

HORSES
HORSEMEN
AND
STABLE-
MANAGEMENT

60 $\frac{8}{10}$ J-4



JOHN A. SEAVERNIS

TUFTS UNIVERSITY LIBRARIES



3 9090 014 552 364

**Webster Family Library of Veterinary Medicine
Cummings School of Veterinary Medicine at
Tufts University
200 Westboro Road
North Grafton, MA 01536**

HORSES, HORSEMEN, AND
STABLE-MANAGEMENT





THOROUGHBRED MARES AND FOALS

Photographed in a paddock on Mr. E. E. Higginson's Norfolk farm. The photo shows how a large field can be economically divided by wooden hurdles with wire on the top; or, even better, by lasket hurdles threaded with gorse.

[*Front.*

HORSES, HORSEMEN AND STABLE-MANAGEMENT

BY

GODFREY BOSVILE

AUTHOR OF "HUNTING IN COUPLES," "POUNDING THE FIELD,"
"PALE-BLUE AND SILVER," "FOREST KING'S RIDERS,"
ETC.

WITH 8 PLATES AND NUMEROUS ILLUSTRATIONS
IN THE TEXT



LONDON
GEORGE ROUTLEDGE AND SONS, LIMITED
NEW YORK: E. P. DUTTON AND CO.

1908

125
177
200

Printed by BALLANTYNE, HANSON & CO.
At the Ballantyne Press, Edinburgh

PREFACE

FAULTY as it is, this work is the first to establish a link between the prehistoric age of "Horses and Horsemen" and the present time. Other books have been simply branches of equine literature.

Old and new ideas have been weighed—steering clear of fads and cranks.

Not only have there been innumerable interviews and much correspondence with the living, but communications with the dead, by means of the well-penned manuscripts they left as monuments of their labours.

Since the first proofs have been corrected the sad intelligence of the deaths of Mr. Hugh Owen and Mr. Garrett Moore have reached the sporting world.

The victories of Chevalier Ginistrelli's "Signorinetta" by "Chaleureux" out of that marvellous mare "Signorina" startled the racing world when the filly won the Derby at 100 to 1, which entitled her to rank as an extraordinarily good mare; especially when she followed this up by winning the Oaks. This took place after my book had gone to press.

Thus readers will see how difficult it is to bring sporting topics in book-form completely up-to-date. So I must ask all interested in this subject to view "Horses, Horsemen, and Stable-Management" in a broad light, and to realise that it has been no easy task to connect the earliest times with the year 1908.

It would have been a mistake to have dwelt at tedious length on the past and to have written too little about the present. Nor could I omit the practical side, *i.e.* stable-management. Yet my chief difficulty lay in explaining, as clearly as I could, matters of importance, not knowing to what extent readers are in touch with the equine world.

Sovereign, president, peer, commoner, merchant, shopkeeper, farmer, and stable-help—for this is a cosmopolitan book—to ALL these the following pages are addressed in a spirit of good-fellowship by THE AUTHOR.

CONTENTS

	PAGE
INTRODUCTION	I
PART I	
CHAP.	
I. EARLY WORKS ON HORSES AND EQUITATION	7
II. AMATEUR VETS	15
III. THE VETERINARY PROFESSION	25
PART II	
IV. BUSH HORSES	40
V. ENGLISH HORSES—THEIR ROUTINE OF STABLE- MANAGEMENT	52
PART III	
VI. BRILLIANT HORSEMEN	70
VII. TOM CANNON	74
VIII. "GENTLEMEN-RIDERS"	84
IX. "RODDY OWEN"	90
PART IV	
X. COLONIAL RACE-COURSES	97
XI. THE RACING CHRONOMETER	103
XII. BITS AND BITTING	108
XIII. SADDLES	121
XIV. GIRTHS	142
XV. WHIPS	145
XVI. SPURS, ANCIENT AND MODERN	162

PART V

CHAP.	PAGE
XVII. STABLE VICES	174
XVIII. COMMON DISEASES AND THEIR TREATMENT	180
XIX. GIVING BALLS, DEBILITY, TEMPERATURE, PULSE	188

PART VI

XX. BREEDING HORSES FOR PROFIT . . .	195
XXI. BREAKING AND RIDING	206
XXII. VICIOUS HORSES	221
XXIII. SEATS AND HANDS OF ENGLISH SPORTS- WOMEN	233
XXIV. DRIVING	243

PART VII

XXV. SOUNDNESS AND UNSOUNDNESS . . .	249
XXVI. PRACTICAL SHOEING	263
XXVII. TEETH	267
XXVIII. USEFUL MEDICINES FOR COMMON DISEASES	270

LIST OF ILLUSTRATIONS

FULL PAGE PLATES

Thoroughbred mares and foals	<i>Frontispiece</i>
"Rufus," a two-year-old chestnut gelding . . .	<i>Facing p.</i> 52
"The Lady," by "Havoc," dam by "Lady Grosvenor"	66
"Ormonde"	72
"Mrs. Fenley," with foal by "Tiber"	195
"Memoir"	198
"Donovan"	200
"Jupiter"	206

IN THE TEXT

	PAGE
Leather head-collar rein	53
Head-collar rein	53
Head-piece of halter	53
Head-collar	54
Yearling head-collar	54
Knee-caps	55
"	56
Swab	63
Fetlock boot	63
Lawn hoof-boot	64
Fetlock boot	64
Speedy-cut boot	64
Elbow boot	65
Ankle boot	65
Fetlock boot	65
India-rubber boot	65

	PAGE
Ring-boot	66
Over-reach boot for foreleg	67
Laced boot	67
Polo boots	68
Running blinker	107
Headstall bridle with picketing-rein	110
Hunting bit with sliding mouth	111
Hanoverian bit, with high port and roller mouth	112
Bridoon	113
The Champion snaffle	115
Guard-check or Liverpool driving-bit	117
Captain Hayes' breaking snaffle	118
Martingale	119
Breast-plate and martingale combined	119
Early saddle	122
Saddle-tree	123
Champion & Wilton's steeplechase saddle	124
Steeplechase saddle with knee-roll	125
Plain-flap hunting saddle, straight head	126
Plain-flapped hunting saddle	126
Hunting saddle with Weston's patent bar	127
A neat plain-flapped saddle	128
Half-cut-back hunting saddle, plain flap	128
Hunting saddles with knee-roll	129
Light (officer's) saddle	130
Military saddle	130
Colonial saddle	131
Colonial saddle with knee-pads and crupper loop	132
Military saddle	133
Mexican saddle	134
Young girl's padded side-saddle	135
Lady's side-saddle	135
Imperial lady's saddle with patent bar	136
Lady's saddle with patent bar	136
Lady's saddle with plain bar	137

LIST OF ILLUSTRATIONS

xi

	PAGE
Ordinary side-saddle, straight seat, plain flap	138
Lady's saddle, with straight seat, pad on flap	138
Lady's ride-astride saddle	139
Little girl's saddle	139
Little boy's saddle, No. 5	139
Champion & Wilton's patent sponge numnahs	140
Lady's numnah	141
Hide girth	142
Webbing girth	143
Leather girth	144
Whip of Hoswell	150
Typical whip of the year 1790	150
Whip, whalebone top, year 1825	150
Phaeton whip	150
Packman's whip of George III. period	150
State whips	155
Newmarket Challenge Whip	159
Charles II. spur	165
Foreign crowned-eagle pageant spur	166
Modern straight spur	172
Modern drooped spur	172
Tail-guard	178
Cavasson for breaking	207
Breaking roller	208
Pillar rein	217
Double-stitched rein	244
Double American hand part of driving-rein	244
Hand part of driving-rein	246
Ordinary driving-rein	246

HORSES AND HORSEMEN

INTRODUCTION

A LABOUR of love in equine literature is a most valuable book entitled "Works on Horses and Equitation," by F. H. Huth, published by Bernard Quaritch, 15 Piccadilly, in the year 1887. It is an index, and embraces in the most painstaking manner the names and works of every well-known author who has written on Anatomy, Natural History, The Veterinary Art, Cavalry, Equitation, Driving, Shoeing, Bitting, &c. &c.

In order to give some idea how valuable this work is, and to show also why it was a labour of love—for obviously few sportsmen wish to read a book which is only for reference, giving the titles of horsey books, and only a few words given to show an outline of their contents—I give a quotation from Mr. Huth's Preface:—

"By far the greater number of books collected in these pages are monographs on the Horse; but I have not thought it wise to exclude other works on Natural History dealing with the Horse, Ass, or Mule in any very distinct degree. Magazine articles, or articles from Sporting

Journals are, however, not included, excepting in one case. Works written before the invention of printing are placed under the year in which it may be presumed they were written. It would be absurd, for instance, to place Xenophon after Juliana Barnes, or Gwyllame Twici after Bracy Clarke. The same work is only again mentioned when it has been entirely recast, or a new compilation is made, such as the *Rei rusticæ scriptores*. In the alphabetical arrangement of names, I have had to meet the usual difficulty of foreign double names, such as:—Esprit Paul de la Font Pouloti, Franz Max Freiherr von Bouwinghausen von Wallmerode, Francisco de Cespedes y Velasco, &c.”

Under “Horses and Equitation” Huth has included everything appertaining to the horse. Fiction is excluded, and generally all books of which only a part relates to horses. He finishes his Preface with these rather touching words, proving that he realised so much that he was humbled by his knowledge of the big subject he had taken up:—

“I must confess with regret that the Index is far from perfect, and I probably could go on adding to it for the rest of my natural life; in that case, however, it would possibly never see the light at all, and perhaps it is better, therefore, to publish it as it is. I do not think many important works have escaped me, but the smaller catch-penny fry are legion; they appear, live their short life, and disappear, leaving scarcely a trace behind them. I hope at least

that others will be saved some of the time this Index has taken me in preparation.

(Signed) "FREDERICK H. HUTH."

"BECKFORD HOUSE,
LANSDOWN CRESCENT, BATH."

What chiefly interests the ordinary reader of horsey literature is the value of all this research when applied to his own case. Let us take any page haphazard and see what Huth imparts. Page 302 of his invaluable work may do just as well as any other. From it we gather that in 1883 were published the following books on this subject :—

Das strategische Kavallerie Manöver unter General Gurko im südlichen Russland Herbot, 1882, und *die Reformbestrebungen in der russischen Kavallerie*, by A. V. Drygalski, 8vo, Berlin, 1883; *L'Asino nella leggenda e nella letteratura*, &c., by Giuseppe Finzi, 8vo, Turin, 1883.

Merely the names of authors would form quite a book to itself, apart from the commentaries which take up the bulk of Mr. Huth's work. But what *we* are concerned with is the value of the various books which have been so carefully indexed. Are they *all* worth reading? Surely a few are inaccurate! Let us draw attention to some and endeavour to extract the practical parts, and, if this long dynasty of authors have omitted anything, let us endeavour to substitute remarks drawn from experience.

It would have been ungrateful to Huth, and

unfair to my readers, not to have drawn especial attention to the best compiled index on horses and equitation. From it they can learn with amazement how much has been written, and read with delight the works of horsey men who have lived in various periods and in all sorts of climates. The only drawback that I find to it is the impossibility of discovering whether a book is worth reading or not. It may have been a standard work or a barefaced plagiarism; and it is almost impossible to digest the contents of all or even one hundredth of them.

As an admirer of Huth's labours—and they have been colossal—I must now call attention to the contents of the long list of horsey books which have been so patiently indexed. Some authors have, in my opinion, made sound, and others very unsound, suggestions; and it hardly concerns us to know whether the people who wrote good ideas had long-winded names, or were Englishmen or not. We approach the subject in a sportsmanlike spirit, holding cosmopolitan views, and believing that whoever lays down rules derived from living and dead literary men and living and dead practical owners of horses, vets, and grooms, &c., is doing beneficial work—soothing pain and preventing needless cruelty, giving interest to horse-lovers, and bringing happiness to the hunters, hacks, race-horses, harness-horses, &c., in their charge.

Should further particulars interest my reader, I must refer him to Huth's Index of 439 pages, which could doubtless have been swelled to an

enormous-sized book had anything beyond the merest outline of the contents been given. Yet thousands of sportsmen and sportswomen are fond of books on horses, which are not technical nor dull, but do not realise that there is such a thing as equine literature in an elevated form. They know, of course, that Greeks and Romans in the dim past made references to chargers and beasts of burden, and they usually hate endeavouring to translate them.

Many lovers of books readily admit that the late Whyte Melville wrote standard works on modern hunting fiction. They willingly grant that *The Field*, *Sportsman*, *Sporting Life*, *The Sporting Times*, *The Badminton Magazine*, *Baily's Magazine*, *The Country Gentleman*, *County Gentleman*, *The Illustrated Sporting and Dramatic*, and other newspapers and periodicals which are devoted to race-meetings and sport generally, are equine literature or journalism; but they little think, when they have named the above, that they have hardly touched upon a gigantic subject.

By kind permission of the editor of *Baily's Magazine*, articles from the author's pen which have appeared from time to time in that well-known sporting journal have again been offered to the public in book form in this work. Also the author must acknowledge similar kindness shown him by the editors of *The Badminton Magazine*, *The Sporting Life*, *The Globe*, and *The Live Stock Journal*.

The difficulties over the illustrations have been

overcome by many of the best-known firms supplying blocks—a great number being specially made. For these the author is indebted to Messrs. Champion & Wilton, Peat, Parker, Swaine & Adeney, of London, and Messrs. Harries & Sons of Shrewsbury.

PART I

CHAPTER I

EARLY WORKS ON HORSES AND EQUITATION

WHOEVER takes the trouble to read the introduction to this book will notice how much has been written about horses; yet they may not grasp that hitherto nobody has attempted to concentrate in one volume the experiences of the authors whom Huth indexed. The following pages of "Horses and Horsemen" are an attempt in this direction; and most gratefully do I acknowledge assistance given by all branches of sporting circles. The Duke of Portland, the Duke of Westminster, Mr. Porter, the recently retired trainer, Mr. H. Moore, the well-known racing vet, Mr. Sapwell, Mr. E. E. Higginson, who breed winners, besides many, many others, too numerous to mention, have all been kindness personified, and given me valuable material combined with their practical experience.

It might, perhaps, from a book-selling point of view be wiser for me to begin with a chapter on the routine of stable-management. I prefer to lead up to this subject, and select as No. 1, Horsey literature from classical times up to date. Should anybody disapprove of this method and wish to read about up-to-date hints, there is

nothing to prevent that person from turning to the index and reading the chapters which touch on them.

Supposing no allusions were made to writers who lived before Christ, the assumption would naturally be that the author did not consider they were entitled to any notice. Yet, just in the same way as Napoleon I. declared that some of the greatest generals were undoubtedly those who commanded armies in very ancient times, so I declare that absolutely the cleverest writers on horses, so far as I am aware, were those who wrote for pleasure—and not for profit—from 380 years B.C. up to a few centuries after Christ.

I have laid particular stress upon the way in which you can find out all about these Greek and Roman equine authors, *i.e.* from Huth's Index, entitled "Works on Horses and Equitation," and without lingering on the borderland of a second introduction, I will proceed to trace from the earliest MS. on horses, up to the researches of professors at the Royal Veterinary College, Camden Town, and other knowledge gleaned from owners, trainers, horsemen, dealers, grooms, and personal experience.

Before we name with reverence the oldest writer on horses, let me suggest that the reader should take an early opportunity of visiting Tattersall's or Aldridge's repositories, and after watching the number of horses offered for sale—noting the faces of bidders—let him subsequently turn into the British Museum and

study there some early treatises on equine literature. They will astonish him, I'll guarantee!!!

There is a peculiar charm about the sporting writings of ancient Greek authors. The most apt expressions are almost invariably chosen; moreover, there is a dignity in the style, a marvellous insight into the habits of horses. As you eagerly read you are compelled to admit that this writer—though he lived so long ago—was unmistakably a gentleman who understood his subject. “I'll guarantee he could ride,” you say to yourself. Of *course* he could! Had he not ridden for his life many a time? As quite a youngster he had been in action; not riding on the modern kind of saddle, but on “Ephippia”—described further on under the heading of “Saddles.”

The Greek author in his day had ridden in sunshine and bad weather. Had climbed mountains on horseback, slept near his horse in an enemy's country, had forded rivers. And was, in fact, as much at home on his favourite charger as the average modern man feels when sitting in an easy-chair. No wonder, therefore, he could write clearly and brightly on a subject he loved, and was so thoroughly familiar with. Moreover, he did not write for a living. He jotted down his thoughts out of sheer pleasure, producing a treatise which was appreciated by his contemporaries and subsequently by posterity. Thank goodness, therefore, that many of these treatises are preserved, though many have perished; equally as good, doubtless, as those which have been preserved.

The Greeks were indisputably artistic. The Romans were thoroughly practical; horses were used by them for war and for purposes of luxury and ostentation. The Greeks wrote with clever, half-sarcastic brightness about their hacks, chariot horses, and chargers; the Romans in a more matter-of-fact vein, until wealth, with its accompanying splendour, made "The Mistress of the World" resemble a leviathan Athens, and the writings of its authors a blend.

What strikes us as being remarkable when studying this interesting subject is the intellectual gap between the ancients and our own period. We notice in bits and biting, in grooming, in carriages, in fact in everything connected with horses that, during the Middle Ages, inventions such as we have grown accustomed to in modern stables appear to have stagnated.

The Egyptians, according to high authorities, were conquered by Arab cavalry. They were panic-stricken when they saw imaginary monsters, who in reality were only men galloping at them on horses.

Even supposing at that very early period the Egyptians were used to cavalry—for one recognised historian will write one statement and another make an exactly opposite one—yet there can be no doubt whatsoever that eventually they learnt to understand them thoroughly well, and had fine studs long before the ancient Greeks, Romans, and Persians used chargers. This is indisputable! It makes the stagnation in the

Middle Ages all the more inexplicable, because there was plenty of sound material to work upon. Yet, from a scientific point of view, it redounds to the credit of vets, saddlers, and horse-owners who are living now, or who lived during this last century.

Take a modern discovery such as electricity. We feel surprised at the rapid strides which inventors have made in motor-cars. On the other hand—and it is impossible to emphasise the fact too much—we are amazed at the comparatively few discoveries made in riding, driving, stable-management, shoeing, and veterinary since the early writers wrote before and immediately after Christ. This uninventive gap is all the more incomprehensible when we reflect that, in the Middle Ages, there were no trains, nor very quick communication such as we have now, and consequently people were far more dependent on horses *then* than *now*.

I defy anybody to study this engrossing subject without wondering again and again that warriors and citizens in the Middle Ages were so uninventive; even in Shakespeare's age—so full of cleverness in other directions. The early Romans and Greeks had bequeathed the same MSS. which we possess now. Yet the Saxons, Danes, Normans, and other peoples of Europe paid no heed to them. Doubtless a few literary monks knew sufficient about them to occasionally read them with interest, and preserved the antique writings because they saw in them interesting relics of a remote civilisation.

Evidence we possess of horse-trappings, several centuries before Christ, point to a high pitch of stable-management. So we are justified in supposing that many inventions which were in daily use in those times were never written about.

Whips, stable-implements, bits, horse-shoes, veterinary instruments—some even possibly better than those in use now—all these we have named were in existence. We can only know about these relics of a horsey past through historians and sculptors, and are obliged to fill gaps they have left in the best way we can.

Historians may never have mentioned now long-forgotten discoveries which, though common in their day, are a sealed book to us. This must be so when we think seriously, because it is often difficult to establish a connecting link in a carefully pieced chain of evidence having only one flaw.

We are aware from a bas-relief that a whip or a certain bit was used, and yet neither of them are easily traceable for a period extending over perhaps a century or even more.

Such is history. Such is the inventor and the thing invented! Future historians may have the same difficulty in tracing *our* attempts to make satisfactory flying-machines and easily managed submarine-boats, tube railways, or motor-cars that rarely break down. Innovations are usually chronicled at the time of their birth. Sometimes all reference to them is burnt, or perishes in a manner never dreamed of by the thoughtful mind who chronicled the inventor's achievements.

Some readers may argue in an opposite direction, and declare that the ancients had a crude form of civilisation compared to our own. Too much stress has been laid upon Roman and Greek equine inventions they may declare. Yet incubators were used by the ancient Egyptians, although some people imagine they are solely modern inventions.

Surely we are justified in assuming that all ancient knowledge on hints on horses and stable-management has not been handed down to us? Doubtless we have missed several secrets which, if we knew them, would prove of the utmost value. Is not this argument reasonable? Great stress must be laid upon the ancient references, because otherwise we treat the forerunners of modern veterinary colleges too lightly—in fact, do not realise that early historians and early writers of veterinary treatises were highly cultured.

Most well-recognised ancient equine authors had been highly cultured. Did they not live at a period when Art as represented by Sculpture was far higher than it is now; perhaps nearer perfection than it ever was or ever will be?

Small wonder then that Greek and Roman authors who made veterinary and stable-management a deep study, wrote remarks which show wonderful discernment, and penned them, using language that is clearness personified, and ornamenting each sentence with the most apt expressions conceivable. Their style was interwoven with rippling humour—not unlike Voltaire's, blended with Byron's versatile genius.

Fortunately for us these talented people did not spend most of their time company-promoting, or driving motor-cars at break-neck speed, or shattering their nerves by living at such high pressure as many of us do, because competition gives us no alternative. They appear to have done things very thoroughly, and to have enjoyed their leisure moments—and here lies the charm of their writings. They wrote for pleasure and not for gain, with a thorough grip of their subject, and we feel, as we read, that their treatises were labours of love, penned with a cultured sense of humour. Their satire was elegant and rarely descended into vulgarity. In every passage the modern horsey man discerns that these ancient writers had light “hands,” and were happy when riding hot, well-bred horses, who were afterwards dressed over by slaves harshly disciplined in stable duties.

But we have touched upon the best side of the early author's character. He had a dark side—cruel, suspicious, even merciless towards horse, enemy, slave, and any person or creature that stood in his way. His culture was too often that of a pagan, his elegance was only what might have been expected from an educated slave-owner. Yet, despite his virtues and vices, those who study equine literature are still heavily indebted to him.

CHAPTER II

AMATEUR VETS

“IN the horse, as in the man, all diseases are easier to cure at the start, than after they have become chronic, and have been wrongly diagnosed.” So wrote Xenophon, with exquisite humour, more than two thousand years ago, in his admirable work on “The Art of Horsemanship.” He continues: “The same care which is given to horses’ food and exercise—to make his body grow strong—should also be devoted to keeping his feet in condition.” Could anything be clearer?

We quote the above in order to emphasise the dictionary meaning of the word amateur, *i.e.* “One who loves and cultivates any art or science, but does not follow the one preferred as a profession.” Again, we desire to impress upon the reader that the cleverest of the ancients who wrote upon veterinary had a practical knowledge of horses, although they did not use sporting phrases that are constantly heard on our race-courses or at our meets. Here is another remark of Xenophon’s: “I will describe how a man, in buying a horse, is least likely to be cheated. In the case of an unbroken colt, of course, his frame is what you must test ;

as for spirit, no very sure signs of that are offered by an animal that has never yet been mounted. And, in his frame, the first thing which I say you ought to look at are his feet."

Please note that in *those* days they swindled in horse-dealing. We cannot too severely censure inferior schoolmasters, who have taught the dead languages so imperfectly that Greek and Latin references are regarded by their former pupils with apathy as being semi-mythical, and therefore having little or nothing to do with our modern mode of thought, in fact belonging exclusively to the realm of the "blue-stocking" and the "prig."

If lessons had been made more agreeable to us when we were at an impressionable age, we should realise how the cultured ancients rode bare-back into action, and had a rough insight into veterinary and a high conception of stable-management, and were practical. For their chargers often went lame and got "done to a turn" by forced marches, injured by lance or sword cuts in a similar way to the twentieth-century troopers in recent wars.

Just as English laws have been built up from Roman legislation, so has the science of veterinary—as we understand it—arisen from the experiences of writers such as Kimon, or Simon of Athens, who has left behind him a fragmentary work written 430 years before Christ. Whilst Xenophon, 380 B.C.; Aristoteles, 333 B.C.; Hippocrates, 350 B.C.; Mago Carthaginiensis, 200 B.C.; M. T. Varro, 37 B.C.; Colu-

mella, 20 A.D.; Apsyrus, 322 A.D., besides many others, have given us valuable contributions.

A singularly interesting library, consisting of several thousand well-known books, might be formed by a literary millionaire who chose to collect the different treatises that have been written, often at long intervals, until a well-recognised veterinary college was founded in England in 1796. In order to spare those who are not bookworms the trouble of poring over thousands of musty old volumes, this so far is a faint outline of some of the enormous knowledge which these early authors possessed, who wrote so easily and so brightly.

This is how Xenophon begins his book: "It has been my fortune to spend a great deal of time in riding, and so I think myself versed in the horseman's art. This makes me the more willing to set forth to the younger of my friends what would be the best way for them to deal with horses."

There is nothing bumptious about Xenophon's style. Each sentence is written from a natural horseman's point of view. In those times chargers and hacks were fed on oats.

Apsyrus and also Vegetius allude to a disease which was possibly a form of colic. The symptoms mentioned were: the patient became doubled up with pain, could not bend his legs, threw himself down, refused to move, and took his food lying. "This disease is incurable unless it cures itself," said Aristotle. It was certainly a sweeping assertion; but then he never had the

opportunity of studying at the Royal Veterinary College. Had he done so, his patient might have been relieved by the dung being removed and a gallon or two of hot water afterwards being injected gently. A gill of whisky, and the following prescription made up in the form of a draught, might have produced a speedy cure :—

Æther Rect.	. . . . .	ʒss.
Tinct. Opii.	. . . . .	ʒvj.
Ol. Tereb.	. . . . .	ʒj.
Tinct. Asafœt.	. . . . .	ʒiv.
Ol. Lini. ad	. . . . .	Oss.

M. ft. haust. Repeated in an hour if necessary.

As regards the Ancients. They understood something about dentistry; that is to say, they knew about the milk and permanent teeth, also how to tell the age of a horse from his marks.

Their veterinary treatises were usually sandwiched between much agricultural information, and this is why interesting passages on the frog, primitive notions on hygiene, references to surfeit, &c., are not always easy to find.

Naturally they quickly recognised strains, and paid particular attention to the points of a horse, and were very suspicious about their grooms robbing them or picking up objectionable stable tricks, because Aristotle tells of a Persian, who was asked, "What is the best thing to make a horse plump?" and who answered, "His master's eye!" Surely that Persian must have had, at one time or another, a rather tricky stud-groom, or some underhand stable-helps who were painfully sharp.

On the principle that "prevention is better than cure," the predecessors of MacFadyean, Flemming, Chauveau, Schwab, Fitzwygram, Tuson, and a host of other equally well-known modern writers, *all* advocated regular feeding and sound stable-management. Horse-keepers of to-day could have learnt something from those who rocked the cradle of veterinary before the Christian era.

Still bearing in mind the meaning of the word amateur—"One who loves and cultivates any art or science, but does not follow the one preferred as a profession"—we will now turn our attention to amateur vets of the nineteenth century. At the same time we must acknowledge a deep debt of gratitude to those who have linked the past and present together. In a horse-loving country like England the inhabitants may say, with a certain degree of truth, that we are all in a sense "vets," especially those who, though they do not practice and have not qualified, yet continue to collect useful material, and who do not attempt to operate without the indispensable training. For a little knowledge is dangerous, and often, unintentionally, a cruel thing.

All who have witnessed the very unnecessary barbarity of the amateur vet—it goes hand in hand with ignorance—will indorse this statement. People who have the merest glimmering of animal diseases occasionally force irritants, in the form of onions, into a mare's vagina, with the object of inducing the wretched animal to stale.

And cases are by no means rare in which horses have been blistered with cantharides unmixed with lard; and repeatedly dumb patients have been severely fired and blistered by the uneducated on the "sound" instead of the "unsound" leg. In fact the list of such atrocities is a wearisomely long one, to say nothing of the superstitions peculiar to certain counties. In Devonshire, for instance, there is a supposed cure by magic, the name being "Whitewitches" or something of the sort. A nineteenth-century English savage takes a nail, which he dips into a pot of urine, and expects the owner of a cow who is suffering from milk fever, or any other ailment, to walk round. In the event of the patient recovering, the witch, of course, takes the credit.

The Whitechapel costermongers pin their faith to vinegar and whitening, or turpentine and beer; in cases of sprains this lotion is well rubbed into the affected part. Certainly this is a very innocent recreation—it has been said that the English take their pleasures sadly—compared with the number of times that laminitis, sometimes termed "founder," or "fever in the feet," is mistaken for congestion of the lungs, and even tetanus, all of which require immediate treatment. Need we say more on this point? To dwell on painful subjects is exceedingly depressing, but we feel bound to lay a stress upon the eager way in which amateur vets, who have never received a practical or scientific training, delight in giving purgatives, without in the least taking into con-

sideration how much the constitutions of their victims differ. Thank goodness the Ancients had no inducement to nearly pull a poor horse's tongue out or cause it to bleed, because they never gave balls; neither did they put their patients to excruciating agony by docking with unsuitable instruments. But they paid even more regard to regular feeding than many of us do now. They knew less about diseases, we readily admit; but this, in a way, was an advantage, because they did not jumble them up. Knowing nothing of our modern blister, they could not apply it, as some foolish people do now, without first of all clipping the hair off. But whether or not they got their fingers bitten off by dogs when giving them medicine is a moot point.

In the present day every amateur vet who respects the safety of his hands takes excellent care to force a stout stick into the canine patient's mouth, whilst another person firmly grips the dog by his ears.

It is not uncommon to torture the brute creation by unskilfully bandaging their limbs, or to choke pigs by administering draughts much too rapidly, and perhaps squeezing the breath out of them in the process.

The thousand and one unspeakable tortures that an unpractical, though not necessarily an intentionally cruel vet, can inflict on the wild and domesticated animals is almost past belief, and has unhappily brought reproach on his enlightened colleagues. The amateur vet, however, intensifies these sufferings.

Life being too short and civilisation too complicated for every man to be his own barrister, solicitor, doctor, or vet, those who really wish to learn the theory and practice of the veterinary art, without passing the stiff examinations at the Royal Veterinary College, should approach a difficult subject in a spirit of humility. We can conscientiously recommend the following standard works for their perusal:—

J. MacFadyean has written "Anatomy of Domesticated Animals" and "Anatomy of the Horse"; G. Flemming, "Practical Horse-keeper," also "Horse Shoes and Shoeing" and "Horse-Shoeing"; Fitzwygram, "Horses and Stables" and "Notes on Shoeing"; A. P. Chauveau, *Traite d'Anatomie des Animaux Domestiques*; C. Schwab, "Age of a Horse by the Teeth," "Veterinary Counter-practice," "Materia Medica"; R. V. Tuson, "Pharmacopœia for Practitioners of Veterinary Medicine."

Those amateur vets who are easily satisfied with a smattering of a noble science, whose branches spread over a large mental area, will find these books have been written to suit their tastes, namely:—

The writings of "Stonehenge"; "Veterinary Notes for Horse-owners," by Hayes; "The Live Stock of the Farm," by Morton and Pringle; Morgan's Translation of Xenophon's "The Art of Horsemanship."

Cattle.—"The Bovine-Prescriber," by Gresswell; "The Yorkshire Cattle Doctor," by Knolson.

Sheep.—"The Sheep Breeder's Guide."

Pigs.—Garrett's "Practical Pig-keeper."

Dogs.—"The Diseases of Dogs," by H. Dalziel.

Poultry.—"Pheasants, Turkeys, and Geese," by W. Cook; also "Profitable Poultry-keeping," by F. Mackenzie.

Goats.—"Book of the Goat," by Pegler; "The Case for the Goat," by "Home-Counties."

Amongst well-known foreign writers, these names deserve praise: Champetier, Lechlainche, Dupont, Boucher, Schlieben—he wrote the "Horse of Antiquity"—Bayer, Paalzow, Haare, Captain Hube, Carl von Schmidt. In fact the amateur vet has the choice of cultivating his mind by reading the wisdom of thousands of good authors on the Veterinary Art.

The authors who filled the gap between Xenophon and the time when the Royal Veterinary College was founded, are indeed legion. It is a tremendous gap indeed! It would be tedious to give more than these already mentioned few sample quotations illustrating Greek, Roman, and mediæval writers. Let us think also of the store of knowledge which perished when Carthage was burnt; for we may feel sure that the slim Carthaginians were active horsemen, or they would not have killed so many Romans under Hannibal, Hamilcar, and other long forgotten cavalry leaders. Therefore we may conclude that the Carthaginians wrote on this subject, and their works all perished, unfortunately for us.

It is obvious from the above that some institution was necessary to establish equine knowledge

on a scientific basis, and this want being felt, the Royal Veterinary College sprang into being. But it did not start teaching pupils about the works we have already touched upon. The foundations were laid on quite a firm basis; viz. scientific anatomy, botany, chemistry, and other sciences which we will deal with when a brief sketch has been given of the Royal Veterinary College, Camden Town, a hospital for the treatment of animal diseases on the same lines as other hospitals devoted to human beings. Nevertheless if it had not been for those ancient and mediæval writers on equine literature, the Royal Veterinary College would have made far less rapid strides in science.

They are also indebted to doctors and surgeons who have made discoveries which have thrown light on Veterinary. The scientific discoveries of modern times have been greatly assisted through the invention and perfecting of the microscope.

CHAPTER III

THE VETERINARY PROFESSION

MANY who feel an interest in the treatment of animal diseases, may be astonished to learn that, although institutions for learning in veterinary science had long been established in France, Germany, and other European states, it was not until the year 1791 that a well-recognised veterinary college was founded in England.

There is no necessity for us to draw comparisons between the ancient and modern veterinary student, to the detriment of the former. Suffice it to say, that nowadays those who take their "diplomas" at this seat of learning, situated in Camden Town, London, have their industry more severely tested than would have been the case had they entered a century ago.

In order that we may sufficiently appreciate their labours, we will try and glean an insight into "The Royal Veterinary College" course, and briefly describe the career of the full-blown vet, finishing up with a few hints that may be useful to whosoever cares to choose this profession.

Before students can enter the college, they must pass a preliminary examination in general education: such subjects as English grammar and composition, Latin, mathematics, and either

Greek, a modern language, or logic are compulsory. Those who can show certificates that clearly prove they have passed a precisely similar or a more difficult examination embracing these particular subjects, are exempt from the veterinary matriculation.

The college fees are eighty guineas, which can be paid in four instalments. There is a Winter and a Summer Session, but the Winter Term—it begins October 1st—is the more strongly recommended by the college authorities.

