one of the most interesting portions of the work. We have seldem met with a work more worthy of a place in every weil-furnished ilbrary. It will interest equally the reader for amusement and the philosophical thinket."— Editoburg A Peneological Journal.

"This is one of the most interesting and delightful volumes we have for a long time met with. It is full of anusement and instruction. Over its details is thrown that luminousness which alone flows from original genins."— *Edinburgh Evening Post*.

"We have been explicated by the elequence-we had almost said the poetry of its descriptions; and, on the whole, we must say that we consider it to be one of the most valueble and anousing books of philosophy we have met with for this long time past."-Loudon Médical Gazette.

"A work which will be perused with interest and delight. It is possible considered the most valuable contribution which burnion, have lately made to the illustration of the study of man's nature, viewed in close alliance with his 'being's end and aim,"—*Zeliabaryah Weekly Journal.*

THIRD EDITION, Price 2s. 6d.

With the Sootch Law regarding the Sale and Warranty of Horses.

Advice to Purchasers of Horses ;

Being a Short and Familiar Treatise on the Exterior Conformation of the Horse, the Nature of Soundness and Unsoundness, the Laws relating to Sale and Warranty, with Copious Directions for Discovering Unsoundness prior to purchase.

By J. STEWART, Veterinary Surgeon, and Professor of Veterinary Surgery in the Andersonian University.

" The buyer hath need of a hundred eyer, But the seller of only one."

" Persons who have occasion to buy or sell horses would derive much antraucion from this little manual, which resonances and unconclores, and the law relating to asle and warranty, with coplous directions for discovering unsondness prior to purchasing. The author is a scientific man, and his work is popularly written, and likely to be useful." -Locks Merceny.

¹⁴ The Mannal, though of small size, is far from being of small value, and amount full to be useful not only to farmers, innekepers, and others engaged in posting, but is to be revery one who may have accounts to pructase as useful and services, the horter. If a service shall be fully prepared to select a sound animal, as well as to detect and prevent the imposition of the law realized to the service shall be realized and the service shall be realized as a start of the law realized to the service shall be realized to a set of the law realized to select a difference which the work, the huyer hat need of a hundred yers, but the select of only one."—String fournal.

"This is a well-composed and useful little volume."-

"We would recommend no person to purchase a horse without having previously purchased and perused Mr. Stewart's book of advice." Glasgow Chronicle.

"This is an exceedingly useful little volume, which every Tyro in the art of horse dealing should lose no time in becoming possessed of."-Dumfries Courier.

1

XV.

Seventh Edition, neatly done up in pocket size, Price 1s.

A Catechism of Phrenology,

Illustrative of the Principles of that Science. By a Memher of the Phrenological Society of Edinburgh.

This Work contains all that is requisite for the information of the General Reader on Phrenology. All the leading Facts and Principles of the Science are fully detailed, and the whole is illustrated with Engravings.

⁴⁴ This is a brief Manual of Phrenology, in the form of a Catechism, intended for the use of individuals who cannot bestow much time or money on the study of it. It combines accuracy, clearness and brevity, and is scrupulously correct in doctrine.

"After describing the different organs, the work contains 'general questions,' in which the effects of education, temperament, size, combinations, Ke., are discussed. It contains a neatly engraved copy of the Edubburgh Phrenological bust; and, on the whole, is a commendable and useful publication. It is neatly printed, and sold very cheep."—Edinburch Phrenobolical Journal.

XVI.

A Brief History of the Protestant Reformation.

New Edition, with Corrections and Additions, in One Vol. Price 4s. Boards.

In a Series of Letters addressed to WILLIAM COB-BETT.

Now Ready, Vols. I._____V., 8s. each. The Scottish Pulpit,

Containing a Body of Original matter, nowhere to be met with in quality so superior, and at a price so very reason-

which in quality is superior, and at a price so very reasonable. The Sermons are by the most eminent living Divines of the Church of Scotland; and, for the most part, have either here furnished by the authors themselves, or corrected by them herfore appearing in print.

SCOTTISH PULPIT, " We hall the appearance of this volume with much pleasure. The extensive sale which the work enjoys, and deservedly enjoys, is a favourable symptom, or rather a gratifying proof, that feelings of christian piety still exist to an encouraging extent in our land. It would very greatly benefit society were such writings to become much more prevalent, and take the place of those, which under the name of politics or political economy, and under the pretence of teaching the art of Government, are souring men's minds, and rendering them turbulent, discontented, and unhappy. It signifies very little for a man to have his head stuffed with crude undigested knowledge, which he probably will never have an opportunity to apply ; but not so with the knowledge here communicated. because it is such as deeply interests every man, not only in his passage through this transitory scene of life, but in future and endless ages. The present volume contains upwards of 70 sermons, some of them by the most eminent ministers of which Scottish Ecclesiastical Literature can boast, while others are, from pens, whose owners, though not yet perhaps much known to fame, are in the fair way of ohtaining it, if the sermons, under notice, he fair criteria of their merits. The volume, in addition to its other properties, is very handsomely printed. It is, moreover, embellished with a portrait of the late Rev. John Geddes, of whom a memoir is given. We recommend the volume, not as one worthy of a single perusal, and then to he laid aside and forgotten, hut as one that may he perused and re-perused with increasing pleasure and increasing profit."-Paisley Advertiser.