Speaking generally, the students' ages vary from sixteen to four-and-twenty. Regular attendance at lectures is strictly enforced, and the professors examine their pupils monthly.

Even supposing a diploma-candidate possesses only medium ability, he ought, with eight hours' work a day, to "pass" in the prescribed period—namely, four years. Yet no candidate can receive "The Diploma" until he has attended four sessions of not less than thirty weeks each, and also has satisfied the Court of Examiners of the Royal College of Veterinary Surgeons, which is totally distinct from the Educational Staff.

In order to explain how scientific the veterinary course has become, it may be advisable to mention the mere headings of subjects that students receive instruction in—

Examination for Class A—(first year).

- (a) Anatomy of all domesticated animals, including bones, ligaments, and joints.
- (b) Chemistry and Elementary Physics.
- (c) Biology, Elementary Zoology, and Botany.

At first sight it does not appear a very difficult task to attain proficiency in these three subjects, after a preparation of a twelvemonth. But we must not forget the various divisions and subdivisions into which the headings are split up. Usually Botany is the great stumbling-block in Class A. This may be accounted for by the fact, that the poisonous and non-poisonous grasses are not as a rule so closely connected with sick animals as anatomy and chemistry seem to be. Most students who get through this first examination pluck up courage and take their diplomas. At the risk of wearying the reader, it is necessary to briefly specify the remaining headings—

Examination for Class B—(second year).

- (a) Anatomy of the domesticated animals.
- (b) Histology and Physiology.
- (c) Stable-management, the manipulation of the domesticated animals, and the principles of shoeing.

Class C—(third year).

- (a) Morbid Anatomy, Pathology, and Bacteriology.
- (b) Materia Medica, Pharmacy, Therapeutics, and Toxicology.
- (c) Veterinary Hygiene and Dietetics.

Class D—final—(fourth year).

- (a) Principles and Practice of Veterinary Medicine and Clinical Medicine.
- (b) Principles and Practice of Veterinary Surgery, Obstetrics, and Shoeing.
- (c) Meat Inspection.

A student who is rejected three times, for any one of these examinations, forfeits his right of pupilage. Out of the two or three hundred candi-

dates for the diploma, a small percentage are too lazy to qualify; others, who are endowed with more grit, take a pleasure in their work, and are heartily sorry when they bid farewell to their friends at the Royal Veterinary College in order to take upon themselves the responsibilities of a practice.

At this epoch in the lives of newly-fledged vets, it is of the utmost importance that they should not only feel, but also inspire confidence in their healing powers. Hitherto, they were always able to consult a professor on any doubtful points; so it is not surprising that young men who start in a district far removed from Camden Town, are apt to be disconcerted by the great change in their mode of life. Instead of being light-hearted students any longer, their nerves get upset when their surgery bell summons them to treat a disease which they have only met with theoretically, but which they cannot recognise from an illustration. In course of time the requisite experience is gained—too frequently at the expense of their unfortunate patients; for it takes a long time to ascertain how to treat the different constitutions of every horse and dog in a large practice, to say nothing of choked bullocks, swine fever cases, &c. &c.

As an instance of high examination marks being no criterion that a vet is competent, we may mention that many an Indian student returns to his home, highly qualified, certainly, but too prone to regard sick animals from a text-point of view.

What, then, is the best training for a veterinary surgeon who desires to be equally proficient in both the theory and practice of his profession?

To begin with, he ought to serve an apprenticeship to a leading country vet. This will enable him to watch the growth of young animals in their natural state. It will also give him opportunities to excel in horsemanship, and to cultivate a "natural touch" with animals. This will prove most advantageous to him in after-life; for good horsemen do not feel much respect for vets who do not handle stock in a persuasive manner, which convinces them that the animal doctor has been accustomed to such patients from boyhood.

It is scarcely fair to send a youth to the Veterinary College and expect him to learn everything there connected with the profession; unless he has previously served an apprenticeship, the chances are in favour of his being too theoretical when he leaves Camden Town.

A subordinate, in a hard-working country practice, has his hands constantly dirty. Sometimes he is engaged cleaning or putting on hobbles, making up medicine, rubbing in blister, or giving patients balls; not infrequently even grooming or harnessing a horse. Or else keeping the day-book, or "attending distant cases in the small hours of the morning."

After he has matriculated, the student who has been so trained, is able to contrast the diseases which are prevalent in the country with those that are more peculiar to towns.

By now, the reader will have surely placed the

veterinary on a level with the medical profession, if not quite socially, at all events scientifically! As a matter of fact, a first-rate vet requires ability almost superior to a leading solicitor's or a well-known doctor's. The reason is obvious: Balaam's ass always excepted—animals are born dumb, and so cannot inform those who treat them where their aches and pains are felt most keenly. Again, there is a likelihood that an owner or his groom have experimented with a patient before, as a last resource, they "send for the vet."

Any amateur who has tried to "examine" a horse, more especially one that he has never seen before, will indorse the statement that a vet who has built up a good practice is very rarely an impostor, because the majority of horses and cattle are kept by shrewd, practical business-men, who are quick to find out if their animals are cured by those who are well paid to attend them in sickness. In this way a clever member of the veterinary profession sooner or later makes his way; whilst his inferiors are employed only by those who consider it economy to call in a second-rate practitioner who charges less for his services.

Unlike similar institutions on the Continent, the Royal Veterinary College, London, is not subsidised by Government. Nor has it a riding-school. In the present college-grounds there is not sufficient space to erect so large a building. In the near future, perhaps, some arrangement will be made by which "diploma-candidates" can be taught riding and driving. Yet it must be remembered how fully occupied the veterinary

student is during his four years' course. Not unnaturally, he seeks manly recreation far away from the scene of his labours; his slender allowance will seldom permit such an expensive luxury as a day with the staghounds, or hacking in Richmond Park, or a canter in Rotten Row.

Recently a scientific club has been formed in connection with the Royal Veterinary College. Only professors, teachers, and students are privileged to become members of this "Veterinary Medical Association." On certain days the college class-rooms are placed at the disposal of the Association, which awards certificates and honorary certificates. Needless to say that the club is dependent on the pleasure of the Royal Veterinary College authorities for its existence, whose rules and regulations it is compelled to obey; otherwise it might violate privileges granted by the College Charter.

Veterinary surgeons may be said to be divided into five distinct classes, namely:—

(1) *The College Educational Staff*, who are specialists in medicine, anatomy, surgery, or hospital surgery.

(2) *The Army Veterinary Surgeons*, who, when young, conform to military discipline, and are more connected with "red tapeism" than the rest of their fraternity.

(3) *Town Veterinary Surgeons*, who see many cases of lameness, chiefly due to concussion—the roads in cities are of course much harder than those in agricultural districts. Glanders and lung

affections are more frequently met with in large towns than elsewhere.

(4) *Country Veterinary Surgeons* usually have a mixed practice. This is because they generally reside in a small country town, and attend foaling and calving cases in the surrounding farms. Country vets examine many carriage-horses, cart-horses, hunters, and hacks in the course of the year, and are frequently consulted about growing stock.

(5) *Racing Veterinary Surgeons* are found in the neighbourhood of a large breeding-stud, or at a training centre; for the many ills which thoroughbred horses are heir to require the opinion of a specialist, who has had a wide experience amongst racehorses both in and out of training.

Having briefly touched upon the scientific and practical side of veterinary, let us roughly estimate the cost of a student's education, and compare it with the pecuniary return he may reasonably expect to get later on.

Apart from buying a town or a country practice, the sums which those who are responsible for a student's welfare must be prepared to lay out on his behalf are—

For an apprenticeship of two years with a country vet	£100
For entrance to college, for instruments, books, and examination fees	£100
For food, lodging, and pocket-money	£500
<hr/>	
Total during a pupilage of two years, and subse- quently a four years' college course	£700

Supposing a junior partnership is bought for a thousand pounds in a first-rate practice, the outlay has positively amounted to seventeen hundred pounds before a veterinary surgeon has earned a single penny.

In the case of an accomplished "qualified man," who has exceptional business-push, it may be a mistake to throw money away only to play the part of second fiddle in an old-established practice. Besides, all those who are entitled to write M.R.C.V.S.L. after their names have not sufficient money at their command to do so.

Probably in no other profession is exceptional ability and steadiness more widely appreciated. Several of our leading veterinary surgeons have risen to fame purely through their own efforts. For influence will not induce those who keep a great number of animals to employ inferior men to treat them.

The best paying practices bring in as much as three thousand pounds a year. The average vet makes from four to seven hundred a year. Even the least fortunate are rewarded with a bare livelihood of two hundred pounds per annum, but it must not be overlooked that a horse and trap has to be kept, and drugs purchased; and these are expensive items.

Many vets keep large shoeing-forges in some market-towns. Their clients often turn these forges into temporary stables on market days, and call at the surgery for bottles of medicine.

In conclusion, let us try and pick up a few

hints from those who have been most successful in the veterinary profession. Whoever desires to follow in their footsteps must be cautioned against dealing in horses, unless they make a speciality of buying and selling animals that are undeniably sound.

As a rule, private purchasers do not look for hunters in a vet's stableyard. Because, to put it bluntly, a dealer who has "qualified" is supposed to know more than is good for him. There is always a likelihood of a purchaser, who becomes dissatisfied with a horse that he has purchased from a vet, afterwards injuring the character of the seller.

Of course there are plenty of pitfalls which a qualified man must try to escape. Insobriety is fatal to any practice. Bad horsemanship is apt to bring down ridicule, for owners and grooms quickly detect anything that indicates inexperience. For instance, if a vet, when giving a horse a "ball," injures his patient's tongue by pulling it too severely, or else gets his hand bitten, some one is sure to notice it—and afterwards to discuss the little mishap. Supposing he is often clumsy, his employers will eventually lose all confidence in him, and consequently employ some one else. Neatness in the surgery is strongly to be recommended: unflinching tact and also an agreeable professional manner are gifts; but they can sometimes be acquired by constant care.

A few examination papers of the "Matric." for the Royal Veterinary College are given below, in

case a reader should desire to take veterinary up as a profession. But let him *not* do so unless he is genuinely fond of animals both in health and when diseased.

ARITHMETIC

1. In a division sum the divisor is 164,600, the quotient 3854, and the remainder 26,167. Find the dividend.

2. How many steps does a soldier take in marching $4\frac{3}{4}$ miles, each of his steps being 30 inches in length?

3. Reduce £14,789, 19s. 11 $\frac{3}{4}$ d. to farthings, and divide £23,596, 11s. 8 $\frac{1}{4}$ d. by 63.

4. Divide £430, 9s. 5 $\frac{1}{4}$ d. between 4 women and 9 men, giving each woman twice as much as a man.

5. Find the cost of 5 cwt. 2 qrs. 24 lbs. at 7 $\frac{1}{2}$ d. per pound.

6. Find the values of—

$$(i) (7\frac{1}{2} + \frac{2}{3} + \frac{7}{1\frac{1}{2}} + 2\frac{5}{24}) - \frac{7}{1\frac{1}{2}};$$

$$(ii) \frac{\frac{4}{7} + \frac{3}{11}}{(1 - \frac{4}{7}) \times \frac{3}{11}}.$$

7. Reduce $\frac{5}{8}$ of $\frac{1\frac{2}{3}}{5} + 5\frac{1}{2}$ to a decimal.

8. A person in 87 days spends £38, 19s. 4 $\frac{1}{2}$ d. In how many days will he spend £163, 9s. 9 $\frac{1}{2}$ d. at the same rate?

9. Find the Simple Interest on £645, 6s. for 10 $\frac{1}{4}$ years at 3 $\frac{1}{2}$ per cent. per annum.

10. A room is 26 feet 3 inches long and 15 feet 9 inches broad. Find the cost of covering it with carpet which is three quarters of a yard wide, at 4s. 6d. per yard.

11. Find the Square Root of 730.0804, and also that of $4\frac{2\frac{8}{9}}{2\frac{5}{9}}$.

12. One metre is equal to 3.28 English feet, and one French foot is equal to 1.066 of an English foot. Express one French foot in metres.

ALGEBRA

1. When $x = -2$, $y = 3$, $z = -\frac{1}{2}$, find the value of—

$$(i) 5x^3y^2z;$$

$$(ii) 2(y-3)^2 - 5(z+2)^2;$$

$$(iii) \frac{x^2}{z} + \frac{z^2}{x}.$$

36 THE VETERINARY PROFESSION

2. Divide $x^8 + x^7 + 1$ by $x^2 + x + 1$.
3. In the expression $2x^3 - 3x^2 + 4x - 5$ write $y - 2$ for x , and simplify the result.
4. State which of the following expressions cannot be resolved into rational factors, and give the factors of the others : $a^2 - x^2$, $a^2 + x^2$, $a^3 - x^3$, $a^4 + x^4$, $a^6 + x^6$.
5. Simplify—

$$(i) \frac{1}{2x-1} - \frac{2}{x+2} - \frac{10}{2x^2+3-2}$$

$$(ii) \frac{x^2+2xy}{xy-y^2} - \frac{2xy-y^2}{x^2+xy} - \frac{x^2+y^2}{xy}$$

6. Solve the equations—

$$(i) \frac{7x+3}{2} - \frac{7x-2}{3} = \frac{21x-5}{12} + \frac{1}{4};$$

$$(ii) \left. \begin{aligned} \frac{2x+1}{5} - \frac{3y+2}{7} &= 2y-x \\ \frac{3x-1}{4} + \frac{7y+2}{6} &= 2x-y \end{aligned} \right\};$$

$$(iii) \frac{x+a}{a+2b} - \frac{x-a-8b}{a-2b} = 2.$$

7. How many times is the sum of money b shillings a pence contained in the sum b^2 pounds $2ab$ shillings ($a^2 + 8ab$) pence?

8. If $2x - 3y + 4 = 0$ and $3x + 2y - 4 = 0$, find the value of

$$\frac{2x+3y-4}{3x-2y+4}.$$

9. A workman in the country saves £10 a year. He goes to a town where he earns 10 per cent. more than in the country, while his expenditure is 5 per cent. greater. In the town he saves £15 a year; find his income.

EUCLID

BOOKS I—III

[Ordinary abbreviations, such as \parallel , \parallel^{gram} , \angle^{le} , sq., \circ^{e} , are allowed, and candidates are advised to adopt them; but in no case may algebraical symbols, such as the minus sign, and AB^2 , be used.]

1. If, at a point in a straight line, two other straight lines, on opposite sides of it, make the adjacent angles together

equal to two right angles, then these two straight lines shall be in one and the same straight line.

$ABCD$ is a rhombus ; O, E, F are the mid-points of AC, AB, CD , respectively : prove that FOE is a straight line.

2. If one side of a triangle is greater than another, then the angle opposite to the greater side shall be greater than the angle opposite to the less.

3. If two triangles have two angles of the one equal to two angles of the other, each to each, and the sides *adjacent* to the equal angles in each equal, then shall the triangles be equal in all respects.

4. The complements of the parallelograms about the diagonal of any parallelogram are equal to each other. Apply the proposition to construct a parallelogram equal to a given one so that one of its sides shall be twice a side of the given parallelogram.

5. If a straight line is divided into any two parts, the square on the whole line is equal to the sum of the squares on the two parts together with twice the rectangle contained by the two parts.

6. If one cord of a circle bisects another at right angles, one of them must be a diameter.

7. The straight line drawn perpendicular to a tangent to a circle from the point of contact passes through the centre.

8. AC, BD are two equal chords of a circle which cut one another at right angles in E . Prove that the difference of the squares on AB, CD is equal to twice the rectangle under the sum of the chords (AC, BD) and their distance from the centre.

MECHANICS

[*Eight* questions only to be answered.]

1. Enunciate the *Parallelogram of Forces*.

Determine the magnitudes of two forces acting at a point at right angles to one another, such that the direction of their resultant SP makes an angle of 60° with the direction of one of the forces.

2. A uniform heavy bar 22 inches long, weighing 9 lbs., with weights 5 lbs. and 8 lbs. hanging from the ends respectively,

38 THE VETERINARY PROFESSION

rests in a horizontal position on a small support. Find how far the support is from the end to which the 8 lb. weight is attached.

3. Find the centre of gravity of a uniform wire which is bent in such a way that it forms AB , BC , CD , three sides of a square.

4. Give, with reasons, *one* example of each of the three classes of Lever.

Define *mechanical advantage*. What is the mechanical advantage of a Wheel and Axle?

5. Two particles started from rest at the same instant, and moved in straight lines at right angles to one another, one with uniform velocity, the other with uniform acceleration, the measures of the velocity and acceleration with foot-second units being 23 and 7 respectively. Initially the particles were close together; how far apart (to the nearest foot) were they when they had been moving for 6 seconds?

6. Enunciate Newton's Laws of Motion.

A constant force acted in the direction of motion of mass of 9 lbs. for 15 seconds. The effect of the force was to change the velocity of the mass from 100 feet per second to 200 feet per second. What was the magnitude of the force?

7. A particle was projected vertically upwards with a velocity of 365 feet per second. As it ascended, at what height above the point of projection was its velocity 189 feet per second, and how long did it take to reach that height?

8. Define *specific gravity*.

Two cubic inches of a metal weigh 9 oz., and a cubic foot of water weighs 1000 oz. Find, correct to one decimal place, the specific gravity of the metal.

9. State the conditions of equilibrium of a body floating freely in a liquid.

A rectangular log of wood of square section floats in water with 2 inches of its thickness above the surface. The S.G. of the wood being .75, what is the area of its section?

10. Describe, and explain the action of, the Forcing Pump.

The Calendar of the Royal Veterinary College, giving complete information about that Institution, can be obtained at Adlard & Son, Bartholomew Close; or for the payment of 6d. by direct communication with the Secretary of the College at Camden Town, London.

PART II

CHAPTER IV

BUSH HORSES

IN order to make a striking contrast between half-wild horses—such as are common in our English colonies or on the prairies in North and South America—and the well-groomed and well-corned horses in our best stables at home, I will give a short sketch of Bush Life in Northern Queensland, afterwards giving in detail the routine of stable-management in a high-class stud.

Without understanding the leading features of the locality in which semi-wild horses are bred in, it is almost impossible to comprehend how and why they are treated so casually. But their value is comparatively very little, and they are treated accordingly.

The Bush, as it is known to squatters and station hands, varies considerably. Roughly speaking, Australian scenery is divided into thick scrub and open plain, both stretching immense distances, and overpowering the brain of the new arrival with a sense of the vastness of Nature. The runs are usually partitioned by barbed wire fencing, and the only other indications of civilisation are the rails of the wooden stock-yard of the

head cattle station, or the large wool sheds of the sheep runs close to the Boss's house, built in the bungalow style. Now and again travellers on the main road pass huge flocks of sheep, or large "mobs" of cattle, that are being driven towards a newly purchased run, or else in a southerly direction for the consumption of citizens in the large towns. No rougher life is known than that of these drivers of stock "on the road," who seldom move more than a few miles a day, and camp out in all weathers. Though many books have been written upon Australasia, more especially by globe-trotters, their authors have usually omitted to accurately describe the Bush life, which has very much monotony and a few compensating pleasures. The freedom, the absence of conventionalities, the rough-and-ready hospitality, have only been lightly touched upon. Narrators have overlooked, or never sufficiently appreciated, the spirited love of adventure which has prompted men to shake off many of the trammels of civilisation, and to seek a livelihood in remote regions, inhabited but a few years ago solely by the aboriginal, the dingo, and the 'possum. After a hasty inspection of both sheep and cattle stations, the literary tourist has pined after the flesh-pots of Melbourne and Sydney, or the Western world; and so untravelled minds have acquired but slight knowledge of colonial up-country life, and have, consequently, sighed over the fate of relatives and friends who eke out an existence in what seem unfavourable conditions.

Some few years ago five or six men were

lolling back on canvas deck-chairs, puffing their tobacco smoke out of the head station verandah, and staring at the vast expanse of bush which lay in front of them. Though the architectural structure of the wooden building did not call forth admiration, still the hut they sat in had an appearance of homeliness, and was not altogether unpicturesque. It was strongly constructed of unpainted wooden planks, and raised two feet from the ground on piles. A corrugated iron roof seemed a mere matter of form, for the rain had not fallen for months; though unquestionably when it does come it makes up for lost time. The main entrance looked out across the gigantic plains, covered with coarse yellow tufts of grass. Near the back door a large river-bed skirted the edge of the scrub, thickly wooded with tall, white, gum trees. The slatternly servant shared a small hut with her drunken husband, and near to the river bank the tame Australian aboriginals made their rough camp and lay huddled up in blankets close to a blazing fire.

On off days, when there was no particular work to do, it was good fun racing towards the nearest Bush township, composed of a few public-houses and general stores. In point of distance this nearest approach to civilisation was only a mile off; yet many an hour was spent catching a horse and saddling it, in preference to walking in a tropical climate. But, though loafing with the consent of the manager was permissible during a slack time, any slowness at certain busy seasons of the year was severely censured in language

more forcible than polite. When the Boss gave orders for all hands to start off on a long expedition, in order to bring the cattle away from the farthest end of the run, all packed their swag, and, after a hurried breakfast, lit their pipes and adjourned to the stock-yard, taking with them their saddles and bridles. The Bush horses, which had already been driven up, galloped wildly round the enclosure, raising clouds of dust from the sandy plain. They laid back their ears significantly, and, swerving round, suddenly came to a standstill, suspiciously sniffing the air. Whenever a black boy stealthily and coaxingly approached them with a bridle, they would start off on a fresh stampede, squealing, biting, and kicking furiously at one another. The sharp cracks from the long stock-whips kept the horses in the corner of the yard, and eventually each one was caught in turn, the bridle slipped quickly on, and led out. Next, the heavy saddles, weighing two stone a-piece, were put on also very quietly, and the girths tightened up. Immediately the horses felt the weight of their riders they started bucking, and their repeated efforts were often rewarded by a horseman falling prostrate amid roars of unsympathetic laughter.

Strange as it may appear, station hands and squatters grow fond of the Bush, and are in sympathy with those who value fresh air and manly exercise above comfort and monetary considerations. It is not a run replete with every luxury that I am about to describe. Country seats exist around Melbourne and Sydney. But

green tennis-courts, well-groomed hackneys, and young ladies fashionably dressed are seldom if ever met within a radius of 200 miles from the Gulf of Carpentaria.

When an old settler speaks of the Flinders River and the adjoining district, he sums it up drily as a "holy terror." He knows that Northern Queensland must have altered considerably if it has ceased to be a land of drought, snakes, and mosquitoes, where the Bushmen do not necessarily bear the names of their childhood, are half-blinded by sandy blight, and pestered with flies, fleas, and the "Barcoo rot."

Fresh mounts were driven on ahead with the pack-horses, and the expedition kept up a slow canter of about six miles an hour. After halting to escape the extreme heat, a camp was made at a suitable "billy-bong," or water hole. Dead boughs were collected and a fire lit. Saddles were taken off, and the horses hobbled and left to their own devices. A "billy," or tin pot, was soon boiling with water for the tea, and the salt beef was unpacked, while an amateur cook made a "damper" (a rough kind of loaf) in the hot ashes. When the meal was over pipes were lit, and the bushmen rolling themselves in coarse, coloured blankets, put their toes towards the fire, and soon fell asleep underneath the stars. In the morning, after a beef and damper breakfast, a black boy drove up the hobbled horses, each man caught and saddled his own mount, and they continued the journey until the cattle were sighted. There

was no difficulty in finding a particular herd, for a "mob" seldom strayed from the part of the run they had been born in.

A small belt of timber, growing on the great plain, made a good spot to collect the different "mobs," and provided shade against the fierce rays of the sun. Bellowing bulls and "mooring" cows were driven slowly towards the clumps of trees, the calves, following their mothers, bringing up the rear. Riders went off in all directions towards the main body until the "mob" numbered two or three thousand head, and were moved steadily along in the direction of the head station. When the men camped the stock were carefully watched by half-a-dozen mounted patrols, who moved backwards and forwards. In the middle of the day the thermometer registered 120° F., and it was warm working, cracking stock-whips, and driving the tired beasts along. Knowing that exhausted animals would die for want of water if they could not keep up, the weaker calves and heifers that could struggle on no longer were shot with a revolver. Large flocks of galaghs or native cockatoos, with the most exquisite plumage, gave shrill screeches of alarm, and flew half-a-mile farther on. Sometimes a snake would dart up angrily, standing erect on its tail, and with forked tongue hiss forth rage, then mysteriously disappear; unless, indeed, flight was arrested by the reptile's head being flicked off with a neat cut from a stock-whip. Often great sandy river-beds had to be crossed, the banks frequently being a mile apart, and the water very shallow. Then

the loose horses and cattle would rush eagerly forward, drinking greedily, and blowing themselves out. Riding along, the men sitting loosely in their saddles, laughing, smoking, and talking, the wings of the stock-yard were at length reached. A stockman went ahead and let down the rails; and amid clouds of dust that completely hid the leading cattle, the "mob" were secured for the night. They rushed round and round in a circle, half-frightened, and vainly searching for food and drink. Before being let out of the stock-yard, the calves were thrown by means of a lasso and green hide ropes, which held their legs tightly, while with red-hot irons letters were deeply branded into their flesh.

Such is the routine of Bush life on an out-of-the-way Australian run, and though the pay of a stockman varies from a pound to thirty shillings a week, the wages are well earned. A strong physique and an excellent constitution are necessary to those who would embark in this rough but free calling.

When the literature of a colony has a strongly-marked individuality, it is quite worth studying—though, perhaps, not entirely for its own sake. The poetry, as likely as not, is only second-rate; and the prose does not rise much higher than mediocrity. Yet the observant reader will gain a fairly accurate insight into the manners and customs of that particular colony, which might otherwise never be obtained.

Now, let us consider what author and poet strike the key-note of Australian sentiment.

Immediately we conjure up the names of Rolf Boldrewood and the daring poet steeplechase-rider, Adam Lindsay Gordon.

In "Robbery Under Arms"—the best type of Australian novel—the wicked hero of the tale was drawn from life. Starlight, as he was called, had many points of resemblance with Dick Turpin and Claude Duval—all lovable scamps of a refined order.

But whoever has read Boldrewood's story of life and adventure in the Bush and in the gold-fields of Australia, must have been struck with a certain reckless spirit that runs through the book, from the opening page to the pathetic end. This independence of thought and action is characteristic of Englishmen who have made Australia their home.

The following is a case in point, out of "Robbery Under Arms"; it refers to an incident in Starlight's wild career: "Here he rode on, and never opened his mouth again till we began to rise the slope at the foot of Nulla Mountain. When the dark fit was on him it was no use talking to him. He'd either not seem to hear you, or else he'd say something which made you sorry for opening your mouth at all. It gave us all we could do to keep along with him. He never seemed to look where he was going, and rode as if he had a spare neck at any rate." . . .

Adam Lindsay Gordon's melancholy poems likewise breathe defiance. Although they are very egotistical, there is something extremely

manly about them ; and they are well expressed. The pick of them are "Bush Ballads and Galloping Rhymes" and "Sea Spray and Smoke Drift."

We must remember that this popular Australian poet was fond of reckless gaiety ; he was a central figure at nearly all race meetings, and took up in turn other exciting pursuits besides jump-riding. From time to time he spent months of solitude in the Bush, and so grew morose ; and consequently felt that his talents were wasted and his writings were embittered. The following verses out of "The Sick Stockman," are fair specimens of his varying moods. It will be noticed that the equine poetry is remarkably spirited ; and was obviously written by a fearless rider, who loved horses for their own sake, above betting and coping.

"'Twas merry in the glowing morn amongst the gleaming
grass

To wander as we've wandered many a mile,
And blow the cool tobacco-cloud and watch the white
wreaths pass,

Sitting loosely in the saddle all the while.

'Twas merry in the backwoods when we spied the station
roofs

To wheel the wild scrub cattle at the yard
With a running fire of stock-whips and a fiery run of hoofs ;
Oh ! the hardest day was never then too hard !"

Another verse will serve to illustrate the devil-me-care lives of his contemporaries :—

"And Mostyn—poor Frank Mostyn—died at last a fearful
wreck

In the "horrors" at the Upper Wandinong ;
And Carisbroke, the rider, at the Horsefall broke his neck.
Faith ! the wonder was he saved his neck so long !"

Since Rolf Boldrewood wrote his first novel, and poor Lindsay Gordon committed suicide—the poet's grave will always be well cared for, because a sum of money has been set apart for that purpose—a change for the better has come over English emigrants. They are now a steadier lot as a whole. More of the Bush has been "taken up"; bush-rangers are an almost extinct race, and there are not so many feverish "gold rushes" as there formerly were.

No able-bodied person with common sense and ordinary pluck need starve in Australia. Loiterers in the towns often complain about the scarcity of work; yet why should we pity confirmed loafers, who have not spirit enough to walk with their "swag" up country? Energetic workers never need forfeit self-respect, even if they cannot afford to keep up the same social position which they were born in.

Oddly enough, in the Bush, where one man is theoretically as good as another, rough stockmen do not sit down to meals with those who live in the head station, unless they are "camping out."

A good seat on a rough stock-horse, and a reputation for being a "white man," a colonial term for a good fellow, will serve as a passport or obtain introductions to most owners or managers of Australian sheep and cattle stations—no matter whether you choose to bear a feigned name, in order to hide a mistake in the past.

Australian settlers are rather unkempt, as regards their everyday clothes; they laugh at the tidy costumes which set off the figures of "new

chums." The expense and difficulty in keeping servants prevent colonials from being luxurious. There is a heavy Chinese poll-tax; so cooks and gardeners are in greater demand than if the "heathen Chinee" was allowed to land untaxed, like an English emigrant does.

As a rule, colonials are boisterously independent. They refuse to toady a moneyed snob, and evince little sympathy for a cultured man who is inclined to be finikin. Such a breezy specimen of our English aristocracy as Lord Charles Beresford would make a Governor after their own hearts; the tone of Australian thought is pre-eminently healthy and outspoken.

Bush life, as may easily be imagined, is apt to become extremely monotonous; and yet the scenery is cheerful; the dazzling white gum-tree trunks, so tall and slender, have a peculiar charm for the settler! Let us endeavour to describe a few familiar objects "up-country." If we may be pardoned for using an expressive Irishism, the extensive plains resemble an ocean of land, for when we look out seawards only a few passing ships catch the eye; so, when first sighting an Australian plateau, there is but little else to notice beyond thin belts of timber, dotted about here and there like islands, amid coarse yellow tussock-grass.

Noises a great distance off may be heard—the tinkling of a bell on a working bullock, grazing miles away; as also the loud report of a heavy bullock-whip, and the much shriller crack from a stock-whip.

The boundary fences between the runs are made of barbed wire, and are kept in order by "boundary riders," who sometimes become mad from the awful solitude of their surroundings. Of course, where land is freehold, the stations are merely farms on an enormous scale; but in the rougher parts visiting your nearest neighbour may mean a ride of at least twenty or thirty miles.

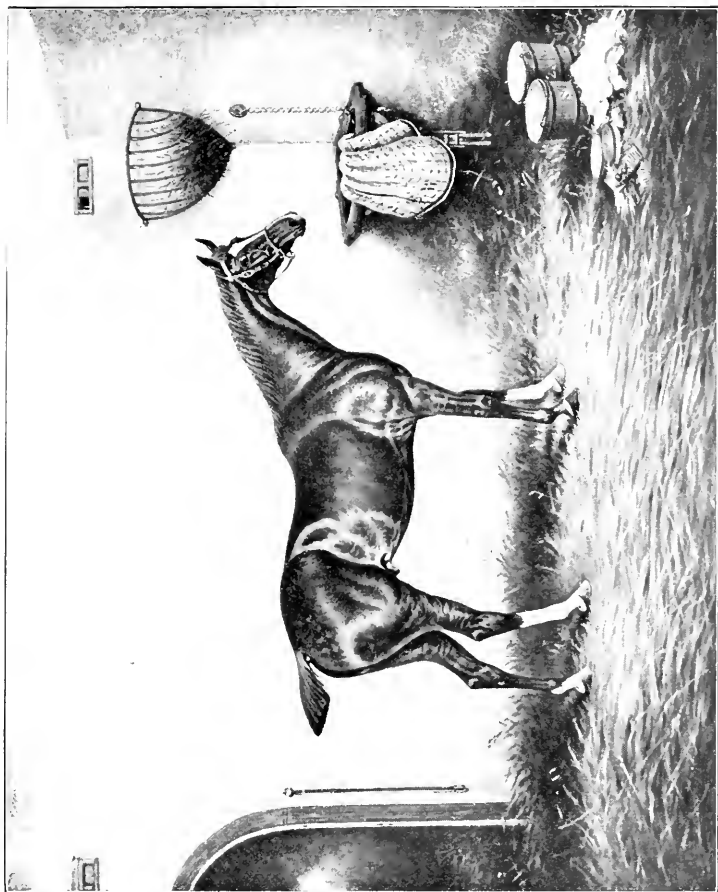
The word "Bush" is applied equally to the plain country covered by detached tufts of coarse native grass—more like corn-fields than English meadows—and to the "Scrub," or forest tracts. Tussock grass is very sustaining to stock, and bullocks and sheep are fattened without artificial food—such as linseed and cotton-cake. Horses fed on it can gallop for miles; they are hobbled during the night, or when their riders rest for meals; and when not wanted are "turned out," and then are perhaps not seen again for weeks together. Stock horses are very rarely given oats, hay, Indian corn, or bran.

CHAPTER V

ENGLISH HORSES—THEIR ROUTINE OF STABLE MANAGEMENT

THE rough-and-ready ways described in the last chapter are fairly suitable to those who ride bush-horses, whose value is small by comparison with English hunters running into three figures. But with horses delicately nurtured in our severer climate, such haphazard ways would be out of the question—for one thing the grass at home is quite different from the coarse tussock on which bush-horses feed. English grass is green and succulent, whereas Bush grass is more like hay in appearance, and is far more sustaining during long and quick journeys. In one case a horse is treated as a half wild animal, often unshod, turned out after a long ride with a smack from the bridle, and left to graze as best he can with raw-hide hobbles round his forelegs. In the case of an English hunter or high-class hackney, every known device to make a fine coat, plenty of muscle, and good manners is tried in turn.

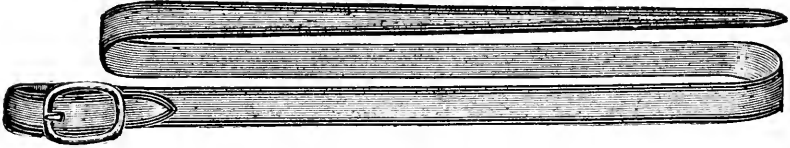
It is impossible to either write or speak on any subject without finding plenty of clever authorities who differ vigorously and widely. Therefore, to expect unity on the following carefully thought over chapter is to expect too much. I willingly admit that many better qualified authors have



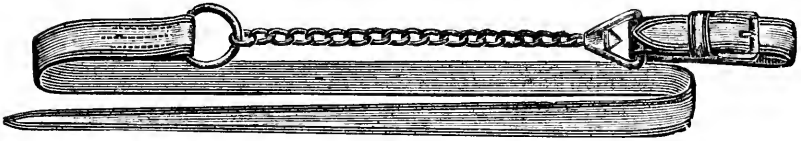
'RUFUS,' A TWO-YEAR-OLD CHESTNUT GELDING.

This photograph of 'Rufus,' a Royal winner of the highest-class type, by 'Outfit,' dam 'Mrs. Fenley,' published by the kind permission of Mr. F. H. Wilkinson, of Cavendish Lodge, Edwinstowe. In the spacious box and in the well-appointed and wonderfully-matured horse may be seen the result attained by first-rate stable-management. In the right hand are wisp-dandy-brush, curry-comb, and other stable requisites.

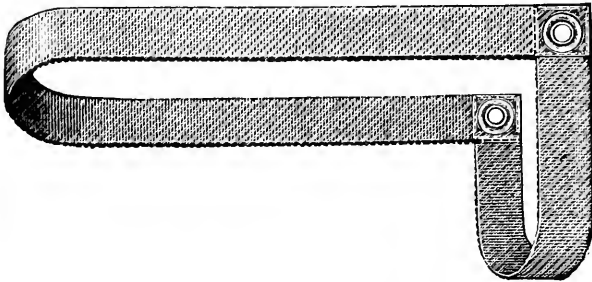
written, and will write, chapters more worth reading, but believe that on the whole I have treated this, one of the most delicate points, with care and without any prejudice. At all events,



LEATHER HEAD-COLLAR REIN



HEAD-COLLAR REIN



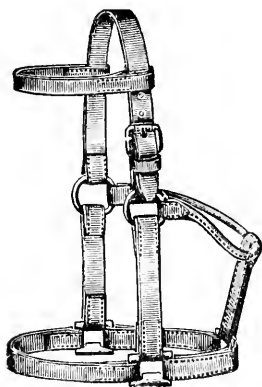
HEAD-PIECE OF HALTER

whoever follows the lines laid down should, with ordinary luck, expect to keep his horses thoroughly fit if he employs—what is a difficult person to find—a first-rate, painstaking groom, who knows how to make those under him work. I fervently hope that such a stud-groom will have your in-

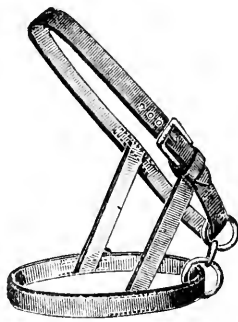
terest at heart as well as his own, be steady, and fond of every horse in the stable.

Unless a man who looks after horses is genuinely fond of them, and also is observant, nothing will continue to be lucky for long in connection with the stable he presides over, for "good luck is good management" with horses and with pretty nearly everything else.

In conditioning time—or when you first take



HEAD-COLLAR



YEARLING HEAD-COLLAR
(George Parker & Sons)

horses up—stable work should commence at 5 A.M. when regular hunting begins at 6 A.M.

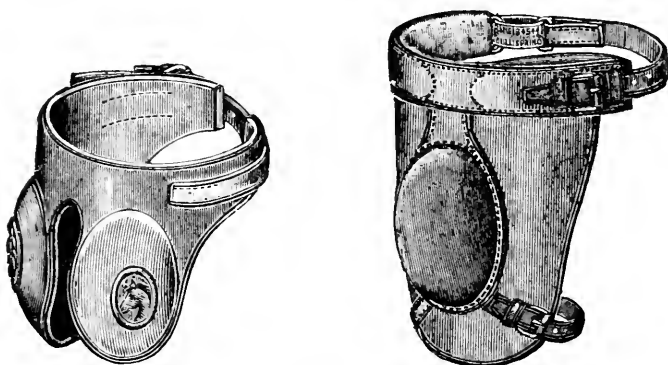
First of all, water your horse, a bucketful if for fast work, then feed according as to the work each horse has to perform. For exercising, horses may have a bucketful of water. For hunting, each horse should have one gallon, according to the size of the horse.

Horses required for fast work should only have the best hay—a rack every night, but none in the day-time—about two pounds of chopped hay

with the oats, also a handful of beans occasionally if the horse requires them. Some horses may require a handful in each feed ; others can do without them.

FOR EXERCISE

A horse should be quartered before going out. First apply the dandy-brush, following it with the body-brush and curry-comb, then water-brush the mane, tail, and forelock. Sponge quarters all



KNEE-CAPS
(George Parker & Sons)

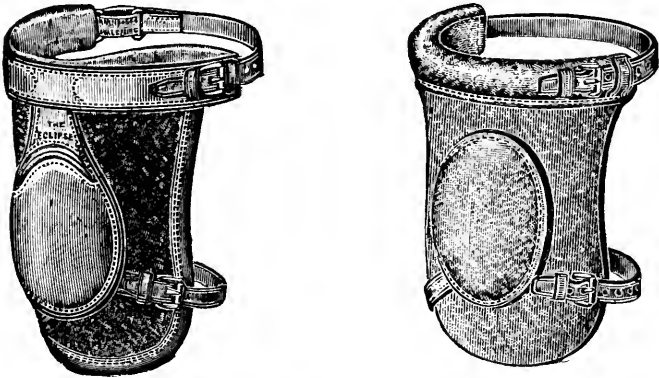
over, using a wet chamois leather followed by a dry one. Put the saddle on afterwards.

A horse that is being regularly hunted requires an hour's walking exercise, and after a day's hunting only about a quarter of an hour's walk out. But in conditioning time—which commences in August—a horse requires three or four hours' walking exercise, increasing to faster work when he has had three or four weeks of this.

Make your horses comfortable before going to breakfast, which should only occupy from half-an-hour to three-quarters.

On returning from exercise clothe the horses and bed them down; also see that there are no draughts from doors or windows.

On returning to the stable the horses should be thoroughly dressed. Dandy-brush your horse's mane, repeating it on neck, head, and shoulder. Use body-brush next, then curry-comb; next water-brush, and afterwards sponge your horse's nose and eyes. Then use a *wet* chamois leather, wisp over with a hay wisp, finishing his fore part



KNEE-CAPS

with a *dry* chamois leather. Then clean your head-collar. This is the finish of his fore part.

Now turn your horse round, repeating the same process over his body and hind part. Comb out mane and tail, and wipe with a dry cloth from head to tail. You can now feel that you have finished dressing your horse. You ought to have taken at least an hour, with plenty of elbow-grease and yourself in a muck-lather, unless you are in tip-top, cross-country trim, which means being as fit as a first-rate athlete.

Clothe the horses, secure clothing with surcingles. A horse who is light or herring-gutted should be also fastened with a breast-girth, so as to prevent his surcingle from slipping back, as it should never be too tight.

Now do some other work ; window cleaning, wash stable down, and flush the drains.

Horses should now be shut up until next feeding time, which is twelve o'clock ; then, again, at four o'clock, watering and feeding them, and thoroughly wiping them over, and leaving them until six o'clock—which is the last feeding time—when haying is all that is required.

If a large stud of horses be kept, of course there should always be some one on the place to give one more look round the last thing at night in case a horse should be cast, or get into the manger, or put one of its fore-legs over the halter, or become griped, or in case of accidents, no matter how brought about.

Good grooming, skilfully and vigorously applied, will bring a horse's coat into proper condition, and a table-spoonful of linseed oil on the food, three times a day, is a good tonic to the hair, making it shine.

COST OF BRUSHES FOR GROOMING

	£	s.	d.
Dandy-brush	0	3	0
Body-brush and curry-comb	0	8	0
Sponge	0	5	0
Chamois-leather (2).	0	4	0
Water-brush	0	6	0
Mane-comb	0	0	6
	<u>1</u>	<u>6</u>	<u>6</u>

FOOD

Taking a bushel of oats to weigh 40 lbs.—they vary from 36 to 42 lbs.

STABLE-MEASURE AND WEIGHTS

1 quatern weighs ¹	.	.	.	2½ lbs.	1
4 quarters	„	.	.	1 peck = 10 lbs.	
4 pecks	„	.	.	1 bushel = 40 lbs.	
4 bushels	„	.	.	1 sack = 160 lbs.	
8 bushels	„	.	.	1 quarter = 320 lbs.	

Beans and maize average 60 lbs. a bushel.

HAY AND STRAW

A load of old hay contains 36 trusses, at 56 lbs. a truss, and weighs 18 cwt.

A load of straw contains 36 trusses, 36 lbs. each, and weighs 11 cwt. 6 lbs.

If a hunter, doing much work, cannot eat five quarters of oats and beans per week, with a mash on Wednesday and Saturday, he should be sent to the hack or harness-stable; as no horse can do much on less, without becoming weak—and a weak hunter is useless.

Of course common-sense and tact must enter into all calculations. It often happens that a hunter, after a long day's run, will not look at his corn; in which case humour him by giving him a little extra hay, especially when he refuses a bran-mash.

The rack for hay should always be *above* the manger and *not* form part of it, as is common in lots of stables. The reason for this is obvious. A horse does not waste his hay if the rack is high, but if it is low he loses the seeds, which are the most nourishing part of it.

It is surprising in big livery-stables and where a large number of horses are kept rather roughly, how little attention is paid to picking out horses' feet, washing them with water in which a few drops of Condy's fluid has reddened the water, and subsequently drying them. As often as not the badly groomed horse has feet caked with dirt, and the stench from each of their frogs is disgusting.

Where carelessness is to be met with in one department it may be looked for in others. Bad grooming is sure to mean unclean feet, which in turn will cause disease and a vet's bill, meaning the horse is a needless expense, and is unfit to work. In the saddle-room the same slovenliness is found; rugs are filthy, harness dirty. Common-sense in stable management is apt to be less "common" than a horse enthusiast desires.

In most cases of so-called accidents which occur in stables, carelessness plays a big part. A horse badly tied up gets loose and kicks another. Another instance—extremely annoying—is when what was previously a useful hunter, or nag, is so fresh from being kept in the stable without exercise that it takes a liberty when it finally *is* taken out, causes an accident, and is virtually useless from fright at having run away, when otherwise with good management it would have been all right and behaved itself.

It seems impossible to din into obstinate people that they must pay attention to the above.

Take the case of tying-up. A careless groom

does not put on the head-collar sufficiently tightly, or neglects to knot a rope, so when it slips through the hole in the wooden weight which ought to secure the horse, if the rope is through the ring in the manger, the accident occurs in a second—a loose horse in a stable where others are secured. A kick or two may be the result, and all on account of laziness on the part of a man or lad who neglects his duty.

An equally stupid piece of stable-carelessness is when the groom is too slovenly in removing droppings. His charges tread on their manure or fœces, and it becomes impacted in their hind feet—the result is that foetid disease known as thrush, the treatment of which I have given under the heading of Common Diseases.

Too much stress, therefore, cannot be laid on tidiness, cleanliness, punctuality in feeding and watering, on firmness with horses both in the stable and outside. All these points are essential to turning out race-horses, hacks, harness-horses, polo-ponies, or cart-horses.

Neat manes, too, as well as carefully trimmed tails and good grooming, cause the occupants of a stable to look as beautiful in their tidiness as well-combed hair, well-kept hands and nails, and carefully brushed hair is becoming to their masters and mistresses in a well-arranged and orderly home.

A direct draught, too, is bound to cause colds, in winter time especially.

Overloading the stomach with too much food and too little work is liable to cause colic. A

very common mistake is to give too much bran and too little linseed. A tea-cupful of linseed boiled to a pulp, the consistency almost of cream, is most useful when mixed with chop and oats and a bowl of bran at least once a week. It keeps the horses' bowels in good order.

The average stable is not kept in a manner which reflects much credit on the tidiness of a groom. Too often it is badly ventilated, dimly lighted, and the floor is an absolute disgrace, it is so uneven.

Not only do we find the accumulation of years of dust on cupboards or window-sills, but rugs which ought to be quite clean to insure good health are so caked with manure they positively reek in bad instances. Thrush, mange, lousiness, indigestion, colic, bad eyesight, itch, sores from ill-fitting harness, grease from ill-management also, all swell the long list, which could be lengthened considerably if we investigate the result of a slovenly managed stable.

Where brass is well polished, where hay smells sweet, and pleasant sniffs from harness-paste can be enjoyed, how different do horses look! Then we see bright bits and stirrups, clean floors and carriages, spotless lamps devoid of all trace of spluttering candle-grease. Rugs and aprons are stainless, carriage-whips have no superfluous knots, and reins do not dirty a clean pair of gloves in such an Arcadian stable.

Feet are carefully blacked with the best preparation, such as is given in notes on this subject at the end of this book. Shoes are not

worn as thin as a sixpence, nor is there a shoe cast in this high-class stable, presided over by an ever-watchful groom who takes a pride in his work ; for if it does not pay to turn out horses really well, it cannot pay any better to try to economise by neglecting them in such a manner that they are incapable of doing their work and deteriorate in value.

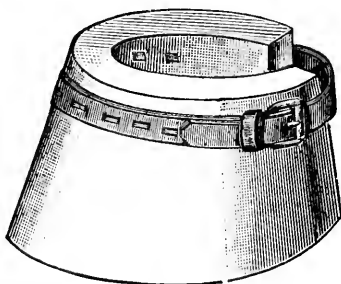
Sending for a vet because of previous neglect is little short of culpable mismanagement.

Dirt and foul smells are so obviously noticeable that there can be no excuse for an owner to overlook them. Directly they are observed they should not be passed over. If the groom, who is responsible for them, refuses to reform, then give him notice and get another who will pay attention to his master's orders.

Draw up a list of stable duties and see they are executed at the times which are laid down, allowing, of course, for taking a horse out unexpectedly. The table in this book is trustworthy ; if you do not approve of it, merely alter it to your taste. But whatever times you consider the best ones for feeding, keep to them with clock-work regularity, which is one of the very greatest secrets of good practical stable-management.

Not only must all buckets and mangers be kept scrupulously clean, but the brushes must be washed and disinfected at least once a week, and kept as spotless and free from injurious germs as the clothing and the harness, to say nothing of well-brushed and well-aired cushions.

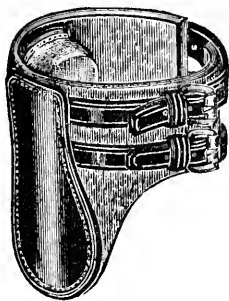
Locking up your stables even in daytime has many advantages, as it enables your stud to eat their food in quietude and to rest afterwards. Whenever a stable-help is admitted he should immediately remove all droppings, sprinkle disinfectant about, and, above all, see that there are no unnecessary draughts.



SWAB (for placing round hoof. It is filled with cold water, and helps to reduce inflammation)

Give water with scrupulous regularity. Nor should the bedding be put under the manger. A horse should stand only on the stable floor in the daytime, and therefore have no temptation to eat his bedding if there is no food in the manger nor hay in the rack.

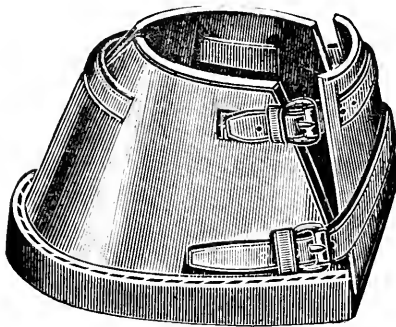
When a horse comes in hot and tired, be sure that no water is given. If you object to such rational treatment, do not give anything more than a few gulps of chilled water or a little gruel. But it would be far better to wait until he has cooled down.



FETLOCK BOOT

A good grooming—pull his ears gently, so as to rub them quite dry—is a very excellent preventative against chills. Give warm beer gruel, crushed oats with a double handful of beans mixed in chopped hay, and a bowl of bran.

If you are in a great hurry to put a rug on, be sure to insist upon a little hay being placed under-

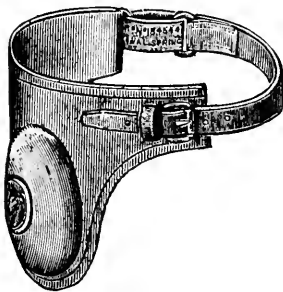


LAWN HOOF-BOOT

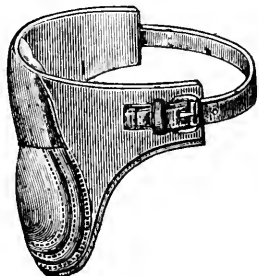
neath, so as to let the horse have a current of air between the rug and his skin. Horses' feet should be washed at least once a day, the hoofs being picked out carefully with a stable-picker, and

the hoofs blacked before he leaves the stable on his way to work.

A smart horse ought to be taught by a good groom to stand well, both with his fore and hind legs, like they are generally seen to do at agricultural and horse shows when in the prize ring.



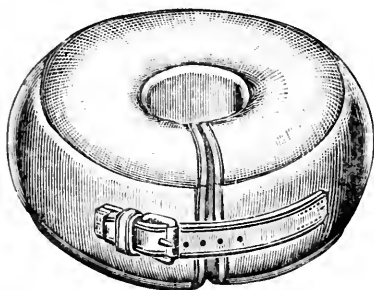
FETLOCK BOOT

SPEEDY-CUT BOOT
(used for hind-leg)

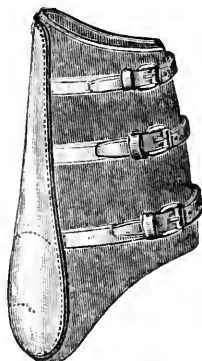
In the box they ought to be nimbly obedient, and move to the near or off side as required on very slight provocation.

Keeping them on pillar-reins for half-an-hour every day is very good for them.

It teaches them patience, and enables them to



ELBOW BOOT
(to prevent a horse producing hump
under the arm)

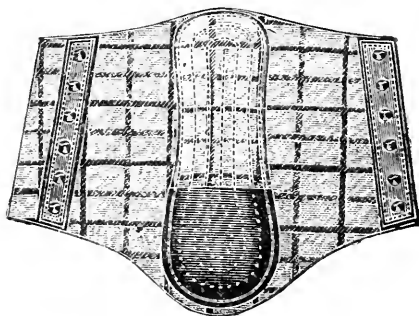


ANKLE BOOT

be all ready to be put into harness at a moment's notice, at the same time freeing the groom from looking after them; and it enables him to pull



FETLOCK BOOT



INDIA-RUBBER BOOT

out the trap and then put them in so quickly that even a querulous owner is not justified at grumbling over any delay.

It is undoubtedly the aim of a clever horse-

cooper to keep his horses ever on the alert and to convey the impression that they are full of mettle ; yet all the time to keep them quiet to ride or drive, despite their hot appearance.

A very common piece of bad driving is when a whip—or rather a would-be whip—makes his horses plunge, instead of being mettlesome yet quiet. The bad driver chanches corners, often cutting them very finely ; whereas a really good driver leaves nothing to chance, and always avoids doing anything connected with horses in the least degree jerkily.



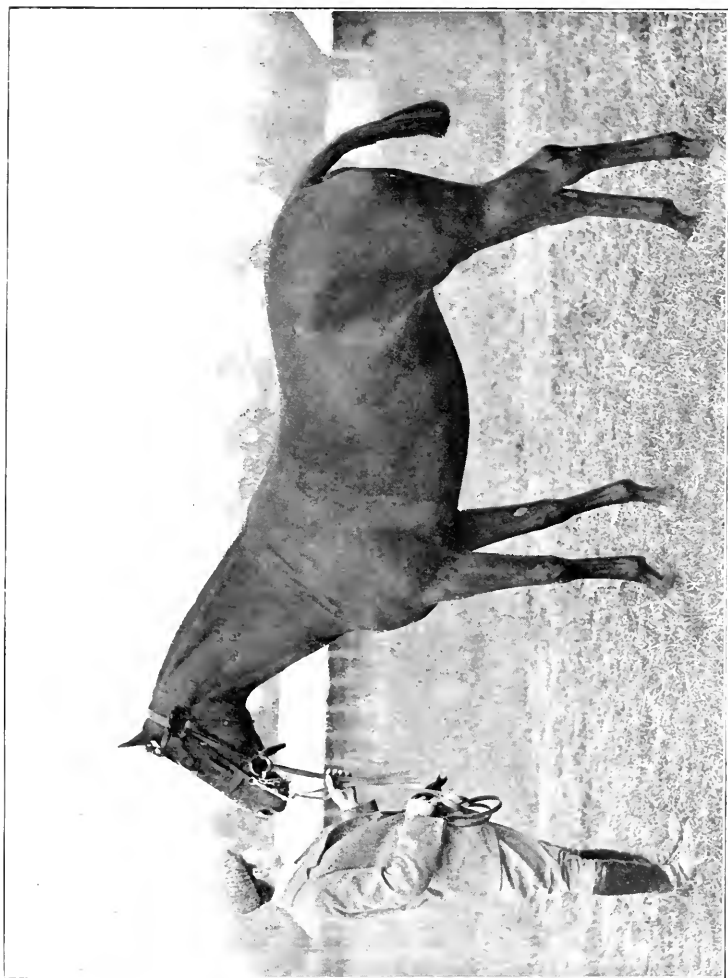
RING-BOOT
(to prevent "brushing")

The ceaseless vigilance of an accomplished horseman allows no slip, however small, to escape his attention. In a moment a draught is noticed. He is not satisfied with mere pleasing effects at first sight. He looks underneath a horse's tail to see if he has been well sponged. He inspects the feet and sees that a bad frog is made better by paring away any rough portions, yet not interfering with the original shape. He has the frog dressed if it smells foul and is in the early, or may be later, stage of "thrush."

Rugs ought to be inspected critically both inside and out. Old ones are put away with camphor bags wrapped up in them as a preventative against moths.

The first appearance of rust in harness is guarded against with callisand and elbow-grease.

An owner must not accept the assurances of a



'THE LADY' BY 'HAYOG,' DAM BY 'LADY GROSVENOR,' 3 YEARS OLD.

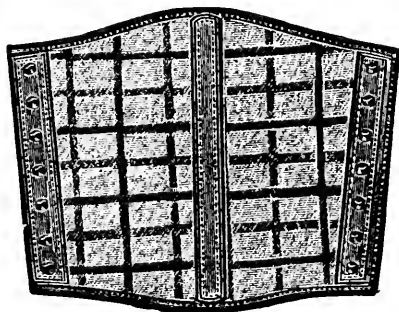
This mare, a Royal and Yorkshire winner, bred by Mr. F. H. Wilkinson, shows a great deal of strength, having a short back with powerful quarters. She has a temperate expression, and plenty of bone; well ribbed up and the reverse of being gutted.

confidential groom that his horses are well turned out, and well looked after. Following the suggestions just referred to, he should insist on the best management possible in his own stable, and he must know, and not merely think, that if the general appearance of a horse is unsatisfactory, something is wrong, and that wrong must be righted and the horse brought up to look first-rate. Aim at perfection, and, if you do not quite attain it, at least you will get far better results than the average person does, for good luck is good management, as a general rule, in or out of a stable.

Thousands of miserable-looking, half-worthless horses you come across every year, and fresh



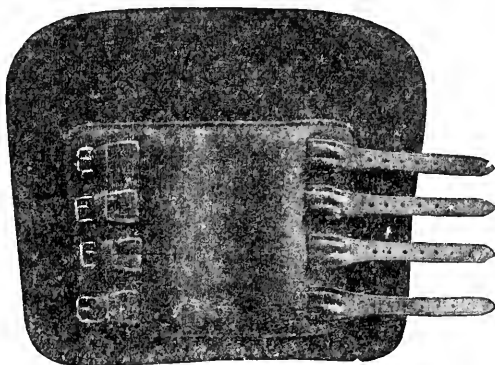
OVER-REACH BOOT FOR
FORELEG



LACED BOOT

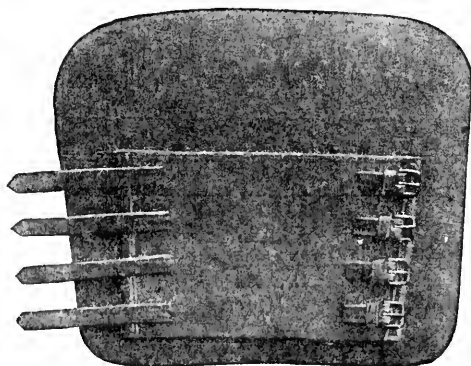
ones, equally worthless, are bred to take their place when their predecessors die of old age or are shot. They are only fit for the kennels, and often have hardly enough meat on for that destina-

tion. Yet, despite these warnings, breeders continue to breed from unsound horses or ill-shaped ones. Some are undersized or ill-shaped, and



POLO BOOT

then these deplorable failures, bred on wrong lines undeniably, and often reared with equal care-



POLO BOOT

lessness, give the risky pastime of breeding, or coping an even worse name than it deserves. It is undoubtedly a risk to buy a young, sound

horse, and to expect [to make a speedy profit. If you do contemplate such a venture, be sure you pick a youngster worth owning, have him passed by a vet, and then use all these previous hints to the best advantage, adding plenty of others derived from the experience of yourself and others; to be valuable they must be based on shrewd common-sense, otherwise they are mere cranks, and there are far too many stable cranks already, without adding to the number.

NOTE.—All boots shown in these illustrations are made by George Parker & Sons.

PART III

CHAPTER VI

BRILLIANT HORSEMEN

IT seems needless to emphasise how inexhaustible is the subject of horses—one studied during hundreds, even thousands of years by kings, statesmen, soldiers, business men, and yet there is so much to learn, that the task of giving the faintest outline of what has been chronicled, and what might be, seems hopeless.

Here is a very incomplete sketch of some of our most brilliant horsemen. Yet, just as

“ Many are poets who have never penned
Their inspiration, and perchance the best,”

so are there countless instances of riders as good, or nearly as good, as those I am about to refer to, who, through lacking notoriety or good mounts, are less known or only known locally. That this must be so the reader will easily acknowledge if he attends race-meetings in Buenos Ayres, Australia, New Zealand, and other parts of the world where residents are lovers of thoroughbred horses, and prepared to pay big prices for them, or who breed them at great expense.

It would, indeed, puzzle a first-rate judge of pace to know how to class the horsemanship of

many a jockey, who rides a desperate finish on race-courses little known to the average student of form, at a glance. But this should not make us depreciate the heroes.

In Art, certain masters are well defined landmarks; their work excites our envy and our adoration. Dull mediocrity feebly strives to imitate them, when they have founded schools of their own. Surely, if this is true in Art, the same may be applied to racing; therefore, let us mention those representative horsemen who have left their mark upon the English Turf.

FREDERICK ARCHER

Several years have elapsed since this wonderful jockey, in shattered health, groped for a revolver within his reach, and, pulling the trigger, terminated one of the most extraordinary careers that has ever been connected with Turf history.

Fred Archer was the chief exponent of nigger-driving jockeyship. When racing he gave the impression of being chronically on the alert, whilst he communicated his own lightning quickness to whatsoever horse he rode. He may be said to have forced the very maximum exertion out of every mount. For the moment he seemed to inspire his horse with his own determination, riding energetically every yard of the way, and finishing in a marvellous style with the most brilliant dash. Directly the flag fell he always gained something, an advantage he often maintained to the end when the distance was five

furlongs. He loved riding any sort of race; whether Derby winner or "selling plater," in his iron grip it was coaxed, or more likely punished, until he got it home, ridden hard the whole way though with good judgment. The profound contempt he appeared to hold his fellow-creatures in was not entirely unprovoked. If "Archer was up" on a complete outsider, whose previous performances showed inferior form, it did not prevent the public from backing the idol; it was the jockey they depended on, not the horse, and the price shortened in a most amazing manner. Love of applause, concealed from the outer world by the careless look on his face, a wounded vanity, and a most violent temper often gave rise to exhibitions of unnecessary severity. "Archer wins!" or "Archer's beat!" might be heard all over the densely packed stands. Then the great jockey would be seen coming up the straight, sitting down in his saddle, spurring and thrashing a beaten horse, the loud cracks resounding yet again and again even after the winning post had been passed.

But those head finishes! Ah, how different was the scene when the finest horseman in the world had a mount worthy of his genius—for he had genius! When every inch was disputed by jockeys who were his equals in many respects, when a mass of bright silk, white breeches, and glossy thoroughbreds rounded Tattenham Corner "all of a heap," and Archer, hugging the white rails from start to finish as was his wont, suddenly shot out of the Derby group amidst yells for the



‘ORMONDE.’

This photograph, taken from Mr. Familie Adams' picture in the Gallery at Eaton, is published by the kind permission of His Grace the Duke of Westminster. 'Ormonde' was bred by the late Duke, and is generally considered to have been the world's greatest race horse. He was well-proportioned, and his great size gave him an advantage over nearly all his rivals, yet there was nothing coarse about him. The late Frederick Archer said he was the best horse he had ever ridden.

favourite, which lasted until the numbers went up and the "all right" was called. Oh! those days when racing was the finest of the fine arts; long will they be remembered, never will they be seen again—for Archer is dead.

CHAPTER VII

TOM CANNON

BORN with a jockey's highest instincts, Tom Cannon became notorious chiefly on account of his deliciously persuasive hands. Light, yet very decided, they have never been excelled, more especially upon a two-year-old. They quieted down the most fractious mounts, or inspired faint-hearted race-horses with a sense of victory. When riding a cur, Tom Cannon was artistically insinuating. Stealing almost imperceptibly to the front, he had the knack of landing the odds, without touching his horse with the whip, unless absolutely necessary. And curiously interwoven with this gliding jockeyship were a searching pair of eyes, a resolute bearing, and a very noticeable pair of side whiskers.

Whilst apologising for using nautical similes, let us picture in our minds two vessels in mid-ocean racing against one another. A sailing yacht built upon exquisite lines, scudding before a spanking breeze, rising buoyantly and parting the waves with her bows, might be likened to the jockeyship of Tom Cannon, who rode as light as a cork floats in water. To illustrate the head-strong riding of the late Frederick Archer, let us imagine a steamer, vibrating from stem to stern

under the impact of too powerful engines, driven along at the highest pressure. And granted these comparisons are correct, we may surmise that Cannon's more sympathetic style injured fewer horses than his formidable rival, who was cruel to two-year-olds in the early part of his racing career; but he was more considerate to them towards the close of his life.

Regarded dispassionately, it seemed almost a pity that the riding of Cannon and Archer so clashed, for instead of each jockey assisting the public to form a notion of an ideal horseman from their respective achievements, they represented separate schools; firstly, the energetically harsh, and secondly, the quietly coaxing. In consequence, only admirers of both can form some faint conception of how a perfect jockey should ride; and they must also pay regard to Tod Sloan's feats.

The only Derby which Tom Cannon won was on the Duke of Westminster's Shotover. Nevertheless, this much coveted race must not definitely determine the merits of our representative jockeys, for Archer won the blue ribbon five times for his patrons; yet his ride on Ormonde was a small feat by comparison with the work he put in when Lord Hastings' Melton passed the winning-post, not prompted by his own inclinations so much as through the grim determination of his dashing rider. Unquestionably "The Tinman," as Fred Archer was called, was idolised by the populace, who adore brilliancy and whip flourishing. Yet it is doubtful if Tom Cannon did not benefit the

racing fraternity more than has hitherto been suspected. He studiously upheld the true dignity of the Turf, and utterly despised many tricks which are occasionally resorted to by followers of his calling—such, for instance, as “gallery-riding”—that is to say, he never pretended to exert himself to the utmost when he was “up” on a superior mount. Living at the same time, these two men seemed to be antagonistic to one another. Both were courageous, and both were unique in many respects. Archer was tall and lithe, and rode “long,” whereas Tom Cannon was thick-set for a jockey, and rode rather “short”—usually he was humane. “The Tin-man” hunched his back and looked like a gipsy; the other sat erect. Cannon’s genius lay in his insinuating hands, and Archer depended chiefly on the use he made of his whip and sharp spurs. Perhaps the strongest resemblance lay in their constitutions, for, though muscular, Tom Cannon was delicate, whilst poor Archer’s health was ruined several years before he committed suicide; yet he performed wonders, with an impetuous, dare-devil genius. Cannon, on the other hand, was patience personified.

With these, and numerous other distinctions, how can we draw a hard-and-fast rule, and say which was the finer horseman? Supposing that they had raced at totally different periods, we should be even more confused than we are now as to which instructor should be followed. Archer, of course, has long since been dead, and Tom Cannon has retired from the saddle for

years, so we are justified in treating him as a celebrity of the past.

One fact is worth noting, but we must be careful not to draw wrong conclusions from it. Years ago there was nothing to choose between Wood and Tom Cannon, and as the former remained on the Turf longer than the latter, and rode against several of our present jockeys, we can roughly estimate two generations, for there seems no reason to suppose that Wood improved as he became older, yet there is nobody who could afford to give him a pound (in weight). But some racing men may disagree with this statement, and declare that Tod Sloan was better. Sam Loates, C. Loates, and W. Robinson, who won the Leger on Kilwarlin and now trains at Foxhill, were brought out by Tom Cannon, but the leading jockeys of the present day who most strongly resemble him on a racehorse are his son, Mornington, and J. Watts. The founder of humane and smooth horsemanship also had a most creditable disciple in Mr. Arthur Coventry, who was once, and perhaps still is, one of our few accomplished amateur flat-race riders.

As if Nature for a freak wished to set hereditary laws at defiance, she strangely enough made J. Watts and Mr. Arthur Coventry resemble their instructor more than his son does. Although Mornington Cannon rides with quite as much judgment, and has even more strength when finishing than his father displayed, he has never acquired the peculiar delicacy of touch which characterised Tom Cannon's "hands."

We must not forget to mention that Custance, Fordham, Archer, Tom Cannon, and Wood were opportunists; for, since Buckle's time, we may take it for granted that the social gulf between jockeys and their patrons has narrowed amazingly. In reality, Lord George Bentinck's cleverly managed but not expensive stud was small by comparison with the late Danebury stable, which Tom Cannon presided over, and could not compare with Marsh's or Porter's well-filled stables either in quantity or quality.