"The third volume of this excellent body of practical theology is completed; and its merits, we think, are even greater than those of the volumes by which it was preceded. There is a marked improvement in the style of the sermons.

The Pocket Guide to Domestic Cookery,

BY A LADY. To which are added,

Instructions for Trussing and Carving, with Plates.

Third Edition, much improved. To this Edition has been added an eitire chapter on *Preserves*, thus making the work the chapter, most complete, and most concise treatise on Cookery extant. The price is, as formerly, only 1s. 6d. sewed, and 8z. hound.

Not a single recipe is given in this volume that has not been practised by the Authoress.

CONTENTS.-Chap. I. Instructions for Marketing.-II. Preparations and General Rules for Cooking, Turnsing, Sc.-III. Directions for Carring.--IV. General Remarks on Dinners and Suppers.-V. Nade Diabas.-VI. Souge, Gravies, Sc.-VII. Fish Diskes.-VIII. Pasty.-IX. Pudding, Sc.-X. Cookery for the Sick.-XI. Miscellancons Receipes.-XII. Miscellaneous Rerips.-Ouservations on Praceves.-XIII. Molecular Disker.

The great defact in the numerous manufas of Cookery, which as present divide the public forward, is their hulk and price. Neither of times objections apply to the present work, although its will be found to control all that is really honesevire. It has been the object of the authors to supply all the requisite information for keeping a well-ordered kitchen and furnishing a respectable table, without perplexand a multitude of details, which, even when not anity and the sequisite and details of the authors to any and a multitude of details, which, even when not anity benef, exceptions, and downloaded and the sequences in the details platetend, exceptions, and downloaded and the sequences in the details plate-

² Min. MitPhan, of our meighbouring dity, is one of the most indedigible puices bank (ayny) where to be formd. If we are, it is certainly to call of his. If is has emploit the housent sty of S. Mangy, with a puice in the purchase of horses, with, a Guide to Mothers, how to take caved the states of horses, is the state of th

Price 1s. 8d., neatty done up,

The Pocket Medical Guide:

Being a Popular Treatise on Diet and Regimen, Cold and its effects, and the Use and Doese of Medicine; the whole selected from the latest and best authorities, and carefully adapted for the use of families and non-professional readers.

CONTENTS.

PART I .- ON DIET AND REGIMEN.

PART II .- ON EXPOSURE TO COLD AND ITS EFFECTS.

Chap. 1. Of Cold in general—Chap. II. Of the disease caused by exponente to cold. 1. The direct consequences of exposure to cold. 2. The initiation of the constraints, Consumption, Iaflatomation of the Larynx, Croup, Iaflatomation of the Lauge, Sove Throat, Heematinn, Diarhena, Chilblains, Ophthalmia.—Chap. III. Of the means where Chilblains, Ophthalmia.—Chap. III. of the means where by the bad effects of exposure to cold may be avoided.

PART III .- ON THE USE AND DOSES OF MEDICINE.

Art of proscribing medicines-Laxative medicines, Emetics, Anodynes, Astringents, Tonics.

"A book that no family in town or country ought to be without."-Kilmarnock Journal.

"This, though a small, is a very useful maroul. The elitor voices aptinds in the art of condensation, and the publisher, Mr. M'Dhuo, a landable promeness to exemplify in book-making one of the very hest maximum of utility is the maintain of space."-Duarfrise Courier.

NEW Edition, Corrected, First Series complete, Five Volumes Svo. Price £2.

The Glasgow Mechanics' Elagazine.

Great pains have been bestowed upon the present Edition of this work in its progress through the press. Articles of temporry interest have heen excluded, and in their place has here astistituted, such matter as will always prove useful to the man of science, thus reddering the work one of permanent utility on every subject connected with Science and the Arts.

• However much we have been led from time to time to peak in advantance of the work of a minihar kind to fills now Publishing in London, we cannot kelle servicing our largeonse to be conduced by a set of penctical men, who anderstand well, what they are about, and who ser well advantation of the set of the set of the set of the set inferior to the most expeasive Scientific Journals now publishing. All the London cheep Periodicals have only got wood engrwings, which do not and amout show the marketing and the set of the point of the set of th

XI.