Fred Archer died in affluent circumstances, and Custance, T. Cannon, Wood, and J. Watts, besides many others, made handsome fortunes on the Turf far beyond the most avaricious dreams of nearly equally experienced jockeys who lived a generation or more before them. Therefore we must not overlook the change which time and better education have wrought in the position of our racing stars.

Doubtless it will be said that if most jockeys on the flat resemble to some extent Archer, Tom Cannon, and, we must now add, Tod Sloan, then the same idea may be applied to steeplechase riders. Why not? If we choose to select any popular wearer of colours under National Hunt rules, we can at least trace some resemblance to the above-mentioned "representative jockeys," though at first it may prove faint. In a few rare instances the opposite styles blend. Arthur Nightingall most happily hit off the best characteristics of F. Archer and T. Cannon—dashing, gliding, punishing, almost at the same time.

We are disposed to range the dashing horsemanship of the late Major Owen, if not alongside, at all events in the same direction, as poor Fred Archer's. Mr. E. P. Wilson was a renowned amateur of a similar school.

Cross-country riders, whose style may be likened to Tom Cannon's, are Mr. Arthur Coventry, Mr. Arthur Yates—who, for riding a waiting-race, was the most celebrated horseman of his day—Mr. J. C. Cotterell-Dormer, and also Mr. Gwynne Saunders-Davies, who hailed from the Tivy side in South Wales, and, having grown too heavy for riding, now trains. Another popular gentleman-rider, especially a rider of winners of small stakes and also a trainer, was the late Mr. Sidney, who was killed instantaneously through a fall from his horse at Wolverhampton, 1903.

Having alluded to several representative jockeys who will never wear "colours" again, it is time we laid due stress upon the revolution in racing tactics which have been chiefly brought about by Tod Sloan. The exact value from an owner's point of view is not precisely fixed. Some keen men on the Turf declare that the swarthy American was 7 lbs. better than any living jockey, and considered that he was every bit as good as Archer was. Others, who are prejudiced, say, "Tod Sloan rode winners when he got the pick of the mounts." The truth of the matter is, that we find a difficulty in ranking an accomplished horseman who rode setting all preconceived ideas at defiance. What are we to think of such a freak, not unlike a prodigy out of Barnum and

Bailey's Greatest Show on Earth? What indeed! All know this style. It is wonderful to behold. Leaning as far back as his arms can reach, with face buried in his horse's mane, riding with the shortest possible stirrups, Tod Sloan made the pace throughout. No! we are slightly inaccurate. For, when closely watching him, we saw that at the starting-post he got away like a flash of lightning, and, until three-quarters of the distance had been covered, his long lead was usually maintained. By then Sloan's mount was caught and apparently beaten, for his horse dropped back, until it was only within the first three. "A change comes o'er the spirit of the race!" In an incredible manner Tod Sloan again led. Amid whip-flourishing, spurring, and frantic efforts from the English jockeys behind him, the clever Yankee landed his mount a winner much in the same way as a quarter-of-a-mile sprinter, having run his race like a hundred-yards runner, eased for a few seconds before gathering himself together in order to make the winning rush on nearing the tape. This crouched-up fashion of riding is considered by Sloan's admirers to be the highest known pitch of flat-race horsemanship, because it distributes the weight.

Is the hideous style, with outstretched arms, hands close to bit, and laughably short stirrups an improvement upon the graceful horsemanship of the elder Cannon and the method successfully practised by Fred Archer? Or, in other words, were our greatest English jockeys at fault, and is the Sloan method right? Prejudice and patriotism

will cause people to give wild answers. Those who are not bigoted will reply: "Sloan's method is right for Sloan, Reiff, and American jockeys generally, but not necessarily for English and Continental riders." It has a grave fault, viz., owing to his position a jockey cannot easily prevent his mount from swerving. When all is said and done, in a ding-dong finish it was good odds on the best of our English race-riders beating Sloan. All the records have proved this. We are, however, heavily indebted to him for making "true run" races compulsory, for no longer do racehorses in England canter and gallop at a "muddling pace" for the first half of the course.

There are different styles of painting, and cultured people have different opinions as to which master should be followed in architecture, music, and in literature. Jockeys also must abide by certain laws. Those who are not original must be content to follow Archer, Tom Cannon, or Tod Sloan until a fourth school is founded.

We have already stated that an ideal jockey should glean the best points of Archer's, Cannon's, and Sloan's horsemanship. It would puzzle the ghost of Michael Angelo to mould him, because a short-legged man cannot ride the same length as Archer did. Nor can a tall person easily adopt the Yankee way of leaning forward on his horse's neck without feeling insecure. We are bound, then, to fall back upon common-sense and admit that all men are bound to ride more or less in the manner in which nature has formed them. However, it might be advantageous in races over a

mile for disciples of Sloan to lengthen their stirrups at least a hole, and believers in Tom Cannon and Archer might shorten theirs. The American jockeys' distance is clearly five furlongs, because they get off more quickly than Englishmen, and ride with toes pointed. A lazy horse is influenced, and feels that the man on his back is like a piece of quicksilver.

Archer believed in throwing as much weight as possible on his horse's withers, and so does Sloan. Thus we have the idea carried out with long stirrups in one case and with extremely short ones in the other. Although all these representative jockeys seem on the right scent, it is illogical to imagine that any one of them is wholly right, yet each has unconsciously "set the pace" towards perfection in the art of jockeyship.

I have purposely referred to flat and cross-country riders together, as one is as high an artist as the other, but their styles must of necessity be different. At the same time the pace at which the Grand National is run, considering the enormously big jumps to get over, is quicker perhaps than the Derby—if viewed in proportion to the distance covered.

It is also a well-known fact that many first-rate jockeys—Frederick Archer was a striking instance—are no good over jumps; they are apt to ride too quickly at them. But some fine horsemen can do both. Yet a first-rate trainer assured me that the popular Major "Roddy Owen" was only a medium "jock" in a hunters' flat-race, whereas he

was quite equal to a first-rate pro. over a jump course, and better than most.

Stress cannot be laid too much on the fine horsemanship of Captain Bewicke, one of the best soldiers who ever wore colours, especially over the Sandown course. His judgment as regards pace was wonderful, being able to win races comfortably by a neck when his horse was good enough not to be knocked about unnecessarily. However, it may cheer novices to know that only after constant practice did success come to this good judge of pace.

Whilst on this subject reams, even volumes, and, almost without exaggeration, libraries could be filled with ease by those who are lovers of writing or reading about race-horses and their owners, trainers, and jockeys. We cannot spare more than a few pages just to illustrate how wide the literary field is in this branch of equine literature.

Take Derby riders alone, and a page is quickly filled. Butler, Wells, Custance, Osborne, French, Webb, Archer, Fordham, T. Cannon, Wood, the brothers Loates, the brothers Barrett, Watts, Cannon family, Allsop, Madden, Reiff, and dozens of others who, as good or nearly so, just missed steering the most popular victory on the flat. The riders who pulled it off will admit that plenty behind gave them trouble, and if the race was run over again in several cases, it might have worked out with a very different result.

CHAPTER VIII

“GENTLEMEN-RIDERS”

PROBABLY few will deny that, putting Arthur Nightingall and Mason out of the question, the services of Mr. Gwynne Saunders-Davies were as valuable as any professional. It is a pity that he has given up riding steeplechases. He never smoked, kept his nerve, remained in most excellent condition and gained a wide experience. He knew nearly every course in England and Wales. At the same time he was latterly in a position to “pick his mounts.” What a lot of meaning is contained in these last few words! Over and over again have we seen instances of men riding race after race on inferior “chasers,” whilst all the credit was bestowed upon some favoured jockey who certainly was invincible, for the very excellent reason that he had the “pick of the mounts.”

When Major “Roddy Owen,” Captain Bewicke, and Mr. J. C. Dormer were in the zenith of their fame, they monopolised the best jump-horses. Consequently, it was no easy task for less favoured individuals to gain notoriety at fashionable meetings. Fortunately, however, “everything comes to him who waits.” But each of those just mentioned were first-rate and as good as professionals: better than some.

Mr. Gwynne Saunders-Davies bided his time for years. As a little boy, to use an Irishism, he was a “good man to hounds” in a difficult bank country. Born at Pentre, a large country-house a few miles from Cardigan, South Wales, one of his earliest achievements was winning a small event in the Tivyside Hunt Steeplechases. This he accomplished on a blood pony; it was an artistic display of good horsemanship, which made critical onlookers prophesy great things of so youthful a sportsman. After leaving Winchester—he was one of the best “fields” in the eleven—Mr. Gwynne Davies frequently trained and rode his eldest brother’s horses, the pick of which was Fairy Queen. He has taken up his abode near Cheltenham recently, where he supervises a training establishment. His hands were, and indeed still are, nearly perfect, but, as a steeplechase rider, he was 2 lbs. inferior to what “Roddy Owen” was at his best, for, though firm and courageous, he did not run such hazardous risks. A long and tiring course like the National suited him best; he was never out of training, and his wind was perfect, especially for a long distance runner. A jockey like this, still in his prime, and who required no stirrup-cup before riding, was one who was extremely popular, especially at Sandown, and over the big Ludlow course, where he rode Cloister in that great horse’s last and ill-fated race.

Mr. Sidney’s was a name scarcely less familiar to Metropolitan race-goers. This midland gentleman-rider took to jump-race riding somewhat

late in life. He had nearly attained his majority when a scratch point to point was got up amongst his Leicester friends. This Mr. Herbert Sidney contrived to win. From that hour his attention was turned towards racing. It has often been said that small beginnings are conducive to great endings—this certainly seemed to apply to the gentleman in question. Shortly after feeling the flush of victorious pride, he rented a small farm with plenty of stabling, situated a few miles from Leicester, and stocked it with a small but by no means expensive stud. Acting as his own trainer, he rode, trained, and won local races on horses which nobody felt disposed to deprive him of, when they were afterwards put up to auction after securing the stakes. As time went on, his naturally light hands improved. Then he laid out larger sums upon a rather better class of jumper. Cunning Boy was about the best horse Mr. Sidney ever owned. Sometimes that safe conveyance secured a fair steeplechase at Leicester. From that central point he travelled all over England, and finally pot-hunted down in Wales.

Now, when all is said and done, no human being can win on inferior horses unless he has extraordinary skill and ability and phenomenally good luck, such as better horses falling. We do not for a moment pretend that Mr. Sidney broke the record and was phenomenal, yet we are inclined to hold him up as a good judge of small handicaps under National Hunt rules. He was a very useful gentleman jockey, and his experiments

as a trainer were cautiously made with unpromising material. Recently he wore Lord Rossmore's colours. Not very long before his death he did the "hat trick" by winning three consecutive races. On Up Guards he was seen to advantage. In fact, Mr. Herbert Sidney's was a name that should have been associated with a better class of chaser than he was in the habit of riding until towards the close of his career. He was thoroughly worthy of first-rate mounts long before he rode them.

Students of racing form and criticisers of jump-riding are rather too apt to regard a good gentleman-rider as a person who wins races. Certainly to be a fine horseman and never to win a race would be an exasperating sort of jockey who would not excite envy. Yet we must remember that "practice," and catering for mounts, "makes perfect." Beginners are prone to get daunted or embittered unless they possess a Job-like patience or have sufficient money to keep on riding mounts that possess very little chance. Therefore we are disposed to lay special stress upon those who are coming into prominence.

A few years ago one of our leading comic papers announced that "The gentlemen-jocks have had a splendid season, and some of their horses won in spite of their riders." This was cut out and sent round to some of the best cross-country amateurs, and, as may be imagined, was greatly appreciated. Perhaps the spice of truth which it contained provoked amusement. We have undoubtedly seen many terrible exhibitions in

our time, notably at Sandown some years since, when eight horses started in a military race, the riders in seven instances positively tumbling off because their mounts jumped "too big," yet they did not swerve.

In military races there is still much to be desired. The only excuse seems to be that in those cases where cavalry officers cannot ride over made jumps, perhaps their habit of riding with long stirrups is indirectly the cause. Candidly, we do not like to think that our army gentlemen-jocks as a whole are insecure in their saddles when they disport themselves in "colours." German officers latterly have greatly improved.

As a rule gentlemen with money will not take the same amount of pains to keep in the condition which a pro. is compelled to do, and amateurs on the flat rarely attain to perfection. The late Mr. Abington (the *nom-de-plume* of the late Mr. Baird), after repeated failures, and unabashed by ridicule in the press and amongst the crowd, became a really good rider of a large stud which he owned.

At the present time Mr. Thursby and several others are extremely good. Still, the gentleman flat-race rider who is first-class remains an exception to the general rule, whereas many gentlemen-riders already mentioned, and plenty of others besides, are over country as good as most professionals, Mason and a few others excepted—the steerer of 1905 Grand National winner is as good as Arthur Nightingall or his predecessor, Mr. Arthur Yates, who still con-

tinues training under the name of his head man, Swatton, and who, when 18 stone or thereabouts, rode a match, and must have remembered many a former occasion when he got home and scaled considerably lighter.

CHAPTER IX

“RODDY OWEN”

A BIOGRAPHY of “Roddy Owen,” which was written by his sister, and edited by Mr. Watson, the editor of the *Badminton Magazine*, gave an interesting account of the closing scenes of his life. It did not, however, remind us of the popular steeplechase-rider as we knew him; for, when engaged on active service, “Roddy’s” genial disposition underwent a change. So let us recall the peculiarities of his horsemanship, which gave him a position in Turf history that was almost unique—for we may state without exaggeration that no cross-country rider excited more comments over a stiff steeplechase course.

Either in or out of the saddle, there was something peculiarly fascinating about Major Owen, who was as bold as a lion, with a good deal of society affectation on the surface and a great depth of character carefully concealed. His healthy complexion had been bronzed in India; he seemed sublimely self-assured, and was very military-looking; in fact, a man of the world, with an unfailing supply of tact.

“Roddy’s” hawk-like face would have been hard had it not been brightened by a mischievous pair of eyes. His features were clearly cut, and the

pose of his head suggested haughtiness. When a racing-cap covered his forehead it gave him a good humoured, foxy appearance. A determined chin and resolute jowl strengthened his singularly attractive face. His mouth was a characteristic feature, because it was firm, yet easily moved to laughter.

In the saddling-paddock a crowd usually gathered round him and displayed the liveliest interest in watching him mount. This he did with a self-satisfied air, settling himself comfortably in his saddle, the admired of all. His seat and strong hands proved that he had constant practice. Turning his horse's head towards the fence nearest to the stand, he boldly took the jump at a terrific pace and careered down the course in the preliminary canter.

He was remarkably showy in colours, and wore ties like an old-fashioned cravat that immediately caught the eye. A book-maker once graphically described him as “a swell short of money, as good as a pro., and one who could handle his fists.”

“Roddy” rode with very long stirrups, sitting bolt upright in his saddle, like a cavalry soldier charging in battle. A big steeplechase course suited him slightly better than a hurdle-race, but he was equally at home over either, yet, according to an eminent flat-race trainer, scarcely a first-rate horseman in a hunter's flat-race.

Inclined as he was to fall into the wind-mill style of finishing, yet it was a magnificent sight to watch him, as his mounts flew their jumps,

seldom refusing or bucking over. His get-up was irrefragable. In splendid condition, he did not appear exhausted on returning to scale, and it took something very much out of the common to upset his sangfroid; he did not stimulate his nerve by the free use of alcohol.

Major Owen was almost perfectly built for jump-riding; he was agile and capitally drilled, which gave him the appearance of being almost taller than his actual height, which was above the average. With so much depth of chest and so powerful a build, it was wonderful how he contrived to fine down to 10 st. 5 lbs. at a push. He had so much unsuspected ballast in his composition that it helped to counteract the more reckless side of his character. A fine seat, a contempt for danger, and a magnificent nerve, all marked him out as the best amateur jockey of his day.

The professionals, naturally, could not be expected to approve of such a formidable rival, for he was as good as any of them, always excepting Arthur Nightingall, who was more finished and quicker over hurdles.

"Gentlemen-riders" admired, but, as a whole, were jealous of "Roddy Owen," for he outshone them. The privates in his regiment worshipped him and would have followed him anywhere, because he was an officer after their own heart. He was affectionate, more especially towards his mother, whom he strikingly resembled. But "Roddy" did not make confidants of his brother-officers in any matters connected with racing, and was serenely indifferent to those who were either

destitute of influence or who could not supply him with winning mounts.

Not only was he passionately fond of horses, but he was thoroughly in touch with them, though he never exhibited that perfect sympathy which characterised his predecessor, Mr. Arthur Yates, and his contemporary, Arthur Nightingall.

Apparently “Roddy Owen” bore a charmed life, and invariably emerged out of a group of first-rate jockeys, all of whom were as keen and as anxious to win as himself; every one willing to face considerable danger to gain the end in view. So, audaciously courting danger, yet cool withal, he steered his horse into the very thick of the struggle with perfect nerve. Wedging his mount into the centre of a tightly packed field, crowded together at the same fence, he used to thrust his way through them fiercely, chancing any fouls, and never dreaming of being unnerved by whosoever had “come down.” Even when hopelessly beaten, there was something decidedly cheerful about the laughing way in which “Roddy” completed the course, as if apologising to the crowd for riding a horse troubled with the “slows.”

The peculiarity of his style lay in the neck-break pace at which he rushed his fences; his mounts always covered a great deal of ground when they jumped, their rider giving them plenty of rein as they cleared the fence in their stride; they did not dwell as they landed but galloped straight on. Ill-tempered refusers were subjugated by his will, impatient chasers loved his

reckless dash, and "curs" became reassured by his unfaltering nerve.

No doubt timid horsemen were glad to keep out of his way, but it is only fair to state that Major Owen rode with just the same cheerful confidence when he found himself pitted against spirits as oblivious of peril as himself. His animation and the evident enjoyment he took in race-riding found him a number of supporters, who backed him persistently, no matter what mount he rode. And this notoriety which he had gained indirectly gave rise to little outbursts of dissatisfaction. Backers, who betted on his mounts without previously ascertaining whether they were good, bad, or indifferent, grumbled when they lost their money. In a few cases they aired their real or imaginary grievances offensively freely. As a disagreeable instance of this, may be mentioned a scene at Sandown, in which Tenby, ridden by Major Owen, started first favourite, but did not fulfil expectations. Directly after clearing the fence, close to the railway, Tenby pecked badly just as he landed and Major Owen came off. Prince Edward, a smart chaser, who had 11 lbs. the best of the weight, finished alone. The supporters of Tenby became exceedingly angry with the crack gentleman-jockey. But even under such trying circumstances Major Owen's presence of mind did not desert him. Remounting and scornfully raising his whip, he threatened to thrash any of the crowd who offered to molest him. A little later "Roddy" rode Tenby in a trial for the National, and the

horse again pecked. Thereupon he decided to try his luck on Father O'Flynn, a rank outsider and a most difficult mount, on whom he easily won the big event; he seemed to be the only jockey who could induce this speedy son of Retreat to gallop up to his best form.

Whatever Major Owen did he did quickly, and never seemed to get in the least flurried. Indeed, he may be said to have gracefully travelled through life with a first-class ticket. Riding the winner, dining at the best clubs, dancing at balls, drilling with his regiment, or camping out in the desert, his career was dazzling and varied, but never prosaic.

Although the scion of a good family, Major Owen occupied the unremunerative position of a younger son; all the same he managed to extract a maximum enjoyment out of the means at his command. There were many possibilities for so attractive a man. He might retire to the colonies, win a fortune on the Turf, turn gentleman-trainer, or marry an heiress. However, he did none of these. In a sense, “Roddy Owen” lived a very complete life, for he achieved his ambition when he won the Grand National. He enjoyed excellent health and spirits before he fell a victim to cholera in his prime. So long as men of his stamp hold commissions in our army, England will continue to be a great and conquering nation. Major Owen's pleasant, smiling face and manly accomplishments will be remembered for life by those who were fortunate enough to know him. Nor will they be easily forgotten by those who attended the

best steeplechase meetings at that time, because his death made a void, which hitherto no other racing man has filled. Although many good amateurs are to be seen constantly wearing colours, "Roddy's" horsemanship was a combination which it is indeed rare to meet with. That he would have won distinction as a commanding officer, if his life had been spared, there seems no reason to doubt.

PART IV

CHAPTER X

COLONIAL RACE-COURSES

WHOEVER sings the praises of our principal metropolitan meetings may be disinclined to believe that those popular resorts, in some respects, compare unfavourably with the best racing centres in New Zealand, Victoria, or New South Wales, more especially with the Flemington course near Sydney.

But as Australasia is a stronghold of patriotism in the King's dominions across the sea, it is manifestly absurd for us to feel any tinge of jealousy, because just a few colonial courses are better managed than our own. Let us rather welcome any innovation, no matter where it comes from, which seems likely to benefit the English racing community. At the same time, I willingly admit that the Mother Turf is apt to feel humiliated when she receives a lesson in the sport of kings from one of her many precocious offspring.

However, if we pause to consider what generosity is implied in the term "a good, all-round sportsman," then we are more disposed to admit the possibility of our antipodean cousins being as

clever at arranging successful race-meetings as they have proved themselves in regard to winning cricket matches on a first-rate pitch.

The Australians attribute to our insular prejudices the suspicion with which we regard their pet "starting machine." Of course the real reason we have not been very enthusiastic about it is, or should be, very apparent. English racehorses have been trained to start when a flag drops, and do not yet understand the meaning of a net unexpectedly popping above their heads at the last moment.

As regards racehorses carrying registered numbers on their saddle-cloths, and having a similar number on their stalls—and by so doing enabling backers to identify them—why, surely, this is an unquestionable improvement upon our present English system?

In 1892, when Sir Hugo won the Derby, I had to depend upon the truthfulness of a lad who led the horse about in the saddling-paddock just before the race. Either that boy had an imagination, or else he deliberately told a barefaced falsehood, for, with great solemnity, he declared his charge to be *El Diablo*. Consequently I lost a few sovereigns over that classic event, whereas, had Sir Hugo worn a number on his saddle-cloth, his admirer would not have been at the mercy of a stableman, and would, moreover, have won £250.

The picturesque Flemington race-course has often been compared to a scenic horseshoe; commodious private and public stands are erected on

the side of an impressive mountain, from which can be easily seen a magnificent view of every single race from post to finish. Even a gourmand cannot find fault with the catering, for the kitchens are large, the cookery is good; hot, *recherché* luncheons are served in spacious dining-rooms. One firm has a monopoly in this department, but are compelled by their contract with the Jockey Club to supply the best article at a reasonable price.

The shortest race is only four furlongs, run on a perfectly straight course, which is quite distinct from the large oval one reserved for long-distance races. There is yet another course at Flemington—for steeplechasing. It is inside the inner rails where the long flat-races are held. Nearly all the fences are alike, being made of red gum-wood, four feet six inches in height and absolutely unbreakable; they are about twelve inches thick. Opposite the grand stand is a big stone wall, with a large rounded log of timber placed upon the top, so as to prevent the chasers from damaging their knees.

The Flemington Racing Committee do not patronise guard-rails, water-jumps, or open ditches; the wings to their very formidable obstacles are securely put up, and are made of the same material as the fences themselves, namely, red-wood. On the landing side the ground is well forked and covered by tan, so as to prevent valuable chasers being injured by concussion.

Far be it from me to downcry our historical flat-race course. Yet, much as I love the associa-

tions of Epsom, it is quite a relief to know that colonials do not needlessly imperil their jockeys' lives by allowing dangerously sharp turnings, like that death-trap "Tattenham Corner." Then, again, at Flemington there is very rarely a long delay at the post, owing to Australian horses not being frightened at the starting machine. Less stress is laid upon head finishes in the Antipodes. Jockeys ride at top speed from start to finish on smooth courses, consequently they make excellent times, and a good jockey seldom wins on a bad mount, simply because there are no waiting-races.

Although everybody has long ago heard how the "totalisator" works, a large number of people to this day have no conception what sort of an affair it actually looks like. Imagine a turnstile in front of a window, behind which is a fair-sized room, with a few clerks and cashiers. Nobody can pass into this holy of holies inside the totalisator, because the entrance is barred by an official who plays the part of a book-maker. Slipped into frames outside the window are the names of the horses that are engaged in the "next event." This method of gambling is theoretically almost perfect, because each "punter" is sure to draw his proportionate stake if the horse which he has backed wins; but not infrequently the price is unsatisfactory, especially when nearly all the money is put upon one particular horse.

Personally, apart from feeling that your money is safe, and that you never get "welshed" by the totalisator, for it belongs to the Jockey Club, I

much prefer the Turf gambling in vogue in the Old Country.

Our owners at home are more influential, and can afford to purchase or breed the finest blood-stock in the world. It is more than likely that our jockeys and trainers surpass all others. But in matters that promote the happiness of the ordinary race-goer and appeal to his good taste, I unhesitatingly assert that we are behind the times. No course in England with which I am acquainted has "going" equal to that at Flemington. Nor, Goodwood and Ascot excepted, is the surrounding country so exquisitely beautiful.

Racing in Oceana is not only patronised by the Governor, it is the favourite pastime of all classes, even "larrikins." Evidently they take a pride in the Flemington Royal Box, which the Governor often occupies, and, to quote one of their own slang phrases, they like to "blow" about the oil-paintings of colonial Turf patrons that can be seen hanging on the walls of the handsomely fitted-up Race Committee Rooms. We, who are fond of our gaily-planted Ascot, must congratulate the inhabitants of Sydney upon having a tastefully laid out private drive up to the Members' Stand.

At Flemington, sportsmen who prefer using their own carriages incur hardly any risks by doing so, owing to the faultless accommodation in the large hackney stables quite close to the course. It is impossible for visitors to refrain from admiring their ladies' retiring rooms, and their

facilities for enabling onlookers to recognise the different horses, whilst they listen to the inspiring strains played by a finely mixed band.

The Anti-Gambling League makes few converts in the colonies, nor is this surprising. Almost every Bush "township" has its own local meeting usually kept going by squatters, store-keepers, and publicans. The latter nearly poison their unfortunate customers with adulterated liquor. Yes! the punter whose constitution refuses to be injured by "up-country" whisky is abnormally sound.

Although in New Zealand there are very few book-makers, and the totalisator is Government property, this is not the case in Australia; there the totalisator has nothing to do with the State, but each course has its own. It is much used in Brisbane. Steeplechasing and flat-racing are amalgamated in Australia.

CHAPTER XI

THE RACING CHRONOMETER

How good are the Derby horses this year? Was Ormonde the fastest winner ever foaled? And have breeders improved on Eclipse? are futile, though engrossing subjects to lovers of the thoroughbred. At present these questions are impossible for us to answer, but they may suggest to our minds the advisability of fixing the precise value of the racing chronometer.

Now, we do not suggest that each racehorse should start with a pedometer strapped to the martingale or saddle, but we are anxious to overcome the racing expert's antipathy to a stop-watch whose works are guaranteed to be in going order.

Although great events in England are timed to the fraction of a second, the British public are angry if the truthful watch casts a slur upon the reputation of their "fancy." All manner of ingenious excuses are made to refute time tests, and some people urge that the course was heavy, and others consider the horse was not fit. But though the "talent" may ransack their brains for excuses, they cannot deny that hitherto the chronometer has not been used to the best racing advantage. The truth of the matter is that time tests should neither be implicitly

believed in nor absolutely ignored. Now, the most suitable person to hit off the happy medium is the racing expert, who takes into consideration not only the state of the course, but also the time, as well as the condition and dispositions of the horses.

Granted that the weights are level, the horse who can complete a given distance in the fewest number of seconds is the fastest animal, but only theoretically. Practical racing men have long realised that horses run differently, more especially on courses they display a liking for. So in reality the "shifty" thoroughbred is mainly responsible for the antipathy which Englishmen feel to the racing chronometer. We are open to admit that the stop-watch is not necessarily a criterion of a horse's utmost speed. But those who are inclined to disregard minutes and seconds must not forget that tip-top time was never made by a bad horse. On the other hand, a high-class Derby winner might run a slow race, simply because the class behind him was inferior and did not compel him to gallop at his full speed. The time-keeper in England is so little heeded that otherwise well-informed race-goers are often unable to answer this question: "What horse won the Derby in the quickest time?" Lots of people who cannot recollect the answer to so simple a question can easily explain that Sir Hugo was not equal to St. Angelo in a mile.

The Colonials very wisely attach great importance to the racing chronometer. This is easily accounted for by their excellent times, largely due to a favourable climate. We must

not, however, imagine that the Australian and New Zealand courses are inferior to those of their Mother Country; as a matter of fact the Melbourne and Sydney race-courses are vastly superior to Epsom and Sandown. Finishing being less studied in the colonies, jockeys on the other side of the equator are apt to make the pace much hotter from the start.

Possibly some day racehorses may start with an "energyometer," an instrument that will record the amount of energy left in them when their race is over. The scientists will draw interesting conclusions from the energyometer and the stop-watch, but the racing man will only grow more sceptical than ever. For so long as horses are well-trained flesh and blood, and until jockeys ride all alike, "book form" will be constantly upset, and this is not surprising when we reflect that even vessels built on the same lines scarcely ever sail alike. Nor is it advisable that racehorses should perform like hobby horses, for, if they did, interest in steeplechasing and flat-racing would be greatly diminished.

We must never reduce racing to a certainty, or the stands will remain empty owing to no enthusiasm being awakened—a foregone conclusion ceases to be a race. Betting also would be abolished, because, according to a gambler's most sacred law, "It is not fair to bet on a certainty." Though unable to prove it, we may take it for granted that the speed of the modern racehorse has greatly improved. Ormonde and St. Simon in their day must have been un-

questionably superior to Eclipse at level weights. Jockeyship, training, and breeding are now more thoroughly understood than they were in any previous century. Nevertheless, there is something aggravating in not being able to definitely decide if our horses can gallop quicker than those of our forefathers. So, everything taken into consideration, it behoves us to hand down to our descendants a record of our best times, carefully noting also the state of the "going." But, after all, when we have taken the trouble to do so, the race-goers of the future may regard our time-pieces as inaccurate recorders. Possibly a new school of riding may have been founded that will revolutionise equestrianism, and for all we know the new racehorse may be trained by means of stored up electricity. And though such a suggestion sounds exceedingly far-fetched, it becomes less improbable if we view the situation in a logical light. We have improved the breed of racehorse, so why should not the studs of our descendants attain a still greater speed?

Let us again look at the old prints of half-forgotten meetings, and read the size of the stakes. Why, they seem as worthless as the animals that competed for them. We should shake our heads and declare the ancient time-keeper must have been mistaken if he declared that Charles the Second's best racehorse galloped quicker than Persimmon.

So, casting all prejudice aside, we gradually perceive that we must strike a happy medium. The chronometer must not be solely depended

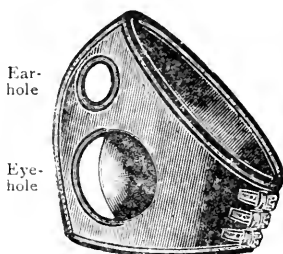
upon, nor can we implicitly believe what we see through our race-glasses.

Good jockeys assure us that occasionally a race is falsely run.

In order to make a brilliant finish, a horse is kept back when otherwise he could have won with ease; or else a horse often appears to be hardly ridden, when in reality he could, if allowed, have won in a canter.

Now the most aggravating thing connected with time as a racing test is condition. Many a staunch supporter of the watch has fallen over this stumbling-block. Therefore, it behoves the discreet person, who is anxious to form an unbiassed opinion of a horse's form, to ascertain if the racehorse who galloped either quickly or slowly was thoroughly fit. Then again, even granted the time and condition were all that could be desired, was the course suitable? Because this is a most important point, as veteran trainers know to their cost.

If wrongly used, time tests to the racing man can be compared with mirages seen by the thirsty traveller. So, casting prejudice aside, ultimately a reconciliation will take place between the chronometer and the racing expert. They are certainly necessary to one another, and the only barrier to their affection is a question of time.



RUNNING BLINKER
(used when racing)

CHAPTER XII

BITS AND BITTING

WE may take it for granted that in pre-historic times "the connecting link" was hacked about with a raw hide bridle in place of the now popular "Ninth Lancer Polo-Bit." But there were evidently disadvantages in riding with a rudimentary halter, because our forefathers subsequently adopted wooden and horn snaffles, and, later on, added sides or "cheeks" to them.

There was no further improvement for many centuries until the iron period, when the snaffle attained a higher pitch of perfection. So far as we can gather from historians, the ancient Romans were the first to introduce the principle of the "lever," or curb; it is humiliating to find that we have made hardly any advance in effective snaffles during the last thousand years. Dates are dangerous things to quote in connection with this interesting subject, for the evidence of the recognised authorities is conflicting. In order, therefore, to be on the safe side, let us state that horses were bitted in Egypt certainly 1500 to 2000 years before Christ, and probably much earlier.

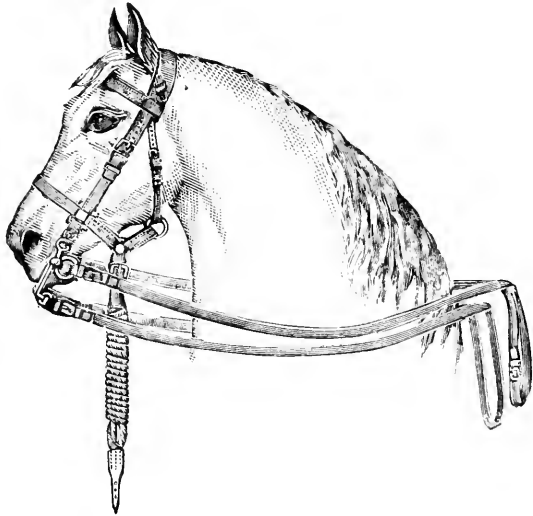
A very curious wooden mouthpiece, shaped like a badly-drawn horse, and believed to have been made about 1000 B.C., was found in Ger-

many not long ago. Then, again, in the horn and bronze period—according to old records—a primitive half-twist-bar-mouth-turn-cheek-pelham came into vogue; of course the original makers did not call it by that name, but it was one all the same. Virgil mentions a Roman bit, which was termed in his time *Lupatus*, on account of its ragged structure. Berenger, in his “History and Art of Horsemanship” (1776) gives the figure of a bit which was found in a large barrow called Silbury Hill, which stands near the road from Bath to London. The mouthpiece is not unlike that of a modern snaffle; the cheek pieces are peculiar, and would not serve to carry a curb chain. This bit is supposed to be either Roman or early British. All bits, practically speaking, come under the heading of either curbs or snaffles, excepting those which partake of the character of both. In the fourteenth century the long lever bits had formidable spikes attached to them, so that a rider’s enemies might not attempt to arrest his progress by catching hold of the charger’s mouthpiece. The sixteenth century was responsible for chain snaffles, which restrained hard pullers; and, in a curious little black-letter volume, published 1566, we find numerous plates showing curb bits more or less severe, and more or less ornamented. These resembled the handsome cavalry bits of the present day. The following is an outline history of bits up to the age of steel:—

(a) The raw-hide halter was introduced.

(b) The wooden snaffle, which was only a straight bar.

- (c) The primitive wooden-snaffle with side-pieces.
- (d) The plain straight-snaffle of bronze.
- (e) The jointed snaffle, in bronze.
- (f) The jointed snaffle, in iron.
- (g) The lever, or earliest form of curb-bit used by the Romans.
- (h) The snaffle and curb of the Merovingian and Carolingian periods, made all in one, like a modern Pelham.
- (i) Steel curbs and snaffles invented.



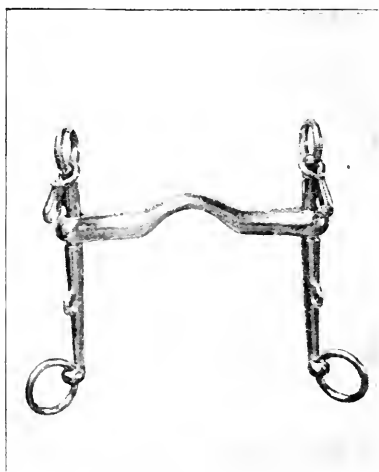
HEADSTALL BRIDLE WITH PICKETING-REIN

The impatient rider or driver perhaps remarks, "I do not care a straw about the origin of bits; but simply want to know the most suitable bridle for a puller, a bucker, a star-gazer, or a tender-mouthed horse." We will come to that presently. But let us first glance at a few of our modern bits.

The strength of a double-bit is chiefly derived from the height of the port and the length of the cheeks. Throughout Europe of late years there

has been a humane tendency to reduce the height of the port and seek restraining power in other directions. In making this general statement, however, mention must be made of that most cruel implement known as "The Russian Rearing-Bit," as the exception to the rule.

The inquirer is chiefly concerned with the improvements which have been made in this cen-



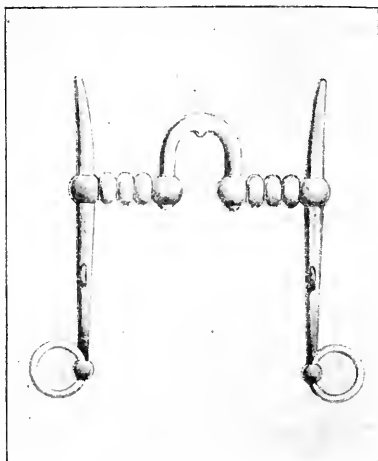
HUNTING BIT WITH SLIDING MOUTH

ture, more especially in double-reined bridles; for our racing-snaffles are uncommonly like the bits which were used before and in the time of the Romans, though of course ours are made of the best steel, whereas formerly such bits were made in wood and bronze, and afterwards in iron.

The chief peculiarity of the modern curbs is their movable mouthpiece, which is made so as to allow a certain degree of play on the cheek.

Good examples are:—"The Sliding-Mouth-Buxton-Bit-Bar-Mouth," "The Sliding-Mouth-Cambridge-Bar-Mouth," and "The Sliding-Mouth-High-Port-Bar-Mouth."

There are also sliding and revolving mouth-pieces, such as the "Buxton Bit," the cheeks of which are bent; "The Gig" is straight. Then there is the "Sliding-Mouth-Liverpool-Bit,"



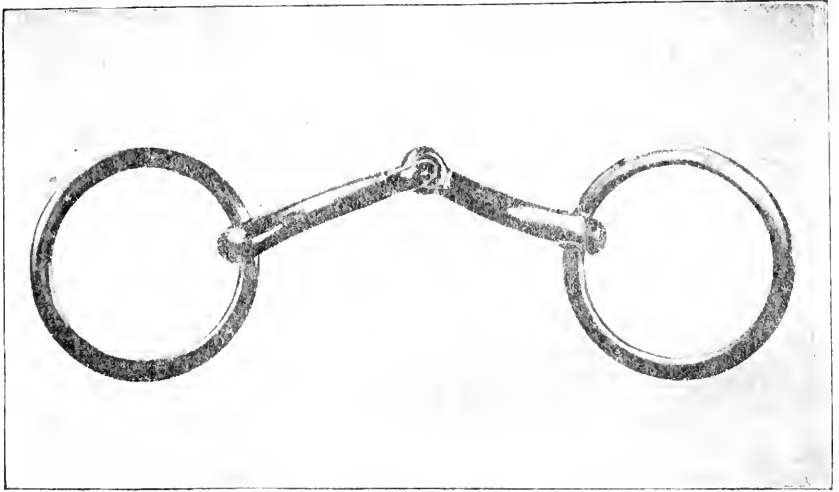
HANOVERIAN BIT, WITH HIGH PORT AND ROLLER MOUTH

which is an enlightened edition of the mediæval curb-and-snaffle in one.

"The Roller-Hanoverian-Bit" has a port two inches high; the sides of the mouth have rollers—this is to prevent a horse from getting too much purchase, or, as the phrase is, "taking the bit between his teeth."

Despite the fact that a first-class saddler keeps in stock something like a hundred different sorts of curbs, these in reality only vary in regard to

the shape of the cheek, the height of the port, the play of the mouthpiece, and the absence or presence of the bridoon, which is the principal innovation in double-reined bridles since the Middle Ages; this is merely a thin snaffle which is used with the curb, the two together constituting the ordinary double bridle.



BRIDOON

A curb made of the finest forged steel costs about 14s. 6d. The bridoon, sold separately, costs 4s. 6d. Racing snaffles, with $2\frac{3}{4}$ inch flat rings, are 7s. 6d. The old-fashioned curb-chains cost 1s. 6d., but letters patent have recently been taken out by Messrs. Peat, for a "Humane Curb," consisting of a smooth steel bar shaped to accommodate the angles of the lower jaw, and ringed at the end to slip on the hooks of the bit.

The advantage claimed for the invention is,

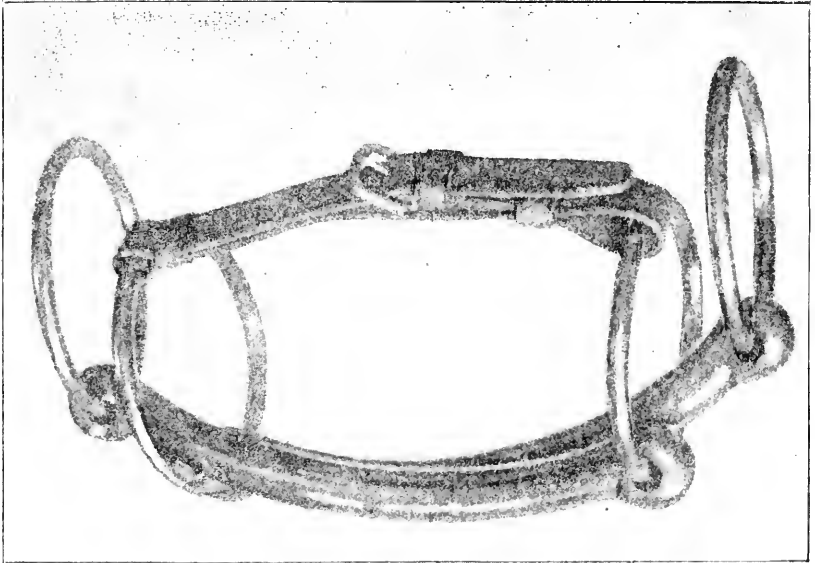
that a horse is not unnecessarily fretted by links becoming twisted underneath his jaw. Ordinary curb-chains are single or double, thick or thin, to suit the fancy of purchasers; leather curbs are sometimes used instead of a chain, and chains encased in leather are occasionally seen. In the well-kept harness-room we frequently admire the glittering polish of the bits. Alas! when the curb or snaffle has been a short time in use, its pristine brilliancy has departed, and although the steel may be kept well polished, there are usually an appalling number of tiny scratches.

The secret of an irreproachably cleaned bit is an expensive mill fitted with brushes sprinkled with fine emery powder. But it takes almost an expert to clean steel properly with this machine. The ordinary groom will act wisely if he ceases to scratch bits with a burnisher, and uses a paste consisting of $\frac{3}{4}$ brilliantine and $\frac{1}{4}$ paraffin.

Now, as regards the bridles suitable for the rearer, bolter, kicker, star-gazer, borer, or puller, and other horses that are ill-tempered, or as crafty in their own way as "The Heathen Chinee."

Owners of rearing-horses may feel disposed to try the Russian-Rearing-Bits before mentioned, but they had far better send the horse to a careful breaker to be cured of the vice. This bit is simply an instrument of torture, because it not only half maddens the horse, but is apt to nearly break the jaw. Many hard-pullers can be mastered by a pair of light though very decided hands and a Hanoverian pelham; but, in spite

of the time-honoured adage, "There is a key to every horse's mouth," there are some horses which from constitutional defects cannot be made amenable. The intemperate "rushing" brute which looses its head, apparently, at the sight of hounds, can only be kept in hand by means of



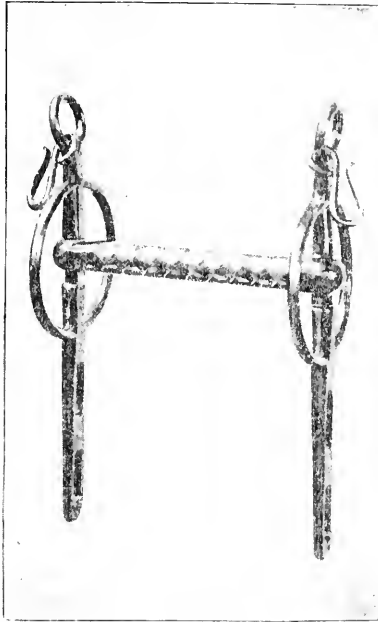
THE CHAMPION SNAFFLE

a powerful bit; and though sufficiently strong tackle will enable you to restrain him from bolting, the pain goads him into a state of frenzy, which makes him anything but a pleasant mount. A horse which can only be kept under control with a gag snaffle and chifney bit in the hunting-field may be a delightful mount for a solitary ride with nothing more than a chain snaffle in

his mouth. The "Champion" snaffle, named after its inventor, the well-known saddler, is a very useful bit for some pullers in harness. The checks of the bridle are buckled to the two inner rings, and the reins to the two outer rings. The sliding action caused by this adjustment allows very considerable power to be exercised over the horse.

The "Bucephalus nose-band" is often usefully employed in conjunction with a bit of good leverage; the nose-net is said to give good results with a puller, but only for a time, the restraining effect of the contrivance seeming to wear off more or less rapidly. The star-gazer may be made to carry his head properly by buckling the rings of a snaffle to a martingale of suitable length or shortness, but this plan is open to the objection that the dead strain may teach the horse to pull. Perhaps the better system is to take a long pair of reins, pass the buckle ends through the rings of the snaffle and carry them down to the breastplate, thus combining martingale and reins in one: "piped" reins answer best for this purpose, as they run more freely. With this arrangement of gear a rider with good hands may overcome the star-gazing trick. In very bad cases an Irish martingale, a six-inch strap with a ring at each end, placed on the reins under the jaw, or a single ring through which both reins are passed before being brought, one on either side of the neck, to the rider's hand, prevents all risk of the star-gazer throwing the reins over his head.

The horse afflicted with the contrary vice, boring, or carrying the head too low, may be taught to keep it up by the use of the gag-snaffle, which is so contrived that by means of a piped rein buckled high on the cheek-piece and carried through extra rings on the bit, the

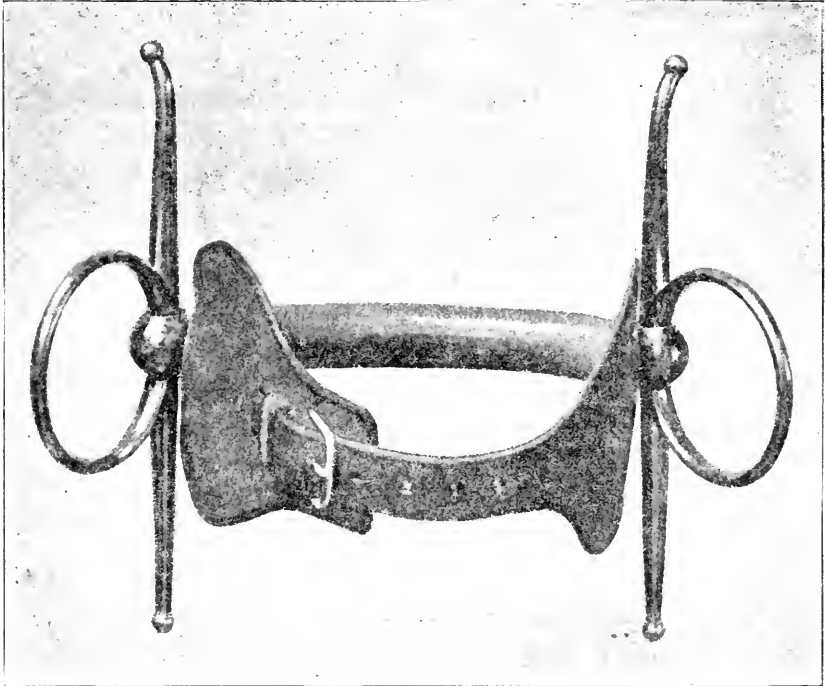


GUARD-CHECK OR LIVERPOOL DRIVING-BIT

mouthpiece can be pressed into the corners of the mouth.

Many devices have been tried to cure horses with "one-sided" mouths; circular pieces of stiff leather with a few studs rivetted on them and fixed on the bit answer the direct purpose, but are liable to make the horse shy of "going up to the

bridle." Messrs. Champion & Wilton have a bit for one-sided mouths which has given excellent results; it is a plain steel bar bent almost to a right angle, and "twisted" on the lower sur-



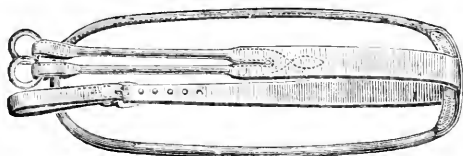
CAPTAIN HAYES' BREAKING SNAFFLE

face of the end which applies to the callous side of the mouth. This simple device is said to be very effective.

A carriage horse with a fairly good mouth should go well in a "Liverpool Bit" or else a "Sliding-cheek-driving-bit"; anything approaching to a high port should be avoided as unneces-

sary and cruel to a temperate and well-mannered horse. When driving a team, the "Elbow Bit"—so-called from the shape—is one that gives great satisfaction.

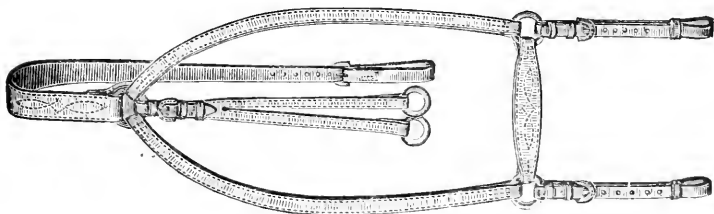
Many cross-country riders prefer the Irish



MARTINGALE

snaffle, which has large flat rings, and is used with double reins.

A very handy "Polo-Bit" is called after the 9th Lancer Regiment; it has a plain, straight mouth-piece and cheeks, with two loops for raising or



BREAST-PLATE AND MARTINGALE COMBINED

lowering the rein, so as to obtain a strong or mild leverage.

Exceptionally light-mouthed horses now and again require snaffles, covered with indiarubber; oddly enough, they do not bite them as much as one might suppose.

Captain M. H. Hayes has invented a snaffle

for use in breaking; this is an unjointed bit with leather covered mouth and leather guards at side buckling under the jaw. This arrangement effectually prevents hurting the colt's mouth, and is most useful with the long reins.

The staunchest supporter of the Royal Society for the Prevention of Cruelty to Animals could hardly disapprove of a plain-curb with slide mouth, low port, and short cheek, and in very average hands this, in conjunction with the bridoon, is probably the best tackle for all purposes.

Although we have not made any very great advance in the matter of "bits and biting" over our ancestors of three centuries ago, we may congratulate ourselves upon being a little more merciful. We need not plume ourselves too much on this account though, for as much ingenuity has been exercised in making irritating bits at the present day as ever distinguished the past.

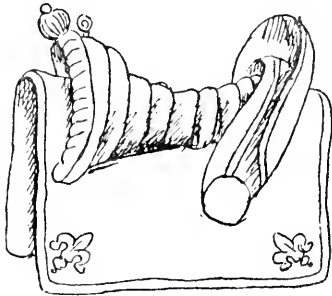
CHAPTER XIII

SADDLES

ANY one who examines, however casually, Greek and Roman coins, vases, bas-reliefs, or sculptures, cannot fail to notice that horsemen are invariably represented as riding bare-back or on a simple cloth. Saddles, properly so-called, were unknown to ancient Greece and Rome; the pad or saddle-cloth was the forerunner of the saddle, and this was secured upon the horse's back by one, two, or three girths. A sarcophagus found at Clayomenæ shows a pad thus secured with a surcingle. Trojan's Pillar and many other monuments bear similar evidence of the use of the housing, or pad, which was called by the Greeks *Ephippion*, and by the Roman *Ephippium*—a latinised form of the Greek word. It is believed that a saddle with a tree did not come into use among the Romans until the fourth century A.D.

These pads, or housings, were guiltless of stirrups or any equivalent thereof. Galen refers to the swellings and "defluxions," to use the word of an old translator, to which the Roman cavalry were subject, and which were due to the attitude maintained for hours together on horseback with hanging legs. The rider mounted with the aid of his spear shaft; his slaves gave him "a leg up,"

or the public horse-blocks which stood at intervals in every street lent the necessary aid ; sometimes the horse was taught to kneel in order to receive



EARLY SADDLE

his rider. There is no evidence to show that any form of stirrup came into use before the reign of the Emperor Maurice (A.D. 602). It has been conjectured that the idea of the stirrup originated in the use of a rope ladder which was thrown over

the horse to enable the rider to mount ; and when a stiffer structure replaced the pad this ladder was fixed thereto to support the rider's feet, and gradually changed its form into a pair of attachments whose primary use was to rest the legs.

The gradual development of the *Ephippium* may be traced on existing specimens of Roman architecture. The pad becomes thicker and the trappings much more gorgeous as years roll on, until an equestrian statue of M. Aurelius shows us a comfortable saddle-cloth, filling up the hollows in the horse's back. On the Theodosian Column, in the figures of Theodosius and Gratian, we meet with the true saddle for the first time ; these have a distinct bow in front and behind. Undoubtedly, about this period, as if to emphasise a recent discovery, a new Latin phrase was coined for a saddle, namely, *sella equestris*.

It would, perhaps, be convenient to give a

résumé of the above short outline of the history of the saddle, and continue the table up to the present day :—

(a) First came the earliest form of *Ephippium*, a thin cloth, or often the skin of a lion or other wild beast fastened with a girth, and with bands round the horse's chest and hind quarters to help retain it in place.

(b) The *Ephippium* became thicker and more comfortable ; it was gaily ornamented with metal scales, bells, and borders.

(c) A saddle, with a bow before and behind, was placed over these glittering trappings, the *sella equestris*, which brings us up to the end of the fourth century after Christ.

(d) In the seventh century stirrups were introduced.

(e) In mediæval times the exposed portions of saddles were protected by armour.

(f) Finally we arrive at the nineteenth century cavalry saddle, and plain flapped hog-skin.

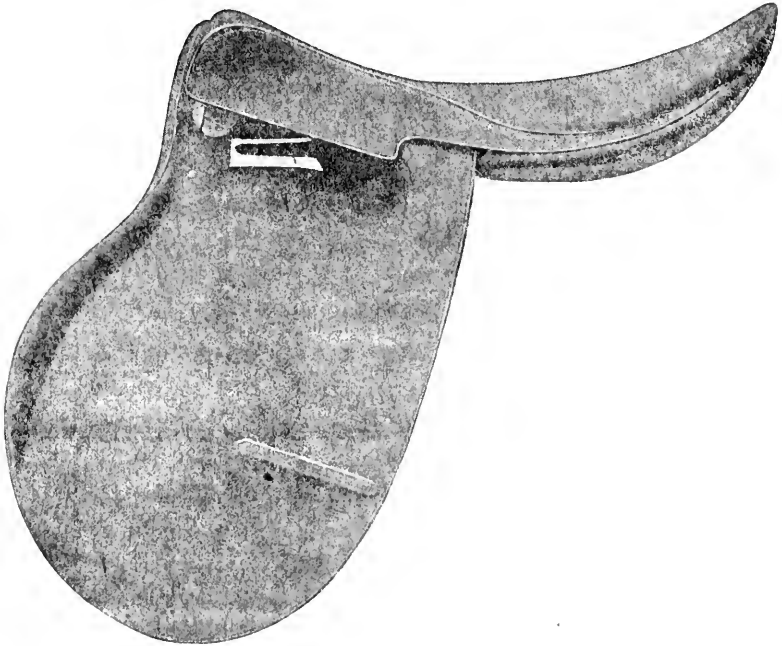
Biblical scholars may complain of our omission to mention how Balaam "saddled his ass." In all probability Balaam walked, and led a pack-donkey ; he certainly did not ride on anything so advanced as *sella equestris*.



SADDLE-TREE

"Saddle-trees" are made of beech-wood, over which the very thinnest canvas is glued, to prevent the wood from splitting under the process of driving in the nails. Iron, or in the best trees,

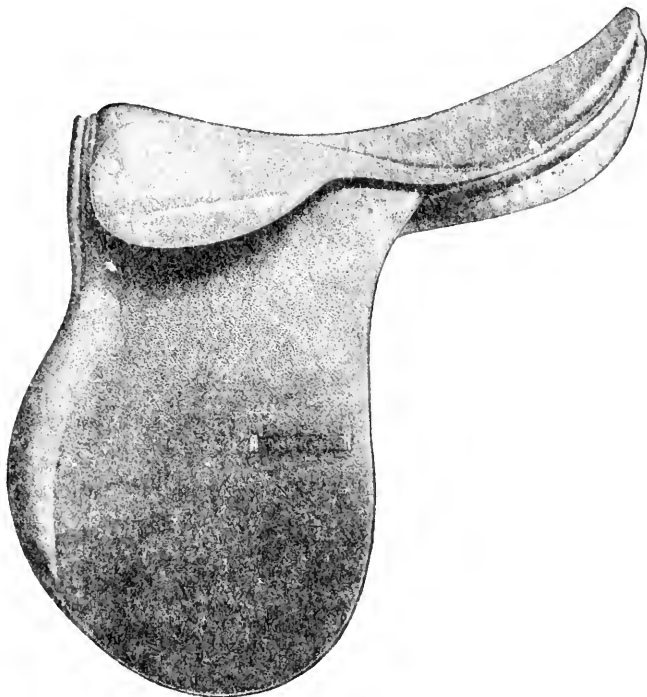
steel plates are afterwards riveted on the gullet or "head," and also on the cantle. The expression, "straining the tree," means fastening four pieces of linen web—two length-wise and two cross-wise—whose purpose is to support the seat. A piece



CHAMPION AND WILTON'S STEEPLCHASE SADDLE

of canvas is afterwards nailed on top of the "webs," and a piece of serge laid over the whole. The stuffing or padding having been well worked in between the canvas and the serge, the saddle is ready to be covered with hog-skin. The cost of putting a new tree into a saddle is about £2. For flat-racing the tree weighs only about 6 oz.

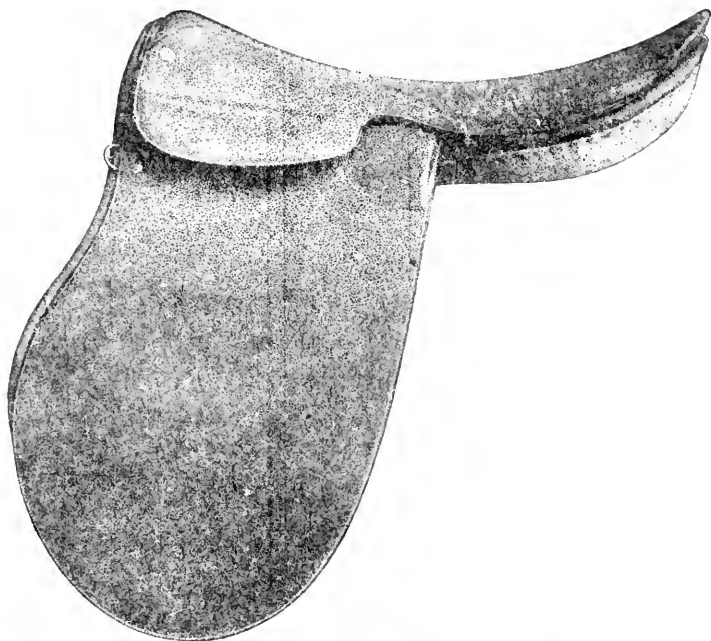
for a $1\frac{1}{2}$ lb. saddle, 8 oz. for a 2 lb. saddle, 12 oz. for a 3 lb. saddle, 15 oz. for a 4 lb. saddle. To obtain lightness no webs or spring stirrup-bars are used, a piece of stout linen being strained across for the seat, while the stirrup-leathers are put through



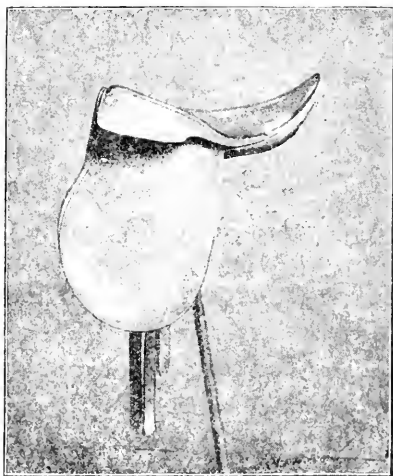
STEEPLECHASE SADDLE WITH KNEE ROLL

the tree. The French cavalry saddles have iron instead of wooden trees.

There are only two distinct shapes in modern men's saddles, namely, (1) the tree made straight over the withers and with a square cantle, which is the generally accepted pattern for hunting



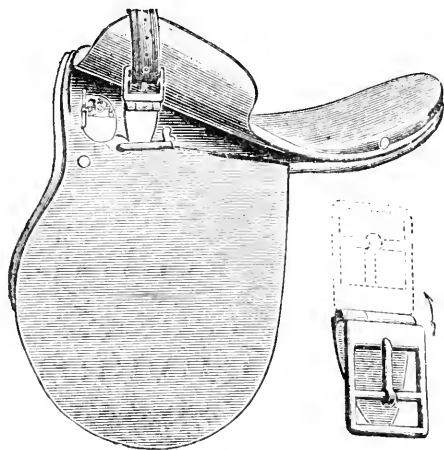
PLAIN-FLAP HUNTING SADDLE, STRAIGHT HEAD



PLAIN-FLAPPED HUNTING SADDLE

saddles, and (2) the tree made cut back over the withers and with a round cantle, which is used more for polo saddles, or horses with very high withers, and also for saddles made for the colonies.

Then occasionally saddles are made cut back with a square cantle to suit certain riders and straight over the withers, commonly called "straight head," and with a round cantle.

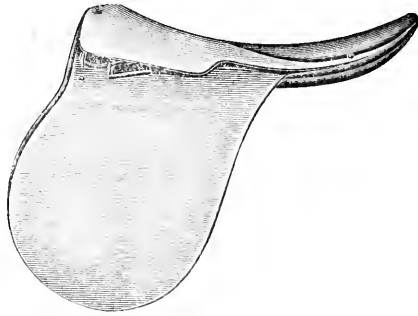


HUNTING SADDLE WITH WESTON'S PATENT BAR
(Messrs. Champion & Wilton)

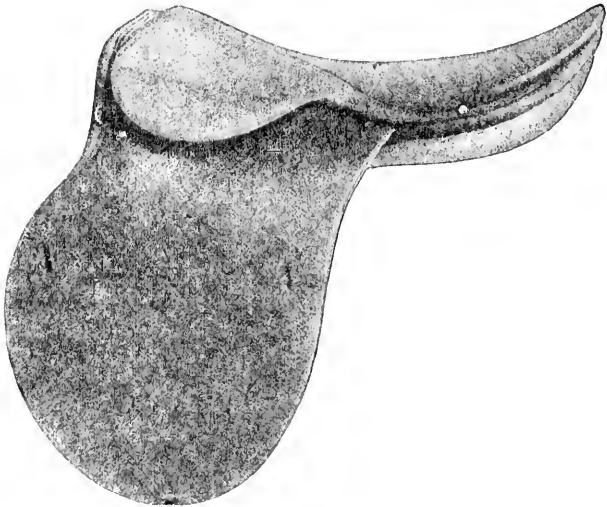
Needless to say, the prices of saddles vary considerably. Here are a few quotations from a leading West End saddler's price list:—

	<i>£ s. d.</i>
Gentleman's hog-skin hunting saddle (any weight) girth, stirrups, leathers . . .	7 7 0
„ „ with plain flaps . . .	6 6 0
„ „ with soft quilted seat . . .	7 17 6
„ „ quilted all over, Somerset saddle . . .	8 18 6
Race or polo saddle, complete . . .	5 15 6
Numnahs or saddle-cloths, felt . . .	10s. 6d to 14 6

At Walsall, near Birmingham, a large number of cheap saddles are manufactured, the trees of

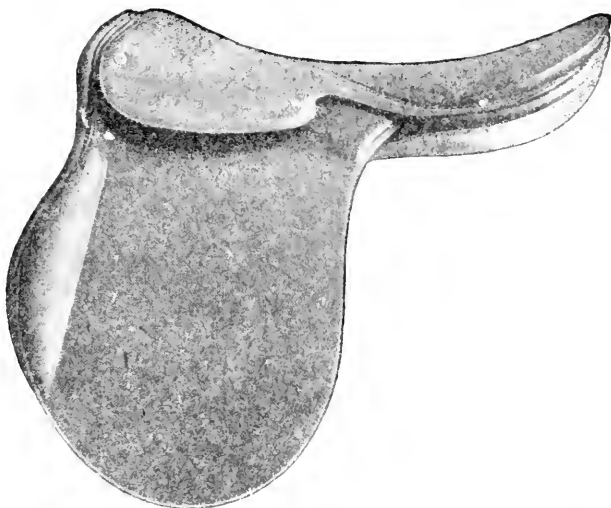


A NEAT PLAIN-FLAPPED SADDLE

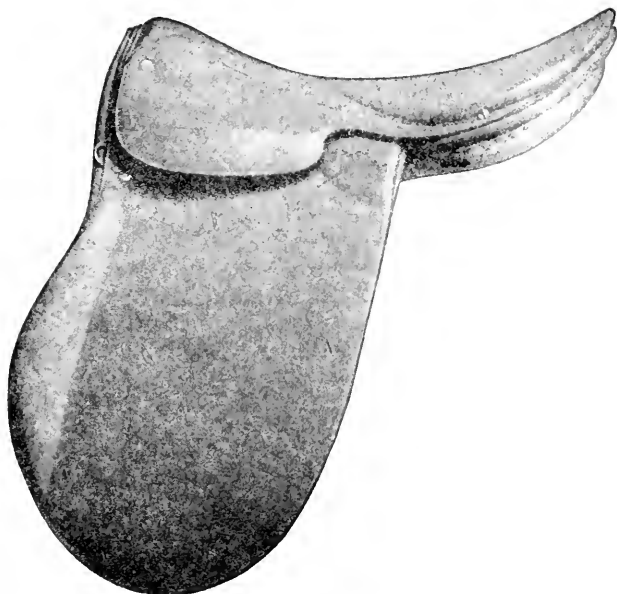


HALF-CUT-BACK HUNTING SADDLE, PLAIN FLAP

which are made of sawn wood and hoop iron, instead of wood split with the grain. These, covered with imitation hog-skins—really stamped



HUNTING SADDLE WITH KNEE-ROLL

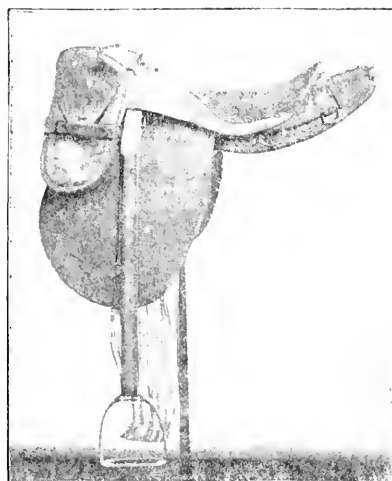


HUNTING SADDLE WITH KNEE-ROLL

sheepskins—cost about 25s. each; but they are



LIGHT (OFFICER'S) SADDLE

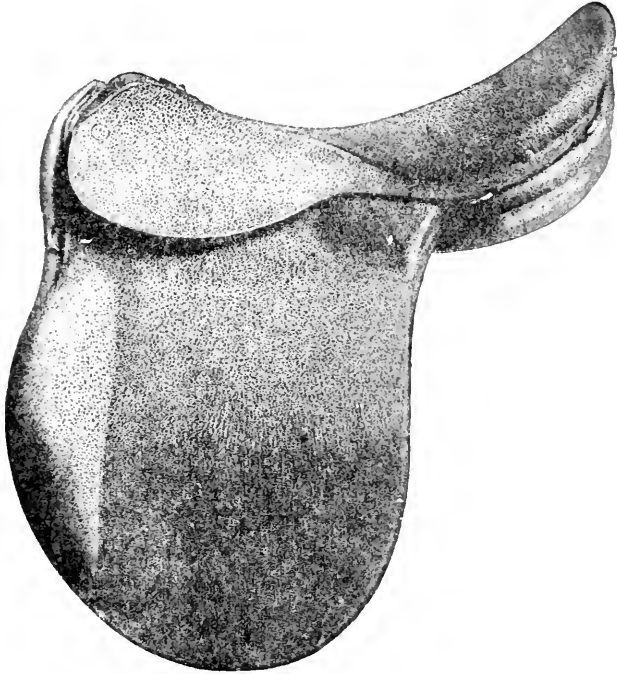


MILITARY SADDLE

not necessarily cheap at the price. Their detractors imagine that they might not last longer

than five minutes if they were put on exceptionally bad kickers; and sore backs are prolific.