TWENTY-SEVENTH EDITION.

The Scottish Martyrs.

In Two Large Volumes Svo.,

Biographia Scoticana:

Or a Brief Historical Account of the Most Eminent SCOTS WORTHIES, Noblemen, Gentlemen, Ministers, and others, who Testified or Suffered for the Cause of the Reformation in Scotland, from the beginting of the Sirecturi Century to the Yazi 1085; originally collected by John Howie of Levis, nor Reylesd, Corrected and Enlarged, by a Cherin Con-Church of Scotland, and Enriched with a Prefice and Attes, by Wx. M GAXIS, Eag. Autoor of "The Protestant" & C. Volume I. Contains Memoirs of the Lives of the Worthies.

"atime 1: contains Memoirs of the Lives of the Workhies, Volume 11: contains the "Last Works and Dying Testion of the start works and Dying Testion of the start works and the start works and "Control of the start works and the start works and pensible requisite, as without will be found an indispensible requisite, as without will be found an indisecting portion of the Biography of the Soutiah Reformers.

"This is by far the best edition of this most remarkable work that has ever seen the light. He is not wortby the name of a Scot, who can be indifferent to the story of these immortal champions." Examplied Magazing.

"We hall with pleasure this new and greatly improved Edition. The external appearance is very creditable to the Publisher, and we have no doubt his well-meant zeal in publishing an improved edition of a work that must ever he dear to plous minds, will meet with the encouragement which it unquestionably deserves."—Edinburgh Christian Jatractor.

XII.

SECOND EDITION OF THE NEW GAELIC DICTIONARY.

Now ready, in one handsome Octavo Volume, dedicated to his Grace the Duke of Gordon, Price 21s.

A Dictionary of the Gaelic Language,

Containing many more Words than the Quarto Diotionaries; with their significations and various meaning in English; illustrated occasionally by suitable Engine and Parases, and Etymological Remarks. The first Part contains Gaelic-English, the Second Euglish-Gaelic, which are given much fuller than in any of the Quarto Dictionaries. By the Rev. Dr. M'Leed, Campsie, and the Rev. Principal Dewar, Aberdeen.

"The Hev. Drs. Michoi and Dware we already advantageoutly hown to the public as eminent Galls' Scholars, and we think their Dictionary promises fully to extend the second sec

"We have now the complete work before us, and we are much pleased to find that, instead of cause to retract, we have rather to add to the praise we formerly field it our duty to bestow on the labours of Drs. M Leod and Dewar."-*Hid. Jan.* 1831.

XIII.

The Gaelic Messenger.

Conducted by the Rev. Dr. M⁴Leod of Campsie, assisted by a numerous circle of Celtic Scholars. Complete in 2 Vols. in Boards, price 6s. 6d. each, or with the Sermons 8s. each Vol.

"This is truly a literary curlosity. A periodical in the language of Ossian. We congratulate our Highland countrymen in particular, and the friends of knowledge and civilization in general, upon the appearance of this excellent Miscellany".—Edividura Literary factote.

XIV.

The Notation of Music Simplified;

Being the Development of a System, in which the Characters employed in the Notation of Language are applied to the Notation of Music. By Alexander Macdonald.

XXIV.

In one Volume 12mo, with an Engraving of the Arms o. the Incorporation of Bakers, Price 5s.

The Practical Baker and Confectioner's Assistant,

Being a Comprehensive View of every thing relative to the Baking of Loaf and Fanoy Bread, on both the Ancient and Modern Systems; with a great variety of Practical Receipts in Pastry, Confectionary, Camiles and Preserves, Cordials, Wines, &o: and the various methods of making Artificial Yeast. By John Turkan; haker.

⁴⁴ Moreover, this hook is a perfect repository of every thing relating to the subject which he has another them to subject the subject which he has another them the fully hid open; and by the simple and pulsions directions hald down, any one may practice for himself the operations of these universally interesting series. We doubt and we domine it with every which for that mocess which it so 'tell desaver's "behaviory because of the terms of the terms."

 $\mathbf{X}\mathbf{X}\mathbf{V}$

In Monthly Numbers, Price 2d. The Child's Magazine; Or, Tales for the Nursery.

By Mas. M'Gazane, Author of "Maternal Duty," &c., &c.

XXVI.

Neatly Printed in Pocket size, Price 6d.

The Casquet ;

A Collection of the best Songs in the GAELIC LAN-GUAGE. Selected by James Munrae.

"It contains as much closely and nearly printed matter in Gaelic, for Sixpence, as we have ever seen offered for the same money in English."-Scots Times.

XXVII. M'Phun's Edition of the Scotch Reform Act. Price Thremes.

This is the most accurate and most comprehensive of all the Abridgements of the Act yet published.