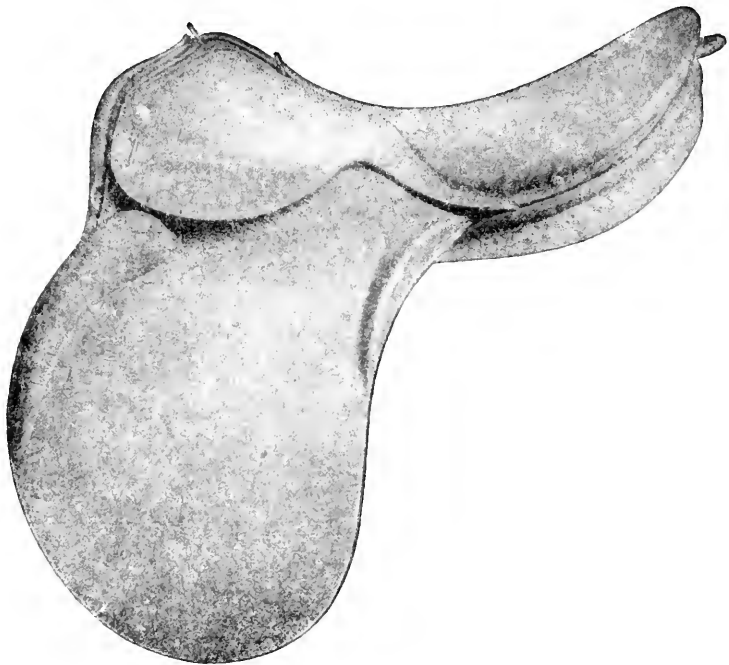
Saddles, of course, vary according to their purpose, in price, size, weight, and shape; the following may be taken as about the average:—



COLONIAL SADDLE

Lady's, 11 to 13 guineas, weight 18 lbs. A lady's saddle for hunting should weigh about 2 lbs. without the furniture for every stone it is to carry: thus, a lady who weighs eight stone seven pounds should use a saddle weighing 17 lbs. A hunting saddle 7 guineas, weight 12 to 14 lbs.; racing £5, weight from 1½ lbs. to 4 lbs.; racing saddles are

sometimes made as light as 1 lb. Regimental saddles cost £8, and weigh $1\frac{1}{2}$ stone; they vary in shape according to the regimental pattern. Polo saddles £6, weight 8 to 9 lbs. Hacking saddles £6 to £7, weight 10 lbs. Colonial saddles

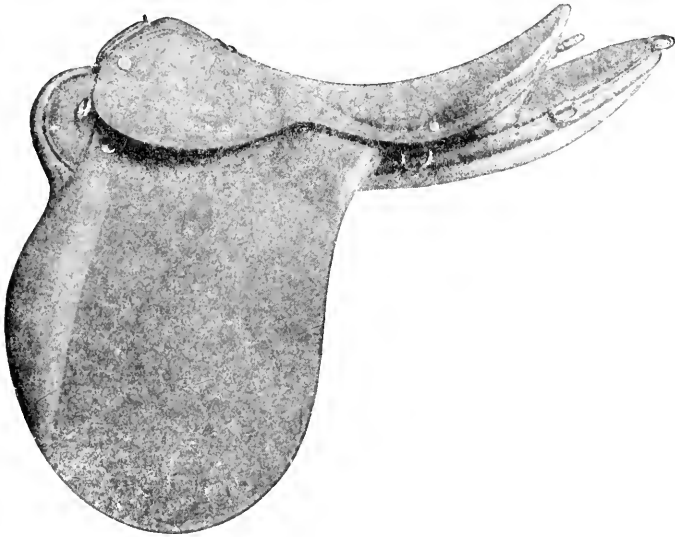


COLONIAL SADDLE WITH KNEE-PADS AND CRUPPER LOOP

£7 to £8; their weight is about 14 lbs. For Mexican saddles fancy prices are given; as much as £50 is paid for a particularly elaborate specimen. The expense is incurred in the profusion of silver mounting and embossed leather. In weight they range from 20 lbs to 30 lbs.

“Side-saddles” date back to mediæval times;

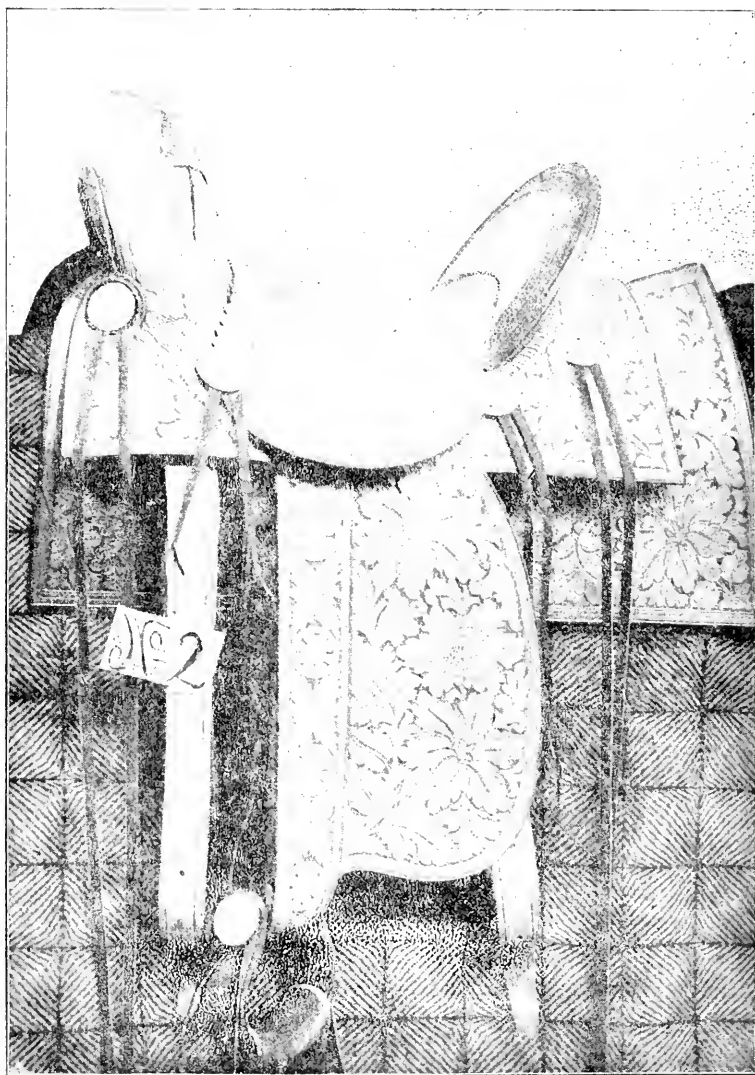
they are said to have been introduced in the latter half of the twelfth century; but a lady's hunting saddle is, comparatively speaking, a very recent development. Originally, ladies rode pillion-fashion, *i.e.* on a pad behind a horseman; the lady sat sideways, and usually steadied herself by holding her attendant's belt. The next development was a



MILITARY SADDLE

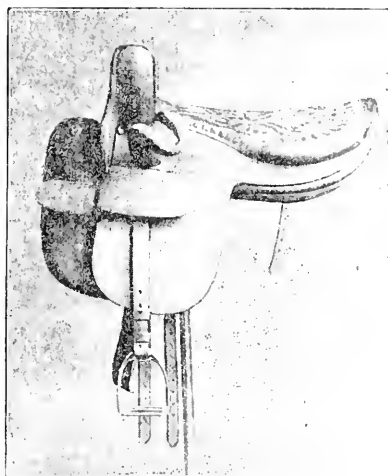
saddle which allowed the woman to ride sideways; the right leg was supported by two pommels, crutches, or "head," in the shape of a cow-horn, the left leg being supported by the stirrup.

Eventually the "third" or "leaping" head was introduced. This was really the outcome of a wager between Mr. Oldaker, a very practical saddler, and some person whose name is now forgotten. The conditions of the bet were that

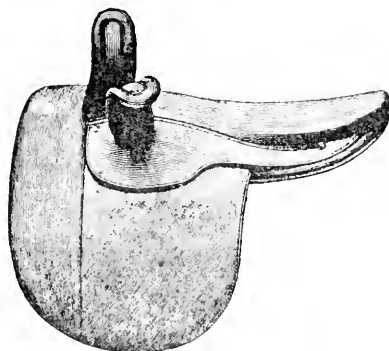


MEXICAN SADDLE

they were to ride a steeplechase, "catch weights," on ladies' saddles. Mr. Oldaker, uncertain of his



YOUNG GIRL'S PADDED SIDE-SADDLE

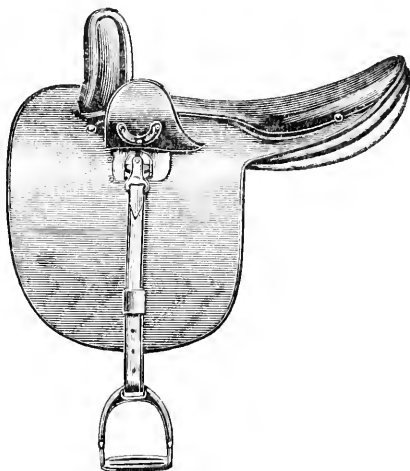


LADY'S SIDE-SADDLE

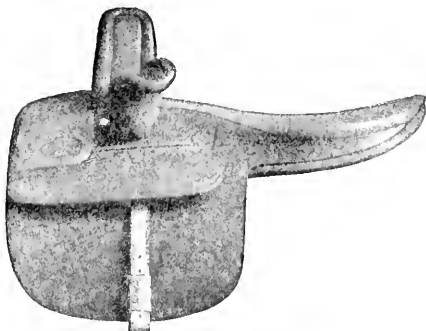
(Nicely cut for hunting; strong and comfortable)

ability to keep his seat, conceived the idea of "The leaping head." He negotiated the course, without his leg once slipping, and was first past the post.

“The leaping-head” or third pommel, or crutch, being found so advantageous, was generally



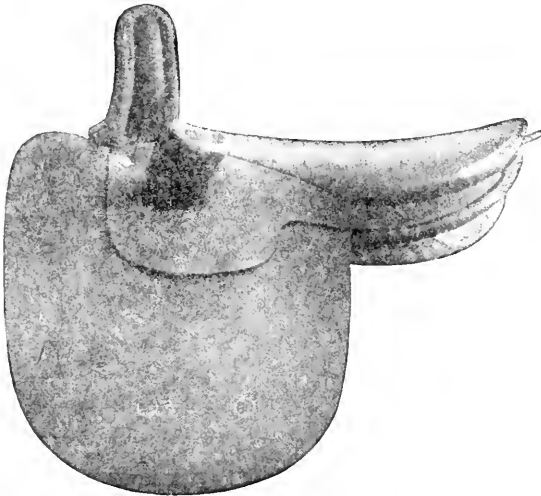
IMPERIAL LADY'S SADDLE WITH PATENT BAR
(Messrs. Harries & Son, of Shrewsbury)



LADY'S SADDLE WITH PATENT BAR
(Messrs. Champion & Wilton)

adopted for cross-country riding; two heads being found sufficient, the off-head was gradually discarded. A great change for the better has

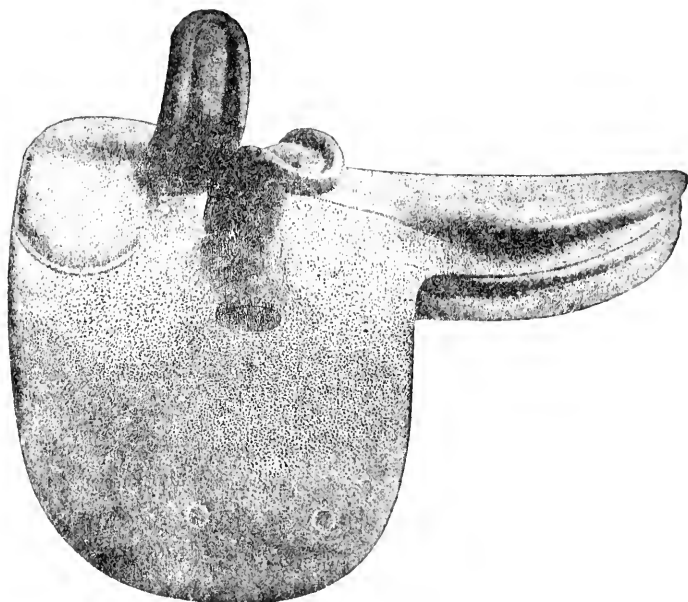
been made by cutting away the fore part of the saddle over the withers of the horse, and supporting the right knee of the rider on a neat leather flap. This alteration has enabled the saddlers to reduce the height of the pommel and give a level seat, whereby the rider gains in safety and also in elegance of posture. Nor



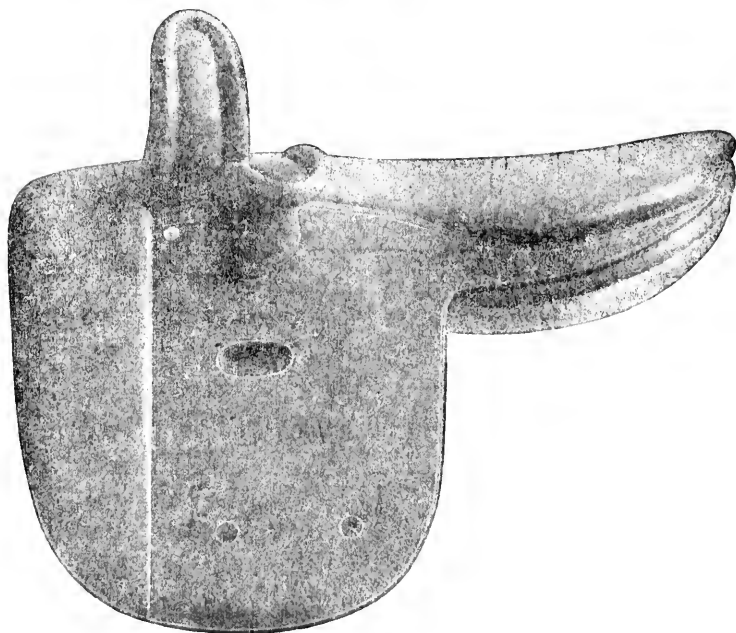
LADY'S SADDLE WITH PLAIN BAR
(Peat & Co.)

is the lady the only gainer; the saddle fits the horse better, and, the rider being nearer his back, is less likely to give her mount a sore back.

When the saddle is taken off a horse, it ought to be put in the sun, or before a fire, to dry out the perspiration. The panel should be beaten and brushed, and saddle-soap mixed with milk is the best preparation for keeping the leather soft and a good colour.



ORDINARY SIDE-SADDLE, STRAIGHT SEAT, PLAIN FLAP

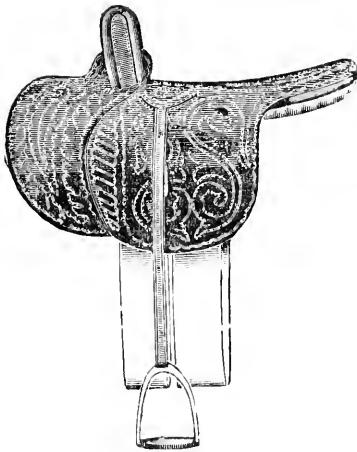


LADY'S SADDLE, WITH STRAIGHT SEAT, PAD ON FLAP

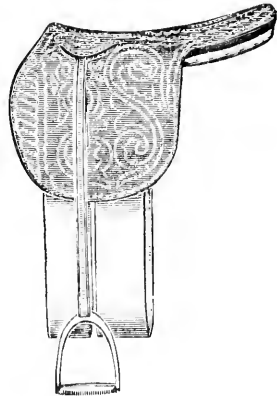
Stuffing and relining a gentleman's saddle costs about 20s.; the same repairs to a lady's, 24s.



LADY'S RIDE-A-STRIDE SADDLE
(Harries & Sons)



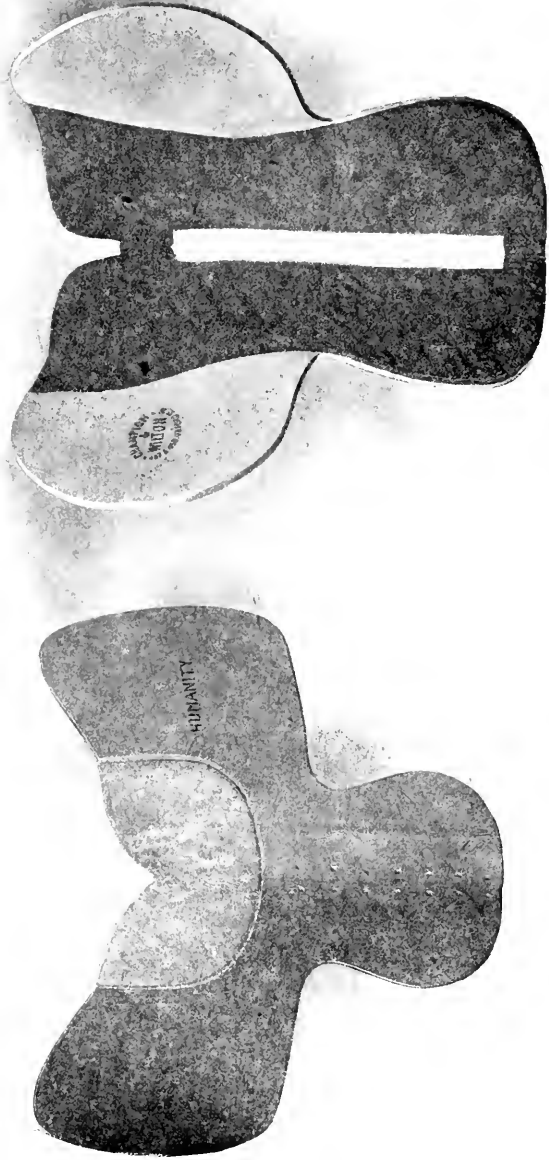
LITTLE GIRL'S SADDLE



LITTLE BOY'S SADDLE, No. 5

If horse-hair is used for stuffing, the saddle should be lined with leather to prevent the stiff hair from working through.

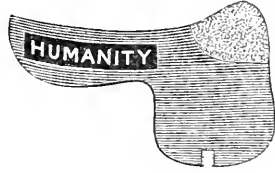
Knee-rolls are rapidly dying out, although some



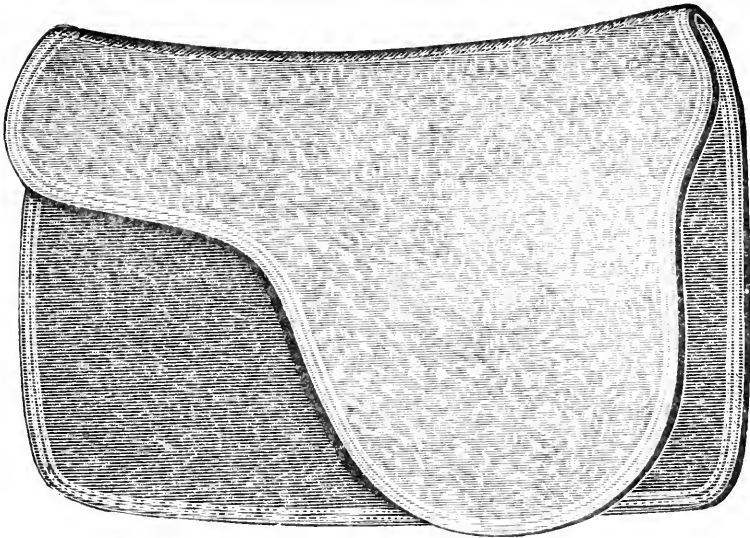
CHAMPION & WILTON'S PATENT SPONGE NUMNAHS

(The sponge must be kept free from dirt or this numnah is useless, but when properly looked after it is a safeguard against sore backs)

men find it easier to ride with them; they are undoubtedly helpful when the horse is narrow in front. Saddles with very prominent knee-rolls are much used in Australia and in other countries where the breaking of horses is very casually done. A great many of the best orders which a fashionable saddler receives come from



America and South Africa. The Boers, some of whom weigh twenty-six stone, often request that 20lb. saddles should be sent out to them.

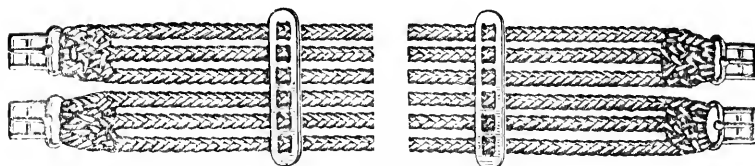


LADY'S NUMNAH

CHAPTER XIV

GIRTHS

HIDE-GIRTHS are often used in the Australian Bush and in several of our Colonies, but they are rarely seen in English hunting centres. They are not such comfortable girths as the "V.W.H." and "Fitzwilliam," and naturally an owner [of



HIDE GIRTH

valuable horses seeks comfort for them and avoids getting them girth-galled.

A valuable adjunct is a surcingle, which is a web strap going over the saddle. This additional safeguard is useful when racing or riding young horses. It keeps a saddle on in case a pair of girths should break.

How to girth a horse properly is a much disputed point. Some people consider that two fingers should be squeezed in when the horse is ready to mount. If girths be much tighter they become galling so, and also help to stop a horse's breathing through affecting his heart.

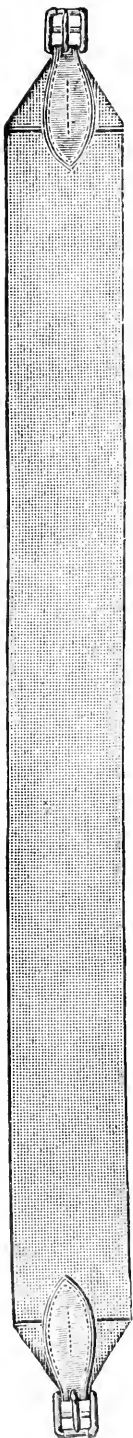
I have known otherwise honest horses that would not try to gallop when tightly girthed. A good many horses learn to buck through nothing else but being too tightly girthed, otherwise they would be perfectly quiet.

When about to do a gallop, or when close to a meet of stag or foxhounds, always see that you do not go to the other extreme and have your girths too loose. The aforementioned test of getting your two fingers between the girths and the horse is quite all right.

Much depends how a horse is made. Some will carry a saddle quite loosely, unless it is very well and cleverly padded. Others will have it tight, being dependent on whether a horse is well or badly shaped at his withers, and herring-gutted or like a beer-barrel round his body. In the army, leather surcingles are used. Of course web-girths have to be washed. In time this rots them.

A capital girth is made from ordinary leather with perforation slits to allow the perspiration to escape. This girth is most substantial for colt-breaking.

“V.W.H.” (*i.e.* Vale of the White

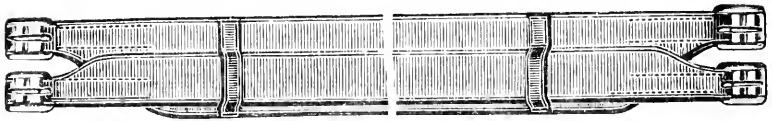


WEBBING GIRTH

Horse) girths are used in the leading hunts, such as the Pytchley.

It is easily obtainable from any first-rate saddler, being kept in stock. But it is not liked by many people, because it absorbs the perspiration more than leather girths do. In comparison they do not wear so well. One pair of leather would last two of the web ones out.

When a horse is killed at the kennels, its carcase is hung up in joints until meat for the hounds is next needed. It might be for a week



LEATHER GIRTH

or a fortnight, according to what the kennel huntsman has got in stock. The flesh is put into a large copper, which in Yorkshire is called a "set-pot." It is boiled until all the flesh is off the bones. Then it stops in the copper until it is cool, and the fat rises to the surface. Now the fat thus obtained is excellent for preserving leather, and can be used for leather girths and also for bridles.

Saddles are, of course, only soaped or vased. The latter must be applied when the saddles are perfectly dry, but soap can be used if they be wet or dry.

CHAPTER XV

WHIPS

No author has written a standard work on whips ; therefore whoever sets an example feels like a literary pioneer. You may wonder what instruments of castigation were used in the days of King Solomon? Let us piece a great deal of evidence together, and begin by ascertaining when the wisest King of Israel lived. He was born A.M. 2971, and died 3209. Evidently whips can be traced back to the time when the Temple was built, as anybody can verify who turns to 1 Kings xii. 11. We quote Rehoboam's scornful remark : " And now whereas my father did lade you with a heavy yoke, I will add to your yoke ; my father chastised you with whips, but I will chastise you with scorpions." The statement is repeated in verse 14 of the same chapter. The Greeks also had an ingeniously cruel lash made of knuckle-bones, through which a string was threaded, but neither the freemen nor the slaves were often beaten with this abominable implement of torture.

In ancient Rome the " cat " was frequently used, and the victims fainted under their terrible punishment. Occasionally they died from their injuries, for the lashes were sometimes made of

wire, but usually of knotted cord. A representation of the above scourge may be seen on a "bas-relief of the statue of Cybele in the Capitoline Museum at Rome. Some *flagella* found at Herculaneum consist of several short chains, with knobs of metal at the end, attached to a short handle." Another point worth noticing in connection with Roman *flagella* is that gladiators fought with them. To judge from old coins, the whips used in the arena had only two lashes, and the same may be said of those used for driving.

Classical scholars will recollect that in ancient Rome, a bundle of rods (*fascos*) tied together, with an axe in the centre, were carried before a prætor or a consul as a badge of authority; to show that each possessed the right to execute or beat a subordinate. All things considered, we are justified in believing that the ancient "cat" or *flagellum* superseded primitive wooden goads that had no lash, and then, as the civilisation of ancient Rome gradually spread, whips having two lashes were introduced into States that were under Roman sway. But, these whips being made of perishable material, no trace is now found of them, and we have to again search the Bible for any trace of their existence. A clue is given in a Harleian MS., executed in the eleventh century. We refer to a copy of "The Utrecht Psalter," which has a quaint illustration of a "cat" or *flagellum* with two lashes, similar to those used by Roman gladiators. At this stage in our inquiries we come to a standstill, because a copy of "The Utrecht Psalter" has an illumination of

a whip, but the original MS. appears to have only a rude goad. Consequently, we leave our readers to decide upon the value of this information, for some may declare that no *flagella* were used in England before the eleventh century. Other readers may argue that, if the Greeks and Romans used whips long before this period, probably the Britons used them also when driving their war chariots.

The Louterell Psalter of the fourteenth century shows a carter driving his team with a short, stocked whip having three thongs—an instrument more like a scourge than our conception of a driving-whip. Needless to say there were no true driving-whips until the date when coaches were introduced, and that did not occur till about the year 1600.

The next point that it is necessary to emphasise is this: From the time when the various whips we have alluded to were invented, up to the last century, very little ingenuity seems to have been exercised in the manufacture of whips. As we have seen, in the first instance they were constructed for corporal punishment, but subsequently they were used by carters to quicken the paces of beasts of burden, and then only one lash was required. But where are any old whips to be seen?

It is very rare to find a whip of any date earlier than the Stuart period; a few made in the reign of Charles II. still exist. Racing men need scarcely be reminded that the famous Newmarket Challenge Whip, of which more anon, dates from

this period. Other whips of Charles II.'s time may be seen in private collections.

An important change was effected when whips were constructed with bent tops, as we use them now, for driving. Apparently this fashion came into vogue about the eighteenth century, when whip-making became a recognised industry. Hunting-whips in the earlier half of the century were made with bent tops, like a short-handled carriage whip, as we learn from the pictures of James Seymour and his contemporaries.

The huntsman's whip of a later date, if clumsy, was a very formidable weapon. There is in Sir Walter Gilbey's collection at Elsenham Hall the whip which belonged to Hoswell, who was huntsman to Mr. Maynard, the Countess of Warwick's grandfather. It is a large and heavy whip, constructed in much the same fashion as the plaited gut crops of the present day, with a long and stout thong and a hammer head of steel or iron, whose face suggests frequent and vigorous use upon obstructive gate locks.

About this time whip-handles were covered with "shagreen," *i.e.* fish-skin, dressed in a peculiar way, and fastened on to the stock in a manner with which no living workman is acquainted, for the manufacture of "shagreen" is, unhappily, a lost art.

In order to show at a glance the connection between ancient and modern whips, we give the following list, and regret that it seems impossible to satisfactorily fill the gap between the Roman period and the last century :—

(a) The pre-historic whip was probably only a goad (*stimulus*). There is no reason to imagine that it was anything more elegant to look at than a long stick with a sharp point to it. This kind of goad was used up to the tenth century, and is even used in the present century upon sand donkeys, with both ends of the stick unsharpened.

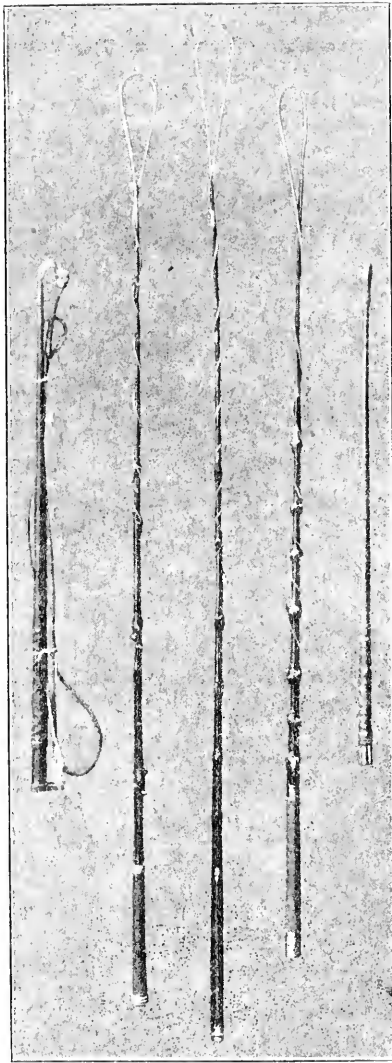
(b) After the goad a mild form of "cat" was invented; it was used in the reign of Solomon. We may safely assume that it was constructed of two or more thongs of hide, securely bound to a wooden handle. This was in vogue A.M. 2971.

(c) Rehoboam had a severe edition of Solomon's whip. It was most likely made with bristles, or perhaps bones acted as substitutes for knots.

(d) The ancient Greeks, according to their historians and artists (*vide* the paintings on the walls of excavated buildings at Herculaneum, Pompeii, and elsewhere), had both "cats" or *flagella* mentioned in (c). They also had others that were milder.

(e) The ancient Romans had *flagella* consisting of three short chains, with knobs of metal at the end, attached to a short handle. They resembled a diminutive stock-whip with three lashes. "Cats" with two and sometimes with three lashes of knotted cords, or even wire, were used. These lashes were called scorpions. The Romans also had "*fasces*," *i.e.* a bundle of rods tied together with an axe in the centre, this being a badge of authority.

(f) We may assume that the ancient Romans introduced the "cat" into the States which they



1 2 3 4 5

1. Whip of Hoswell, huntsman to Countess of Warwick's grandfather, Mr. Maynard.
2. Typical whip of the year 1790 (English).
3. Whip, whalebone top, year 1825 (English).
4. Phœton whip, formerly the property of and used by George IV.
5. Packman's whip of the period of George III., the handle having a receptacle for pen and ink and spare horse-nails.

conquered, for it will be remembered that they were strict disciplinarians.

(*g*) From an illuminated psalter, copied in the eleventh century, we gather that whips with two lashes were used in England at that period. In the fourteenth century the carter used a whip with three lashes.

(*h*) Prints of the fifteenth century show whips having only one lash.

(*i*) Postillions were employed in the eighteenth century and previous to that period, and consequently noblemen and gentlemen living in those times paid very little attention to driving whips, because they rarely drove themselves.

(*j*) In the eighteenth century whips were bent at the top, and became more shapely. The best cutting whip-handles were made of "shagreen."

(*k*) Whips of the present day far surpass those which have been mentioned by historians, and they are not designed to permanently injure either a human being or an animal. The Russian "knout," also bullock-whip and stock-whips, are not merciful correctors, but the Russian "knout" was not designed in the nineteenth century.

A curious whip in the Elsenham collection is the packman's. This is a specimen of the whip used by packmen and carriers in the latter half of the eighteenth century. The metal head unscrews to reveal within the thick part of the stock a receptacle for pen and ink and spare horse-nails.

There is no great difference, save in superior workmanship, between the carriage-whip of 1790

and that of to-day. The thickened grip of the typical whip is clumsier than the neatly graduated grip put upon our modern whips, but otherwise there is little to choose between the old and the new.

Modern whips are wonderfully light and well-balanced; the best "stocks" are made of "rabbit-bitten" holly. In frosty weather, when rabbits cannot get much to eat, they gnaw the bark of hollies, and the places which they bite get frozen. After a good holly-stick has thus been ill-treated by conies, it is cut and sold to a whip-maker, and the ungnawed bark is taken off, but the "rabbit-bitten" is left on. It forms an admirable grip for the hand. The best hollies are grown in Kent, but Sussex and the New Forest also supply fine stocks.

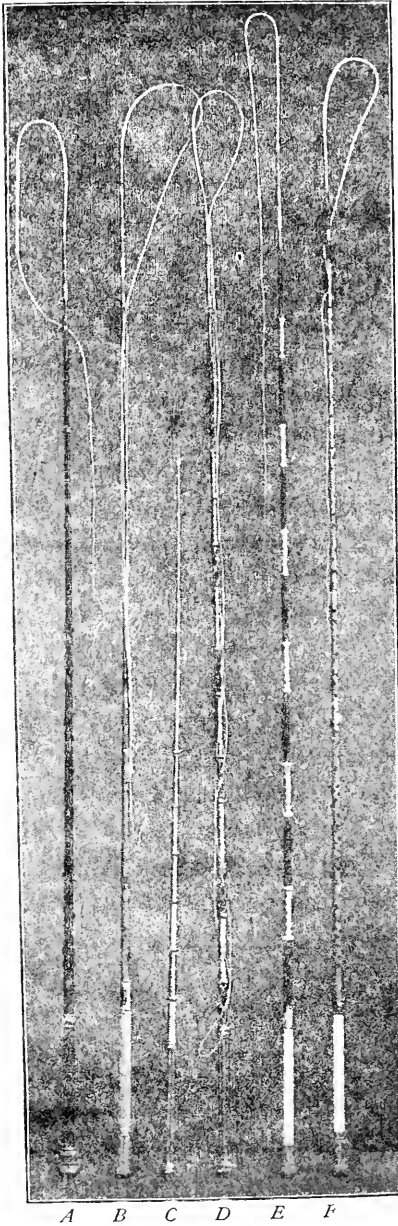
A good instance of history repeating itself is furnished by "dog-knee" stocks. They were used seventy years ago by four-in-hand coachmen and afterwards went out of fashion, and have only recently come in again. Most whip stocks are straight; the best are made from holly, but several other woods answer the purpose admirably, as blackthorn with the bark left on. Yew has a better "natural play" than any other, and lance-wood is extremely popular; it is dressed in all kinds of patterns, and shaped to any size. Varnished green lance-wood stocks are quite the rage, and so also are "built" cane. The latter are constructed as follows: a steel rod forms the centre, and six pieces of cane, in hexagonal shape, are built round it, overlapped at intervals

with fine gut. The silver mounting is usually hexagonal shape, to match the stock. There are likewise jointed whips, which are particularly useful for travelling, because they can be taken to pieces and fastened on to a board and put under the seat of a railway compartment, &c. As we mentioned before, modern whip-makers cannot make "shagreen" handles, but they can produce others that are even prettier. However, the Japanese surpass the English in this art, and plain ivory handles are frequently sent to Japan, and are returned in twelve months' time beautifully lacquered. A great number of the fancy handles made at home are cut out of lizard and crocodile skins. The most serviceable are pig-skin; they are more durable than Russian leather, although their smell is less agreeable. Then we have seamless handles; each one is made by a calf's tail being dragged tightly over an iron tube.

To omit to call attention to crops, stock-whips, cutting whips, American straight buggy whips, besides many other sorts, would be unsatisfactory; yet to give more than a few lines to each would mean lengthening an article until it became as voluminous as a book. Nevertheless, the following facts ought to be laid stress on, if only to call attention to the advance in the whip industry during the nineteenth century. We will run through the chief points of the leading varieties, and implore the reader's forgiveness if we fail to allude to some that are well worthy of being mentioned. A modern hunting

crop often has a leather handle covering a third of the stock, from the silver mount upwards. Clouded rattan are generally considered to be the smartest cane hunting-crops, but they are not equal to those made from whalebone and covered with sheep or lamb-gut. By the way, a popular error is to imagine that first-class whips are made with "cat-gut"; the right expression is sheep or lamb-gut.

The peculiarity of the polo whip is that it is much longer than an ordinary racing whip, and more swishy. A stock-whip has sometimes a lash as long as eighteen feet, and its crack may be heard half a mile off, if the whip is skilfully whirled round a stockman's head, and then allowed to fall without being jerked. The best are those which are hand-made on a station. It is advisable to have a smooth wooden handle, cut from an Australian tree that has a native name not unlike "Gedjee." A bullock-whip is much heavier than its first cousin the stock-whip; it requires two hands to crack it properly. When the atmosphere is in favour of a listener hearing noises a long distance, the report from this modern stimulus will travel three miles easily. But of course the ordinary bullock-driver is not cruel enough to hit one of his team every time he uses his whip, or none of the animals would have a hide that was not scored with lash marks. "American straight buggy whips" are largely made at Westfield, Massachusetts; it is the principal industry of the town. Throughout the United States, whips of all sorts are made by



D. State four-horse whip made for Her Majesty's Coronation and repeated for the Jubilee, 1887. *C* represents a silk-braided postillion whip used for the creams on the same occasions. *E* and *F* represent State whips as used by some of the Indian princes.

NOTE.—This illustration kindly supplied by Messrs. Swaine & Adeney, whip manufacturers, 185 Piccadilly, and republished by permission of Vinton & Co.

machinery ; in England they are always made by hand.

A very effectual instrument of castigation is a species of cutting whip used in China, not only by "the heathen Chinese," but also by European residents. It is simply constructed, with three pieces of thin bamboo twisted round one another, secured at one end by a silver or tin mount, and at the other end by silk thread, fastening the three canes together, and also a short lash of three inches long. Needless to add that this pliable switch will cause a great deal of pain, if harshly applied to man or beast.

The curious old Dutch whips in the Elsenham collection deserve special notice. These are a good deal shorter than a modern driving whip. The stocks are adorned with chased silver bulbs, and the extraordinary orbicular butts, also of silver, chased and embossed, have a ring on the under-side. The thongs are adorned with fringed leather tufts. These whips were given at the end of the last century by the King of Holland to the winners of the driving races, which were a great feature of country life in Friesland ; they were, in fact, equivalent to our Royal Plates, and were given to encourage the breeding of trotting horses for which Friesland was, and is, famous. One of these whips bears date 1791 and a name (illegible) obviously that of the proud winner and the year of his success ; another is dated 1798.

It will not be out of place to refer to the driving races, for which these quaintly shaped

whips were the prizes. Edmondo di Amicis, in his work "Holland" (1874), says:—

"On our way back to Leuwarde we met some peasants' carts drawn by those famous Friesland horses, which are considered the best trotters in the world. They are black with long necks, heads small, and full of fire. . . . The races in which these horses run, called the *harddraveryen*, are very characteristic relics of ancient Frisia. In every small town an arena is prepared, divided into two parallel straight roads, on which the horses run in pairs and successively, after which the winners run each against the other till one is victor over all and wins the prize."

From this account it would seem that the competing horses were "drawn" in couples on the same lines as greyhounds for a coursing match.

Jockeys prefer a racing whip with a small button, whereas gentlemen-riders prefer a "high button," or, in plain language, a mushroom-shaped one. A jockey's whip should be very stiff. A "knout" usually has a bone handle, and sometimes only a wooden one; a leather flap acts as a substitute for a thong.

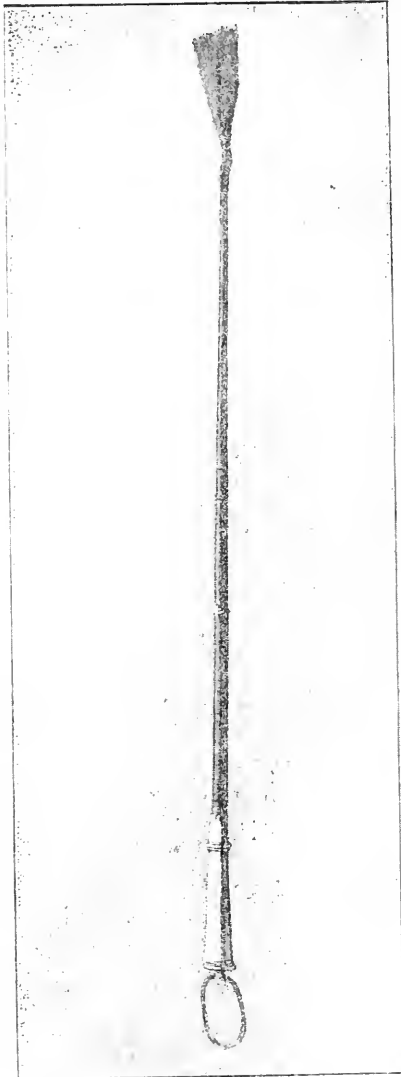
French whips are remarkably pretty, but, according to our insular prejudices, they are fanciful and have not the wearing qualities of English ones. Both French and German drivers hold whips high up, and consequently require longer sticks than those we use. All whips used in State processions come to a great deal of money, because the handles are elaborately

braided with gilt wire and silk. The thong for a tandem is generally twelve feet long, on a stick five feet three inches in length. Team whips are a little heavier and have a thong thirteen to fourteen feet in length, and a stick about five feet one inch. Whilst on this subject, it may interest good whips to learn that some accomplished four-in-hand drivers have been able to catch the lashes of two whips at the same time.

Ladies' whips fifty or sixty years ago were wretchedly flimsy little things. Ladies carry sensible crops in our time, but they do not always handle them in a professional manner. A lady's crop should be strong enough to give a determined refuser a good sound thrashing; at the same time it should be light and look like a neat and small edition of a hunting whip used by the stronger sex. A lady should carry a crop in her right hand, in order to prevent a horse from swerving on the off-side; the lash should be gathered into two loops, and the stock held a few inches from the keeper. Few women can crack a whip easily on a fidgety horse; in fact, it takes them all their time to use it gracefully on a quiet mount. The explanation is simple enough. Not one lady in a hundred has been taught to handle any kind of whip in a professional manner, and without a proper training nobody can excel in any accomplishment. To be able to "flick a fly off your leader's ear" is a feat which the dashing hero in a sporting yellow-back can do without difficulty, but those used to

horses will agree that in life a man who can disturb a fly, apart from actually hitting it, with the point of his lash, is not an unhandy whip; for whoever can give one of his team a reminder on the exact spot he wishes to can usually drive with his reins. On the other hand, it by no means follows that a coachman who can turn a difficult corner with leaders that run well up to their bits, is able to neatly use his whip over hot wheelers and jibbing leaders.

The famous Newmarket Challenge Whip, to which passing reference was made on a previous page, was originally the property of Thomas Lennard, Lord Dacre,



THE NEWMARKET CHALLENGE WHIP

whose arms are engraved upon it. Lord Dacre was created Earl of Sussex in 1674 by Charles II. ; this young gentleman held some appointment at court, and, "going the pace" after the fashion of his age, lost his money and part of his estates by gambling. It is believed that he gave the whip as a trophy to be run for at Newmarket ; he died in 1715, and the first recorded race for the "Challenge Whip" came off in 1756, when Mr. Fenwick challenged, naming Matchem by Cade, and easily won from Mr. Bowles' Trajan. In 1764 H.R.H. the Duke of Cumberland won it with Dumplin.

Some of the best horses of their time have run for the Whip ; in 1770 Gimcrack won it, beating Pilgrim ; in 1775 Sweet William won, beating Transit ; in 1777 Lord Grosvenor, the holder, was challenged by the owner of Shark against Mambrino, but Lord Grosvenor preferred to pay 100 guineas forfeit and keep the trophy : in 1778 Shark beat Dorimant, and in 1781 Lord Grosvenor challenged for the Whip, naming Pot-8-os, but his challenge was not taken up. Pot-8-os and Dungannon won it in 1783 and 1786 respectively. Thormanby, winner of the Derby in 1860, is one of the more modern winners of the trophy. In 1895 Prince Soltykoff won with Lorikeet, beating Glengall by six lengths : in the following year, the prince not defending, Lord Derby won with Dingle Bay, who beat Mr Leopold de Rothschild's Bevil by a long head. Mr. Archibald Gold was the last holder of the Whip. He challenged Prince Soltykoff in 1899,

naming Villiers by Thurio—Lady Clarendon, and the Prince named Canopus to defend. Villiers made all the running, and won by 15 lengths.

The race for the Whip is the longest run under Jockey Club rules ; it is run at the Second October Meeting over the Beacon Course—4 miles 1 furlong 177 yards. The weight to be carried is 10 stone, and the stakes 200 sovereigns a-side. The Whip may be challenged for twice a year, and the challenge must be accepted or the trophy given up ; no challenge issued last October, but the latter opportunity was taken by Lord Ellesmere and Sir E. Cassell. Under the rules Mr. Archibald Gold was obliged to accept the challenge or resign holdership of the Whip by 31st July. Villiers having died, he adopted the latter course, and thus the race was reduced to a match as is usual. The first sheet calendar in October contained the names of the horses nominated, Lord Ellesmere's Ultimatum and Sir E. Cassell's Gadfly to wit, and on the concluding day of the Newmarket Second October Meeting, Gadfly beat Ultimatum by four lengths, making Sir E. Cassell holder of the Whip for the year.

The Whip may not leave the United Kingdom. It is a short, heavy, old-fashioned jockey whip ; the hair interwoven and plaited through the ring on the handle is from the tail of the famous Eclipse.

CHAPTER XVI

SPURS, ANCIENT AND MODERN

THOSE who like to glean knowledge hastily, and therefore superficially, will not find much information about spurs in most dictionaries; and we fancy we are right in asserting that nobody has written them up to date. Even that admirable work, the "Encyclopædia Britannica," ignores them completely; yet it mentions horsemanship and other equine matters, such as bits and saddles. The British Museum has a poor collection, chiefly Mexican ones. So, needless to add, that primitive spur is a precious tough subject to get up. It has saddened many people who have tried to tackle it. The difficulty lies in finding out what sort of a "heel shod with iron," to use a phrase of Virgil's, was worn previous to the Norman Conquest.

A good many authorities declare that the ancient Greeks knew about, yet did not use, spurs. But they possibly had one, made of bronze, with a solid point on a semicircle, whose extremities were pierced with holes, through which thongs were put in order to fasten them on. Certainly the Romans had similar ones in iron to those just described. They were used in the Augustan age; their historians prove this conclusively.

And we might add that antique equestrian figures disprove it. Consequently at this period we have to cope with either a coincidence or an unaccountable mystery. Does it not appear inexplicable that Greek and Roman sculptors did not model horsemen with spurs on? Of course we can only judge from the work they left behind. But the old historians were more thoughtful. As proof of this, Cicero used the word *calcar* in a double sense: as an ordinary spur, and also metaphorically as "such an one wants a bridle, such an one a spur," signifying that one person was too quick and the other too slow. Again, the well-known phrase, a "heel shod with iron," is used by Virgil; and Plautus and several others, who lived in that remote time, have passively alluded to spurs, but have never attempted to fix the date of their invention.

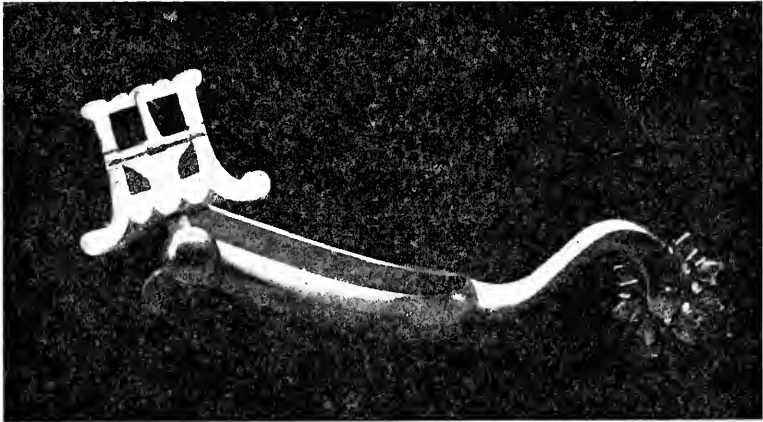
The earliest pattern is called the primitive "pryck" spur. And here comes the gap which no author can satisfactorily fill, because we naturally want to know the connection between this early "pryck" spur worn by the Romans and those used by the Anglo-Saxons. Now it is easy to conjecture. But we must go a step further, and consider every link in the chain of evidence. The Saxons used a "spuran," as they called it, which was similar to those used by the Romans, who conquered Britain. Plainly, the Saxons borrowed the idea of their spurs from the Romans; this is the logical deduction.

In as few words as possible let us trace this interesting subject from the Augustan age up to

the Edwardian; but we cannot mention every pattern minutely, because there have been so many. Nevertheless, we can show that circumstances brought about a change in spurs, and we can give the reader an idea of the reason why each change took place, viz. on account of the horses' trappings. Riders needed long-necked spurs when their chargers wore armour, and also when they were decked out for a pageant.

We have mentioned the first sort of spurs, and will now compare the Anglo-Saxon one. They were goads of a rather curious shape. Here are some remarks showing how recognised authorities have referred to them. "The Roman spurs differed but little from those of the Franks and Saxons; the neck was rather shorter, the pyramidal head rather concave on every side, which afterwards suggested the ring and spike of the 'pryck' spur, and the shanks, instead of being straight, became curved." Another view is more difficult to substantiate as regards the "rouelle," or "rowel," for the great division in spurs consists in whether they are the old "pryck" or the modern "rowelled" ones. Henry III. is said to have been the first English king who used the latter. Anyway, it is quite worth while to give this quotation from Mr. Grose, an archæologist in the last century, whose statements seem correct on other points, if not on this. "The rouelle, or wheel spur, though evidently an afterthought, or improvement on the 'pryck,' was worn in common with it at the Conquest. Its superiority was, if point was broken, spur was not useless, owing to

the rotation of the wheel, and the same motion prevented it injuring horses. The points of rowels were sometimes three inches long." Surely he meant the neck? The fifteenth century was responsible for rowels made like a serrated wheel; these are more ornamental than useful. They mark an era of transition between those worn previously, when horses and riders were encased

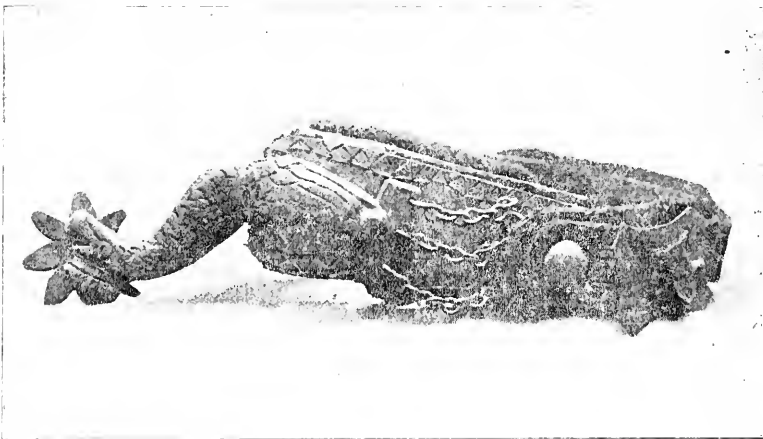


CHARLES II. SPUR

in armour, and those used subsequently, when armour gradually became less heavy and finally fell into disuse. One of these processional spurs weighed one pound and three-quarters avoirdupois.

Here are some important changes after the battle of Hastings. Iron "pryck" spurs were lozenge-shaped, or like spears' heads, usually with short necks, but a few were long. Until Henry III., the tendency of the average rider was to wear these "pryck" spurs, with longer

and longer necks, and this brings us to the period when the rowel is first noticeable on the great seals. However, rowels are a characteristic of the fourteenth century, and in Henry IV.'s reign to Henry VI., the necks became purposely bent, and enormous spiked rowels were used; "from the heel to the tips of the rowels some were seven inches and a half long." In the sixteenth



A FOREIGN CROWNED EAGLE PAGEANT SPUR
(Probably about fourteenth century)

century, Ripon in Yorkshire was the most celebrated town in England for the manufacture of spurs. Heavy brass pageant ones, with curved necks, in Henry VIII.'s time, are well worth looking at, and were sure to have been made at Ripon. About this time spurs were worn ornamentally; they were studded profusely with precious stones, and made of gold or gilt. A pair with exquisite gleaming diamonds in, are said to have been in the possession of Henry,

Prince of Wales, in 1615. We all know the iron round spurs in use when Charles I. and II. reigned. In George I.'s days, if not before, ladies had pretty little silver ones, short in the neck, with sharpish rowels. They were jointed at the sides, in order that a lady could put them on and take them off easily. This brings us nearly up to our own time. As late as the thirteenth century, it was a common practice to bury warriors with a single spur always attached to the left foot.

A couple of centuries ago, hunting spurs were short in the neck; the average length being about one-and-a-half inches. Then came a tendency towards having longer ones; but during the last three or four years those with short necks have again come into fashion. Riders find them more convenient for jumping, particularly as they are now worn high up under the ankle of butcher and top-boots. Quite recently the straight and drooped ones have been equally popular. The former have a nattier appearance, but the latter are easier to keep off a fidgety horse.

The seven distinct kinds in England at present are:—

(1) Box-spurs worn for military duties, and yoke-spurs, with the neck curving upwards. (Box-spurs, of course, are also worn with trousers by civilians.)

(2) Those worn out hunting.

(3) Those worn for racing.

(4) Those worn for hacking.

(5) A lady has a single spur, which is a miniature edition of No. 2.

(6) Very often a lady wears a spur with a single point, covered by a spring cap until pressed against her horse's side, when the cap retreats and bares the point.

The rowels in vogue have ten points, and their length and sharpness should depend on the wearer's skill as a horseman, and also on the character of the horse.

Guineas have been used in military spurs as a substitute for rowels, but very rarely. Box-spurs came into use about seventy years ago. Their inventor was Mr. Henry Maxwell. He was grandfather to the world-famed spur-maker, who carries on the business now. Before their introduction, spurs were screwed on to the heels of boots when their wearers wished to avoid using buckles and chains. The best steel box-spurs are "forged solid"—*i.e.* out of one piece of metal—to avoid screwing in a spike that is liable to break. Of course brass and compound metals are cast. Whoever is foolish enough to try and forge them will find the task about as interesting and nearly as difficult as endeavouring to make ropes out of sand. On reflection, it will strike an observant person what a neat discovery Mr. Maxwell made when he cleverly hit upon the idea of holding the spur in a spring socket which is built into the boot-heel. Cavalry officers wear the same kind of box-spurs for undress and for mess as the original pattern. But for mounted duties they have jack-spurs, which are worn with buckles and chains. As regards foreigners, they use box-spurs, if the expense does not deter

them, or else those which screw on to the heels of their boots. Clergymen and horse-dealers—extremes meet—often wear black spurs, giving their owners concealed power, with the semblance of humility in one case, and of modesty or desire to mark their subordinate position in the other case. Those worn by jockeys are far prettier. They are made of hard steel, owing to their being so extremely thin and light, and are covered with silver plate, put on in four strips. Electro-plating is no good in this trade, and spurs, to be serviceable, must either have the silver brazed or soldered on; the former is the old Sheffield plate. In addition to those we have referred to, polished steel, gilt and brass spurs are much used, chiefly by army men.

Here let us impress those who pin their faith in “the good old days” that presentation spurs were never in the past so exquisitely chased as those which a skilled hand can make to order at the present time. Any extravagant person can soon prove this by purchasing a five-guinea silver pair, and then comparing them with those which cost an equivalent sum before the reign of Queen Victoria.

Concerning the pitch of cheapness ill-made foreign spurs have reached, it would be difficult to say. They are manufactured very roughly—no work being put in—so that even if purchasers give merely a franc a pair, it is quite enough for them.

Spur-money probably conveys nothing to ordinary churchgoers in the twentieth century. Yet

it had a meaning, long before the bicycle craze, for now a few country churches have houses for bikes. From the cheque-book of the Chapel Royal, Dr. E. F. Rimbault made the following extract of an order made by the Dean in 1622 :—

“That if anie knight, or other person entituled to wear spurs, enter the Chapell in that guise, he shall pay to the quiristers the accustomed fine ; but if he command the youngest quirister to repeate his gamut, and he faile in the so doing, the said knight, or other, shall not pay the fine.”

This was enforced until the year 1830. Quoting a note in Clifford’s edition of the work of Ben Jonson, Mr. Markland says: “In the time of Ben Jonson, in consequence of the interruptions to Divine Service, occasioned by the ringing of the spurs worn by people walking and transacting business in cathedrals, especially in St. Paul’s, a small fine was imposed on them called ‘spur-money,’ the exaction of which was committed to the beadles and singing-boys.”

Again, to show how the author of an old tract, entitled “The Children of the Chapel Stript and Wipt,” quaintly expresses himself, we give the following passage:—“We think it very necessarye thát every Quorister shoulde bringe with him to Church a Testament in Englishe, and turn to everye Chapter as it is daily read, or some other good and godly Prayerbook, rather than spend their tyme in talk, and hunting after spur-money, wherein they set about their whole mindes, and doe often abuse dyvers if they doe not bestowe somewhat on them.”

In those mirthful days

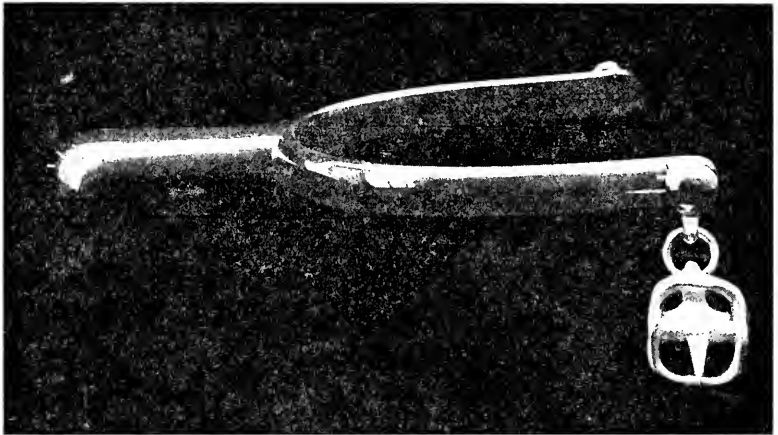
punctuation seems to have been less studied than now!

Another custom, which amounts to an old form of "copyhold tenure," is still in force. The copyholder in the following case is the Crown. Example: A gentleman at the present moment holds an estate on condition that he presents a pair of spurs to the reigning King whenever the sovereign passes through his land. This is analogous to the Duke of Wellington's annual presentation of a tri-coloured flag to His Majesty, in token of the former's right to hold Strathfieldsaye. The custom in this particular instance originated when that estate was presented to the "Iron Duke" after the battle of Waterloo, in return for his distinguished services. Blenheim, the magnificent seat of the Duke of Marlborough, is held under similar conditions.

Many instances can be given of horses that have been severely injured through using unnecessary sharp rowels. In more than one case, when a horse has fallen, he has had his side pierced by the neck of the spur. Obviously then, in order to prevent a recurrence of such an unusual mishap, it is advisable to have a fair-sized "boss," *i.e.* that part of the "neck" which contains the rowel. Sentimental people will be pained to learn that a great number of Mexican spurs are manufactured in England, and not in a romantic town in the southern part of North America. They are certainly handsome to look at, make a jingling noise, and are suitable for a harum-scarum, braggart's style of riding.

172 SPURS, ANCIENT AND MODERN

Some horses are so hot that it is almost impossible to ride them in "persuaders" having



MODERN STRAIGHT SPUR



MODERN DROOPED SPUR

rowels in them. And there is no doubt whatsoever when they are absolutely necessary, it is

a mistake to attempt to use them, even though a boot looks better with them. Yet it is quite worth while when exercising to attempt to make an effort to get your mount to tolerate them. Let the horse be tired first, and thus learn that you do not wish to prick him. He will soon learn this under ordinary circumstances. Even kickers, with judicious handling and firm horsemanship, permit spurs without rowels if they are introduced to them in this way. But the right expression would be, perhaps, re-introduce, as few horses resent spurs without rowels if they have not been previously punished with others having rowels.

You cannot gash a horse, if you become half-unseated, with spurs which have no rowels.

If a hunter is courageous and consequently fond of jumping, it is a great pity to use rowels. Yet, on the whole, it is better to ride with spurs that are virtually so blunt that you cannot draw blood with them if you wish.

By all means let a sensible young horse know what rowels feel like. They will teach him to walk well and run up to his bit. When he understands this unpleasant sharpness, ride him without any.

PART V

CHAPTER XVII

STABLE VICES

CRIB-BITING or wind-sucking is a *most* annoying habit. It prevents a horse from getting into condition, and often causes acute indigestion.

There are a host of contrivances to remedy this trick—for it is a trick, which is often picked up by a horse who has imitated another crib-biter, or, in other cases, has taught himself how to crib from being left too long in the stable with nothing better to do than to learn a mischievous habit which it is difficult to break.

A cribbing-strap which encircles the throat is an effective method of preventing this trick. But it must only be taken off in the stable whilst the horse is eating, otherwise it is useless. A pin inside the strap pricks the cribber each time he tightens the strap, through arching his neck in order to crib. It is advisable to feed out of a movable manger, which is not very expensive.

On the whole it is a great mistake to buy a cribber—unless at a low figure—as this disease comes under the heading of “unsoundness”—

NOTE.—The illustration in Part V. is kindly supplied by George Parker & Sons, 17 Upper St. Martin's Lane.

and it is seldom that such a patient can be brought into good condition.

As it is almost impossible to know if a horse cribs—when you examine him—it is necessary to ask the purchaser; and a horse that has been guaranteed sound can be immediately returned and the money refunded, if it can be proved by a vet that he cribs, although sound in all other respects.

KICKING. — Some horses, and particularly mares, will kick all night and not uncommonly kick down any partition which is not made of extra stout material. Such animals generally have capped-hocks and other blemishes as signs of this their favourite pastime.

A popular remedy is to strap a leg with a chain attached to one of their hind legs, yet it often fails to check this pet vice. Violent punishment has no good effect whatsoever. Although patience and perseverance may do a great deal with young animals—especially when the vice has been created through ill-usage—*nothing* will cure an aged and confirmed kicker.

When being groomed underneath their bellies, many horses try to kick and bite their grooms, stretch out their fore and hind legs until they seem bound to slip up in their stall or loose box—yet rarely actually do so. This is in consequence of their having delicate and, therefore, very sensitive skins. When the brush hurts or irritates them, they vent their feelings by flinching, then kick

and bite almost simultaneously, until they are tied up closer to the rack, and handled firmly, and brushed harder, until groom and horse are engaged in a very noisy and dangerous fight.

To thwart this habit of biting viciously when they are being groomed, it is a good plan to put a large wooden bit in their mouths. In some cases it will stop this unpleasant vice.

A "twitch" is a stable instrument of torture which is often much abused. It is usually too short, and should be made out of a stout pole at least six feet long, with a soft piece of cord passing through a hole bored at one end of the stick. Temporarily a horse can be subdued through having a twitch put upon his nose, which is held high up in the air. But the pain which a twitch severely applied always causes to a horse's very sensitive nose, makes the animal inclined to be vicious. And the less a twitch is used—excepting in very exceptional cases—the better.

It is always a kind plan to take a twitch off very gradually, and to gently rub the horse's nose soothingly directly afterwards, pat his neck, and make him feel on good terms with himself and yourself. Induce your late patient to realise that you are not angry with him, and have no intention to cause needless pain; in fact quite the contrary. Many horses, being very affectionate, soon understand this, and return your caress by rubbing their poor sore nose against your hand, arm, or face, making you feel quite ashamed of putting them to pain in the present or doing so in the near future.

GROSS-FEEDERS will eat their bedding if the groom does not keep the hay-rack filled night and day. In consequence they rarely get into good condition. If they have as much hay as they will eat, they over-eat themselves and cannot gallop or do fast work.

It is necessary to keep a leather-muzzle on a gross-feeder when he has eaten as much as is advisable. But it is troublesome to expend so much time in preventing a greedy horse making a pig of himself—to use an Irishism; the best plan is to pay a short price for such a one, unless his unusually good qualities in other respects counterbalance his greediness.

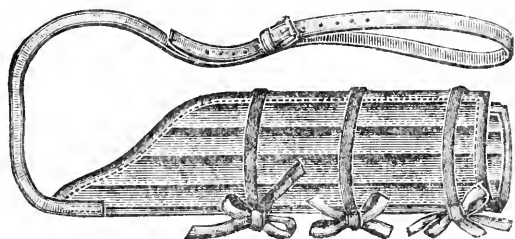
CRADLES are useful in preventing a horse from tearing his clothes, or from rubbing sore places which have been dressed—such as broken knees, wounds, &c.

SLINGS require professional good management to be very successful, and a considerable amount of extra strength, as the weight of a horse needs a lot of clever manipulation to keep it suspended on slings—used in bad fractures when it is absolutely necessary to prevent the patient from touching the ground, and thus disturbing bones recently set.

DOCKING seems rather cruel, and can be justified only on the grounds of preventing a carriage or draught horse from getting the reins underneath his tail—thus often causing a fatal accident, or it is useful to strengthen a foal's hind-quarters.

It is indisputably a fact that, if a cart-foal is docked, a good deal of the strength which would have gone into nourishing the tail—had it been left on—goes to nourish the hind-quarters instead.

A horse—and especially a cob—has a sporting appearance if nicely docked. On the other hand, they lose nature's weapon against flies and other teasing insects which cause a lot of torment during mid-summer. Bush-horses are rarely docked in consequence. Nor are race-horses as a general rule, and, in the case of



TAIL-GUARD

steplechasers, it is considered by some good authorities that a long tail acts like a rudder in a certain fashion over an awkward jump—helping the horse to steer himself at a critical moment. I will not vouch for the truth of this idea—but many contradict it and others believe in it. Probably there is some truth in it. A long tail gives dignity to a thoroughbred, which cannot be said of a hog-maned polo-pony with a scrubbing-brush tail, who looks very knowing. The extremes are somewhat like dignity and impudence.

There is a certain amount of risk when docking, lest lock-jaw should set in, but cases are very

rare ; perhaps not 1 in 500 die from this sometimes cruelly performed operation.

It is especially advisable to have a very long twitch. The head of the patient should be pushed well up in a corner, a fore-leg held up to prevent the operator being kicked behind, which is less likely to happen when the tail is severed by the docking-knife than when the red-hot irons are applied to burn the bleeding stump.

RASPING THE TEETH is another minor operation. It is sometimes done without even a halter on. The horse does not mind it much as a rule ; and if it removes any jagged points to a tooth which irritates a gum, quick relief is effected.

As regards dentistry in the equine subject, not enough attention has been paid to it, and much suffering occurs in consequence. Decayed teeth are often as painful to the horse as to his master or mistress, and a wolf's tooth is casually knocked out by the local blacksmith, sometimes well and not infrequently badly.

CHAPTER XVIII

COMMON DISEASES AND THEIR TREATMENT

THIS is a wide field to discuss. If the subject is to be taken up professionally, a reference to the article on "The Veterinary Profession" should be read afresh and the "Matric" passed without delay, and the would-be vet a student in real earnest as soon as possible.

But if common diseases are to be viewed purely from an amateur's hobby, in order to save a vet's bill—which it may not accomplish; indeed, quite the reverse—then a clear knowledge of anatomy and veterinary books should be gleaned; they are absolutely necessary in order to grasp the subject and appreciate what valuable work has been given to amateurs in connection with equine literature.

Let us recommend to the reader just a few first-rate books to read, and then turn our attention to those diseases which are very common to every buyer or breeder in a fairly big way. I hope that any hints gleaned may enable owners to know when to send for a vet, and, in some instances, to do a little amateur diagnosing and even to treat a patient for the disease which it is suffering from.

It cannot be sufficiently insisted on that determining the nature of a disease is no easy matter.

It is chiefly because the professional can diagnose correctly as a rule, and the amateur is not quite sure, or has not the courage of his own convictions, that vets who know their work will continue to make a fair living, whilst amateur vets are somewhat reluctant—and even mean—as regards sending for somebody “who knows more than themselves”—to use an expression of sensible owners of valuable horses, who ungrudgingly send for a first-rate vet—realising that the money was well earned and good services were appreciated by a clever amateur. Why should any one feel ashamed of admitting that his knowledge is inferior to the knowledge of a long experienced M.R.C.V.S.

Recollect that you may fluke a few right diagnoses, but unless you have a practical knowledge of your subject—which only comes through constant practice, and cannot be gained entirely from books—you will kill or injure more patients than you are likely to cure. Never send for a vet when it is too late for him to be able to help you out of a dilemma. You may be even disposed to hide from him your ignorant mode of treatment, especially when he courteously, yet quite confidently, pronounces an opinion different to your original one.

Suppose a patient really had an early form of influenza, and you had imagined that you were treating a horse with stoppage, what would be the result? Perhaps you would have given a strong physic-ball, which would soon weaken a patient to such an extent that, when in despair

you called in a vet—who shook his head with a shake significant of a critical case—it might be too late to undo the injury. The patient would be weakened by being unnecessarily purged, the influenza might have increased—it would have been your fault if the horse died and the vet sent in a bill for useless though expensive services.

The more an amateur knows, the more eagerly will he be to enlist the services of a first-rate member of the veterinary profession, because he knows that in the long run prevention is better than cure ; and, in the case of a dealer, it is better to pay a vet to pass a high-priced horse and keep him sound afterwards. Suppose you buy a horse on your own judgment, and discover that he will “not pass a vet” when a certificate of soundness is required by a customer who will give a high figure on no other stipulation? It would have been cheaper to have paid for a veterinary examination. Following the already laid down advice, the reader better carefully study “The Comparative Anatomy of the Common Domesticated Animals,” a book in use at the Royal Veterinary College. The illustrations are excellent, and it would be advisable to purchase bones through the secretary to the College at Camden Town, and after a few explanations from a local vet, these illustrations, when thus carefully explained through the medium of the actual bones, will insure a knowledge of anatomy which cannot fail to be interesting and valuable afterwards in diagnosing diseases.

Other books which at this stage should prove

useful are : "Anatomical Outlines of the Horse," by the late J. A. M'Bride, Ph.D., M.R.C.V.S., late Director of the Veterinary Department in the Royal Agricultural College, Japan, and late Veterinary Professor at the Agricultural College, Cirencester.

Unless all copies have been sold by Baily and Son, Market Place, Cirencester, or Longmans, Green & Co., London, and the work not reprinted, this very interesting work by the predecessor of Professor Garside at the Royal Agricultural College, Cirencester, is worth studying carefully. The prints are well executed, and, without some such knowledge, it would be presumptuous for any amateur vet to deride the services of a practical, full-fledged vet who has been under a good master of the veterinary art and had a long experience on his own account in a practice which he has built up on his own merits—not merely purchased.

Another rather old-fashioned, yet not quite out-of-date book which is a step further on in veterinary is "The Illustrated Horse-Doctor" by Mayhew. It has "more than 400 pictorial representations characteristic of the various diseases to which the equine race are subjected, together with the latest mode of treatment and all the requisite prescriptions; written in plain English." The twelfth edition was published in 1881 by William H. Allen & Co., 13 Waterloo Place, London, S.W.

Few books on horses are more widely known, and deservedly so, than "Horses and Stables,"

by Lieutenant-General Sir F. Fitzwygram, Bart., published by Longmans, Green & Co., London, with sound knowledge on each page and many valuable illustrations. This work will always remain fresh and up-to-date, because each edition is revised with care, one by Mr. W. B. Watters, Army Inspecting Veterinary Surgeon, to whom the author desires to express his great obligation.

To the casual student of veterinary, quite content to abide by the decision of one standard author on such a many-sided subject, I advise the purchase of "Horses and Stables." But if a reader imagines even from that well-written book to be able to doctor his own stock or his friends' solely from the knowledge derived, I beg to differ with him. Nobody excepting a seer could make theory equal to practice in vetting or any other branch of learning. It is impossible. Why, then, try? My answer is merely to express a hope that the veterinary art may be approached by amateurs in a reverent manner, and to realise the truth of the adage that a little knowledge is a dangerous thing. Much will have been gained if a reader can learn to detect a good vet from a medium one, and a medium vet from a bad one. A bad vet may be a clever man in other respects, but lack a knowledge of veterinary. Many instances of this have been known, some having reaped pecuniary success, yet never having mastered a thorough insight into that high gift, diagnosing correctly.

It is the diagnosing, then, that is half the

battle. Granted you do this correctly, it is comparatively easy to treat the disease.

What is the disease my horse is suffering from? Shall I send for a vet? These are common enough questions. Now how, in different instances, should they be answered? Did you breed the horse? Yes. Then you have a better chance of knowing his defects than if you had bought him at a repository a few days before. You have something to go upon. Another point to remember is environment. Town horses get diseases in their feet resulting in lameness from hard going. Therefore navicular disease, which is due to caries of a tiny bone in the foot, is common in countries where horses have road work, and much less common in countries such as up-country in India, our colonies, or on the prairies.

Hereditary diseases are extremely common, and therefore a breeder should avoid using a mare with a broken wind, no matter how well she may be bred. In fact many a high-class racehorse that has turned roarer or whistler has become virtually worthless for the stud on this account. But should a mare wrong in her wind never get the chance of being served? It may be worth while to endeavour to correct this predisposition in the offspring by using a small and sound-winded pony-sire, the progeny being probably a smart cob, perhaps a valuable polo-pony.

Bad hay and mouldy oats, and quick work when out of condition, all help to send a horse wrong in the wind; whereas cleanliness, regular

exercise, saving a horse in a big run, regular feeding on the best of hay and good oats, all help to keep a horse sound in wind, limb, and even eyesight.

There is a sound reason for every disease. This cannot be emphasised sufficiently. A few instances may be given which show this quite clearly.

A horse carries a weight which is too much for him. Plucky though a horse may be, if he is over-weighted he shuns work and temporarily or permanently breaks down. He stands over at the knees; he throws a spavin or a curb. Both these are nature's retaliation for ill-treatment. Curbs, however, are thought by some riders to be an evil, with this amount of good—they are frequently found in horses with crouched hocks, which belong to good jumpers; and hunters fired for curbs most deeply often fetch big sums of money, despite the tell-tale lines of the iron.

It is palpable that if most owners bore this fact in mind, as regards diseases having causes which any reasoning mind can detect, that horses would be better looked after. Capped hocks would be fewer in number; bad shoeing would produce fewer corns. Horses, after coming into stable in a muck lather and getting cold water, and thereby catching chill, often suffer from inflammation which flies to their feet, and fever in the feet is the result. Subsequently, at different times, they trot out like a cat on hot bricks. Their feet are in pain from inflammation, which, had they been looked after well in the first instance, might have been avoided.

Some water has unquestionably a predisposition to stone, notably chalk, and, after great agony, the horse refuses to work, groans in agony piteously, turns his nose from the manger to the side nearest the stone, as if drawing attention to this painful disease which has come on gradually, the calculus or stone increasing in size until, unless a skilful operation be performed by a first-rate practical vet, the horse is relieved from intense suffering by death.

Constipation is another common disease which might be avoided if the groom drew his master's attention to the fact that the horse needed less constipatory food, more exercise, and a little linseed mixed with a bran mash once or twice a week. Instead, week after week the horse gets more constipated, and a ball is given; if by an unskilful person, the patient's tongue is either lacerated, or the giver of the ball gets his hand bitten.

CHAPTER XIX

GIVING BALLS, DEBILITY, TEMPERATURE, PULSE

THERE is a critical second when giving a ball. It should be made use of. Open the mouth and firmly, but rather gently, grip the root of his tongue. Just when the tongue is gripped is the opportunity which must not be lost. The ball, rightly given, should be deftly slipped down the patient's gullet and the hand removed quietly—the very reverse of jerkily. Almost before the horse has time to think of swallowing, his neck is being patted, his nose softly rubbed, whilst the ball trickles down, plainly enough for a looker-on to watch it go down.

Some horses hold balls for quite a long time, many minutes, and require a gulp of water to aid them. Or they have an aggravating habit of coughing them up just when the giver of the ball expects they are about to swallow it. This is irritating for a vet, who feels that he may be scoffed at for doing his work like a poor amateur. Horsey-men like to see a vet give a ball without a balling-iron, as they consider it is one of the tricks of the profession to be able to do so without getting a scratch.

A point which the holder of the horse's head ought to know is that he has a big say in the

way a ball is given. Hold the nose plially, yet firmly, not rigidly and pugnaciously, as if making the horse fight against the man who tries to slip it down, then the patient ought to take his medicine without any great difficulty.

Avoid leaving a ball sticking on one of the grinders. The horse immediately tastes the physic mass, gentian, or whatever ingredients the ball is composed of, and he becomes troublesome next time you want to give him physic.

But what kinds of balls ought to be given under certain circumstances? Having mastered the art of giving even difficult horses six drachms physic or diuretic balls, it is indeed necessary to prescribe the right medicine for the right disease.

It is very common to give two balls consecutively—a diuretic and a physic. And, in consequence, many people who have watched this done might conclude that they “could not go far wrong”—to use a common expression—if they usually gave such doses for nearly any disease. In the case of constipation, it would work out all right, especially with the aid of a glyster. But what would happen in a disease such as influenza? A horse might be in the early stage of that insidious disease, and then the result of the physic ball so injudiciously given might easily be death.

In the case of these two just mentioned diseases it is worth while to sketch the treatment and the prevention so far as lies in human power. Extreme debility, shivering, and every appearance

of fever, weak pulse, steaming coat, a nasty cough, running at the nose, inflamed eyes.

According to that still eminent authority, Stonehenge, in the "Horse in the Stable and the Field," published by Routledge & Sons, a useful treatment is to take :—

Spirit of Nitric Ether	1 ounce.
Laudanum	4 drachms.
Nitrate of Potash	3 drachms.
Water	1 pint.

Mix and give as a drench, night and morning.

Now influenza is a common complaint, and one which affords a good illustration of an amateur (who is a little uncertain as to whether any of his stud suffer from it or not) behaving in a manner which places him above a mere petty owner. He may acknowledge that he is uncertain—if he is so—or he may treat the case on the quiet, and then, when in fear that he is doing so in a way likely to injure his pocket, he may send for the vet.

As regards prevention. In the case of a fair-sized stud there is no necessity in well-planned stables to have the buildings so arranged that flue almost necessarily attacks every horse. Several in the same stable might catch it, but others might escape through being in a separate portion of the building. A hospital where sick horses are isolated on the slightest suspicion is invaluable ; and this, as all the rest of the stables, should be frequently—even daily—washed down with bucketfuls of water, a few grains of permanganate of potash in each. This is a cheap

and easily applied disinfectant, and wards off dangerous germs, as well as keeping the stables thoroughly sweet and well purified.

Now the object of this book is to point out and emphasise the fact that thousands of works on the Horse have been written, forming a collection big enough to term Equine Literature of a high order. Therefore, if this book appeals to the public in the manner the author hopes it may, it will be in conjunction with the study of other books which he has mentioned, and also with plenty of others which he has not mentioned.

You must be practical and have a natural gift to recognise diseases, or you are unfitted to treat animals under your charge, so by all means send for a vet when a horse is worth doing so in your opinion. When in doubt, therefore, send for a vet, if his professional charges are likely to be sufficiently reasonable to be worth your while to pay ungrudgingly. If in doubt on this point obtain the services of a practical vet, and pay him by a scale of charges which you can arrange amongst yourselves if you particularly wish; in short, let him do contract work for you. If you object to this, a nice and clever vet will not charge you a price which you can reasonably dispute, as a rule.

At this point we come to a stage which is very common amongst over-careful breeders and purchasers of horses. A little knowledge is a dangerous thing. Many owners fuss and begin to imagine horses have diseases which they

have not got. Instead of being hypochondriacs themselves, they become so on behalf of their horses.

Supposing, then, you feel a doubt as to whether your horse is ill or not, use logic. If you suspect fever, apply a good test by using a thermometer. In paragraph 217 a, under "Temperature in Horses and Stables," by Lieutenant-General Sir F. Fitzwygram, Bart. (third edition, Longmans & Co.), this passage occurs:—

"The ordinary temperature of the blood has already been stated to be about 99° F. In diseases of an inflammatory nature, or when fever is present, the temperature of the blood becomes increased above the normal standard, and is an important guide in determining the condition of the patient. To ascertain the temperature of a horse, a small clinical thermometer is necessary. This is inserted in the rectum, and must be allowed to remain for one or two minutes, when it may be withdrawn, and the index hand will indicate the exact temperature of the patient."

A horse's pulse is taken at the angle of the lower jaw. A "blood 'un" beats 40 to the minute, cart-horses 30.

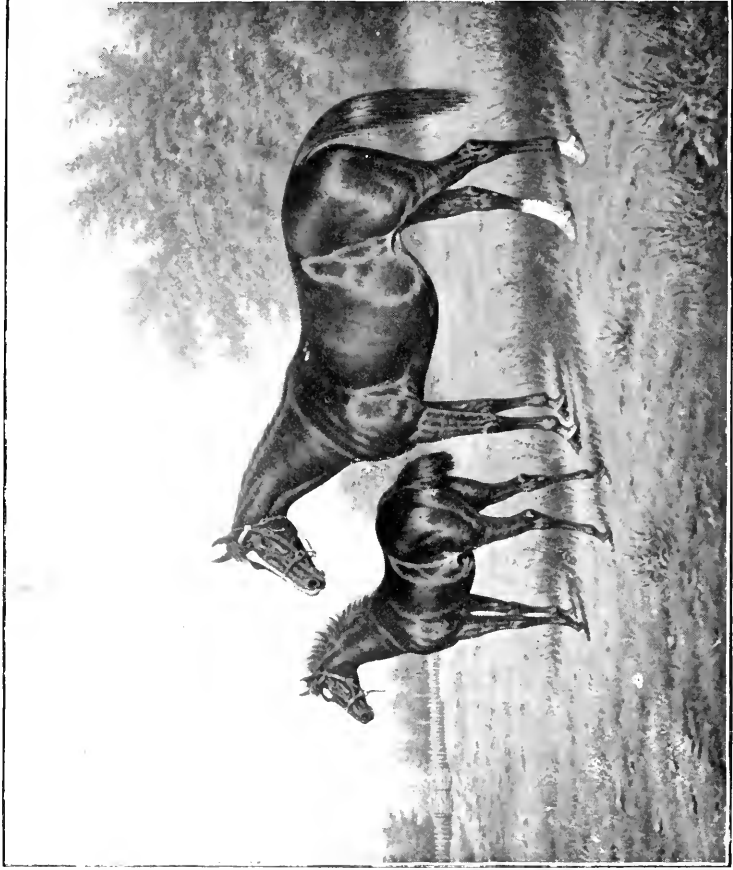
It may be asked, if I am going to send for a vet on all doubtful occasions, why study amateur vetting at all? The answer is as clear as the question. If you take an interest in healthy horses, you are bound to wish them kept in good health, and therefore everything which helps to make your stud fit will prove interesting to you.

If your horses get ill, you naturally wish to know the cause, and why they should be treated in such a manner from a logical point of view. This, then, is what amateur veterinary amounts to, and it is inseparably bound up with professional veterinary, because the amateur is dependent on the profession when in difficulties, and the profession are dependent on the amateurs for payment of services rendered, often under exasperatingly difficult circumstances—a querulous owner with a little smattering, a groom who is doggedly discourteous if not flattered or tipped, and a patient who is often badly nursed and who is not treated at the most opportune moment—for vets are often consulted when the patient is at least half-dying, and when the previous treatment, or ill-treatment, of the animal has been suppressed.

More—ah, far more—than 30 per cent. of equine diseases are due to crass stupidity, verging on unwarrantable cruelty—over-straining, thereby causing the heart to be strained, likewise the wind, spavins, and splints. Over-heated stables are likewise a ready source of disease. Ill-kept stables, bad grooming, bad feeding; in fact, bad anything, such as bad management causing colds, all help to make patients for the amateur vet to diagnose the symptoms as best he can. And for the professional vet to cure when the bad amateur has made a mull of things—to use a school-boy's phrase.

Hereditary diseases are very common, more

especially the tendency of the offspring of broken-winded sires or dams to go wrong also. In fact, as much attention ought to be paid—though, as a rule, it is not—to sound mares as to sound sire horses at the stud.



· MRS. FENLEY, WITH FOALS BY 'JUBER' ·

This magnificently-shaped and roomy brood mare—hunter's type—won prizes all over England and abroad. She was bred by Mr. F. H. Wilkinson, of Cavendish Lodge, Edwinstowe, by whose kind permission the photograph is published here.

PART VI

CHAPTER XX

BREEDING HORSES FOR PROFIT

A WELL-KNOWN judge of high-class hunters, who was judging at a big show in the North, made the remark that "It seems incredible that farmers should expect to breed first-rate hunters out of those sort of mares." He pointed contemptuously to an indifferently bred stableful of mares who had been exhibited as huntress dams, with foals who were bred anyhow, owing to their mother's absence of the best points in breeding for activity, combined with grace and strength.

We now come to the natural sequence, "Does it pay to breed?" In horse-breeding this is largely dependent on how you set about it. But, generally speaking, there is more to be got out of breeding high-class flat racehorses, under good management, than anything else. The figures are certainly high for the original outlay of high-class mares and a first-rate stallion or two, but, if lucky, the sale prices are proportionately big also. Oddly enough, the other extreme is paying also, namely, heavy draught-horses well-mated, powerful, high, and sound generally make large prices in proportion to the cost of

breeding. But hunters and polo-ponies, though most interesting animals to breed and school when young, and still pleasanter with good manners a few years later, are very ticklish financially, and many a clever horseman and good judge has ended his days in poverty on account of his passion for breeding or trying to make good hunters pay, when the sale prices were dead against him, and a little ill-luck thrown in, made him a poor man instead of being fairly comfortably off—if only he had not bred horses as a business when he ought to have taken it up as a hobby in quite a small way.

But there are dealers who have and do make it pay, but they are exceptions—good business men, who probably in any other calling would have made a great deal more money than ever they did out of hunters, hacks, and harness-horses.

Let this caution not damage the ardour of the man who is determined to breed hunters at all hazards; let it make him extra careful with his economy, and make him avoid having any bad debts through selling horses to gentlemen in a good social position who do not pay him at the time when the horse changes stables—and very often never pay at all—waiting perhaps for the death of a wealthy relative who still continues to live, or else expecting to marry an heiress who will defray the luxuries of hunters bought from dealers who get abused if they do not sell horses sound in limb, wind, and eyesight, and first-rate performers over a big county—on very doubtful security.

In fact, horse-dealing cuts both ways; the purchasers often expect to buy too cheaply, and the seller is disappointed if he turns out a good, sound horse at a price too low to reap any benefit out of the risk of buying, or breeding, and the chances of disease or accident whilst in his possession.

As a rule probably harness-horses—especially well-matched pairs—pay better than hunters. But the motor-car industry has somewhat hurt the sale of carriage horses, but has not affected the price of really good hunters well known with first-rate packs. Rich men will continue to keep motors and hunters, and the reason for this statement is verified by the big prices which hunters make at Warner, Shepherd, & Wade's Horse Repository, Leicester, and also at Tattersall's.

With horses, use this golden rule, and know yourself what you want to do. Is it a racer? Then your object presumably is to win races. Is it a steeplechaser? Then your object is to win steeplechases. And in both cases see that it is well trained, ridden, and entered in such events that it will perform as you desire, and win—for we are only discussing straight people. Is your horse a mere commercial speculation? If so, treat it as such, and reckon every penny you spend on this business enterprise; for horse-dealing requires that no money should be fooled away before you have found a customer who will write a big cheque that will be honoured. Above all, know what object you have in view with a horse. If you fancy you have an equine

treasure you are keeping for your own comfort, treat him as such ; and never take a few pounds profit for an animal that suits you, if you can afford to keep it. It will never pay you ; as if suited, you cannot replace the horse you have just sold so easily as you imagine.

With horses have a fixed object in view, and strive to attain it, and recollect that most horses can be greatly improved if properly cared for and ridden or driven well. Most half-bred horses are bred on careless lines, and therefore turn out in an unsatisfactory manner—breeders paying a good deal of attention about the sire and too little over the dam. You must breed from sound dams and sound sires if you wish to breed sound stock. And you must break a hunter in the manner in which a hunter should be broken if you wish to make a decent price. Yet these obvious truisms are rarely observed. Are they? Ask anybody who has made a life study of equine matters, and the answer will be, “Very rarely.”

MATING THOROUGHBREDS

It is impossible to be sure of obtaining a good result from mating a valuable sire horse with a first-rate mare. As an instance of this, the case of Simon Magus is worth quoting—a horse bred at Welbeck by the present Duke of Portland. The sire of Simon Magus was the renowned St. Simon ; the dam was Wheel of Fortune, a mare which, during her racing career, the late Fred Archer declared to be the best he ever rode.



MEMOIR

This photograph of a celebrated blood-mare at the Wellbeck Stud is published by the kind permission of her breeder and owner, His Grace the Duke of Portland. This portrait should be compared with those of 'Oymonde,' and of 'Donovan,' and the contrast between being 'in' and 'out' of 'training' will be rendered obvious.

Yet, though so advantageously bred from a racing point of view, Simon Magus proved a failure on the Turf, and never repaid his cost of breeding. The same owner—the Duke of Portland—also could number amongst his numerous triumphs the best heavy-weight horse in the world. It is true that he did not breed this prodigy of the hunting-field—an enormous horse, almost ideally shaped, with perfect manners, an enormous weight character, good tempered, and as agile as a polo-pony. Yet how was it bred? The answer shows the lottery of breeding. Its sire was a good horse, its dam a useful mare; and though they produced several others—besides the valuable hunter just described—none of them proved to be much above mediocrity.

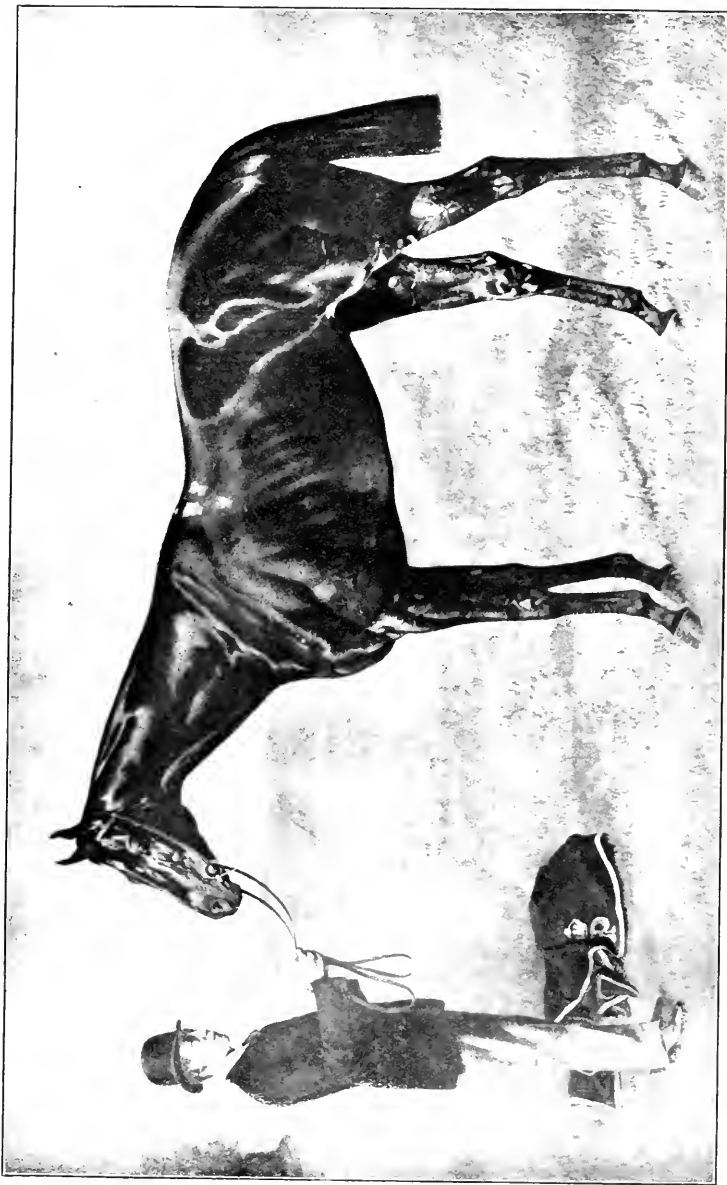
There is no doubt whatsoever that jumping runs in certain families, of which *Ascetic*, the sire of many steeple-chase winners, is an excellent example. Yet *Ascetic* was not a flyer on the flat.

The truth of the matter about breeding horses seems to lie halfway between certain laws which have been laid down in books, and also between judges of soundness and suitability in mating. To prove this theory we may take breeders who, having a natural eye for a “blood ’un,” start a stud on cheap lines, and purchase a mare who is well shaped, or has a first-rate pedigree, or maybe both, and, by judiciously mating her to a horse which rectifies her faults, produces a yearling which makes money, and another which makes still more, until at length that breeder has gained

a name by a combination of good luck, good management, and a quick eye to observe the best points of a cheap brood mare.

He needs a lot of grit who contemplates breeding horses, for it is quite a mistake to imagine that it is impossible to breed a first-rate horse for comparatively little money. The point is, can you reasonably expect to purchase a mare for very little money which, on being put to a good horse, will throw winners of classical races? The betting is a thousand to one against it. Yet I have known several instances of men who have accomplished a great deal in the direction of breeding good horses at small cost. They have made handsome profits on their original capital, even though they have not won a Derby or Leger.

A brilliant exception to prove the rule is one cheaply bought Derby winner. Under what circumstances can a breeder of racehorses on the cheap expect to make a handsome profit? Surely if a mare who will throw a winner of a thousand pounds race be sold for twenty or thirty pounds, there must be a great number of bidders after her. Of course there would be, provided they felt *sure* that she could breed "good 'uns." What actually happens when a good mare is sold for next to nothing is very palpable. She is a little soft perhaps, and, in other words, a cur; or she is not sound, and, therefore, it would not be worth a rich man's while to keep her for stud purposes; or she may be undersized—or, in plain language, a well-bred weed. And these



'DONOVAN'

This photograph of 'Donovan' is from M. Emile Adams' picture in the Galley at Wellbeck Alley. It is published by the kind permission of His Grace the Duke of Portland. 'Donovan's' shape indicates speed rather than strength; he was a 'real flyer', to use a favourite expression of his backers. He some what resembled a greyhound, being loose-jointed and covering the ground with long swinging strides.

drawbacks the buyer of cheap brood mares must put up with, and, if possible, rectify by mating her with a horse that will atone for those qualities she is deficient in. If the mare is light, or weedy, the horse should be powerful. If the mare is unsound, be sure and select a very sound horse. If the mare be good-looking but soft, or a cur who won't try, then, by all means, send her to a horse that showed plenty of courage during his Turf career. And if a mare be bred on unfashionable lines, and has no recommendation that you can perceive except that she is going for a mere song, do not attempt to warble that song, and find that the auctioneer has "knocked her down" to you. Let somebody else have her, for goodness' sake; and if she breeds winners ultimately, ascribe that fact to the good qualities of the horse she was served by, unless you believe that you were wrong in your opinion, and that the mare had qualities which you were not keen-witted enough to recognise when you had a chance of buying her.

Suppose that we buy a good-looking mare that has not been fast enough to win a selling race of 103 sovereigns. What are we going to do with her, granted she is a two-year-old? Shall we ride her, and break her in ourselves. All right. That implies we have stable accommodation and a groom, or a friend has, unless we are going to start horse-keeping on this mare, just bought out of a selling race. At this point, whatever happens, we should not deceive ourselves, but put every penny down that we spend on her, and

also write down her future winnings—if any—and the price she ultimately makes, also what her stock makes—or, in plain language, all the money she earns during the time we possess her.

Let us take a hundred mares sold at an average of five-and-twenty pounds, and work out roughly their financial future. Out of that hundred, certainly not ninety will repay for keeping; about five per cent. will show a small return, and there may be a winner of a selling race or two in the remaining five. Most likely a good brood mare may be amongst the number, and make but a small figure, but the good studs are composed of fashionably bred mares, who have the best horses known to the racing world; therefore their stock make big figures, and the unfashionably bred yearlings are sent into the sale-ring at a pecuniary disadvantage, despite the fact that the unfashionably bred are sometimes as good looking as the fashionably bred "blood 'uns."

One point should be emphasised on this subject. If you have a brood mare earning you money, do not go on mating her with unfashionable sires, but utilise the money you get for her yearlings in a plucky manner, and spend it on fashionable sires. They cost big serving fees, but the money will be well expended if the mare is reasonably lucky.

BROOD MARES

Blood-stock should be bred on limestone soil, in order to make bone, as the familiar phrase goes. Another valuable point in successfully

managing a stud is not to allow it to become sick, like an over-stocked fowl-run too frequently does.

There is no reason whatsoever why farmers should not devote more attention than they usually do to breeding a few well-bred horses, or even thoroughbreds. A good type of successful gentleman farmer is Mr. Russell Swanwick, who is tenant of the Royal Agricultural College Farm at Cirencester, and who permits the students to walk over his land and go into the accounts for a consideration of a small premium per head. Other instances may be mentioned, such as Mr. Sapwell and Mr. Ernest Higginson, both residing near Reepham, in Norfolk, who have made blood-stock profitable, by dint of careful supervision, on ordinary farms, which they have gradually improved according as the demand for paddock and stable accommodation became necessary as extra brood mares were bought or bred by them.

In the case of cart mares, by all means work them up to within a few days of foaling ; of course be reasonable, and therefore humane, as the births of the foals draw very near.

Mares that have been given about as much corn as they will eat—such as racehorses—require extra feeding when they are sent to the stud. Two feeds of corn a day after they have been six months gone.

According to the soundest authorities, every precaution should be taken against excitement, as they are apt to slip their foals towards the end

of pregnancy. Even when a few months gone, the shocks they receive will be bad for the foal. Therefore fence your brood mares in so that they are as free from harm as is reasonable.

Never try to foal your own mares if you have a practical and steady veterinary surgeon within easy distance. But a mare more often than not does not require professional help, which it is merely being on the safe side to send for if the case seems difficult. I allude to the presentation being at all complicated, *i.e.* one of the foal's legs being twisted in an unusual position, and so preventing the mother from bringing it into the world after a series of labour-pains, which are too often most painful to witness.

In Stonehenge's "The Horse in the Stable and the Field," published by Routledge & Sons, there is a carefully written article on the treatment after foaling which it would be difficult to improve on. "In a healthy state the mare very soon recovers the efforts which she has made in bringing forth the foal, and in fine weather she may be allowed to enter the paddock on the second day afterwards, which is generally soon enough to suit the strength of the foal, though occasionally the young animal is very active within six hours after it comes into the world. For a couple of months, or perhaps less in some cases, the mare and foal are better kept in a paddock by themselves; but in a large stud this is difficult, where the foals come very quickly, and then several mares of quiet temperament are put together, still keeping separate those which

are shy or vicious." The above is very concise, and not a word could be omitted.

In many studs the habit of handling youngsters with firmness, by picking up their feet and pulling them gently backwards or forwards by their leather head-collars, all helps to make them partially broken before they ever go up as two-year olds to their trainer.

But do not make foals or young horses soft by over-petting them. Their object is to win races eventually, and for that they must be alert, yet obedient.

Many owners who are not afraid of valuable youngsters getting fairly rough weather—such as sharp showers of rain, &c.—often derive the benefit of better constitutions than they would do if they over-coddled their high-priced charges and allowed them to be in their loose-boxes instead of defying the elements in a healthy, airy paddock.

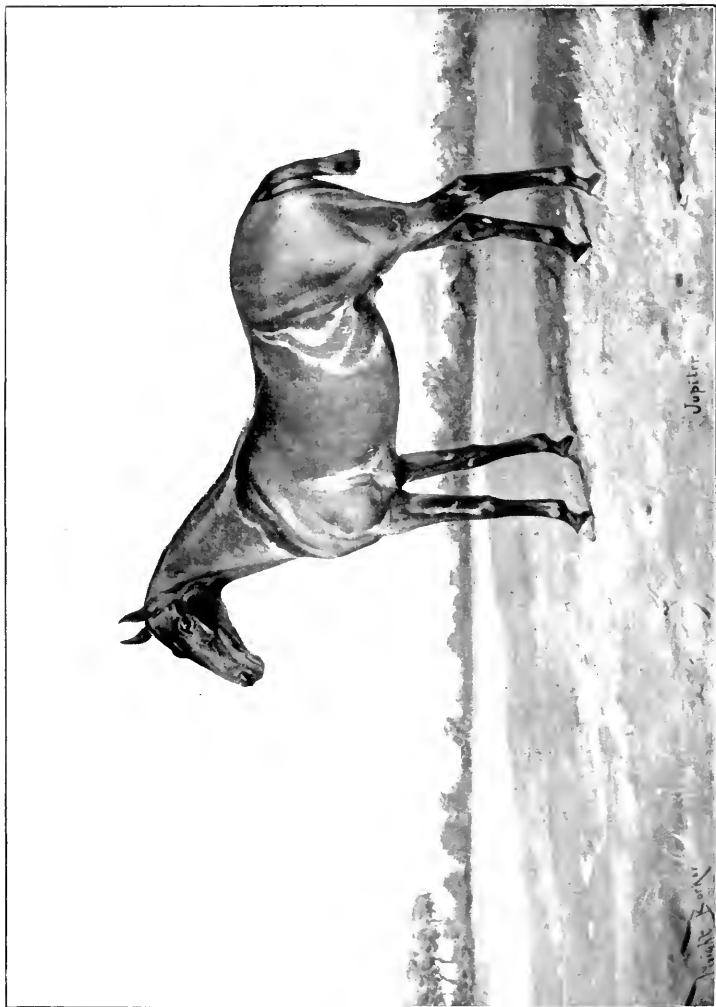
CHAPTER XXI

BREAKING AND RIDING

MORE works have been published on breaking than the average reader would believe, and Xenophon's, though written so long ago, is about the best. But times have changed since he wrote. Stirrups have been invented, and the *ephippium* discarded for the up-to-date saddle. Therefore Xenophon's treatise on "The Art of Horsemanship" is chiefly useful to us, as showing that the ancients knew how to ride, and could also write about horses and give valuable hints on stable-management which are of great practical value to us to-day.

You cannot learn to ride from a book. To attempt to would be waste of time. Nor can you become a good horseman or horsewoman even by practice, unless you have been well taught; and you must begin young in order to excel, unless you are a phenomenon in equine matters, for it is useless to lay down any laws to keep genius within bounds.

People generally ride in harmony with the manner in which they are built. If lithe and elegant, with plenty of practice and good tuition, their litheness and elegance will be noticeable in their horsemanship. Ungraceful people cannot

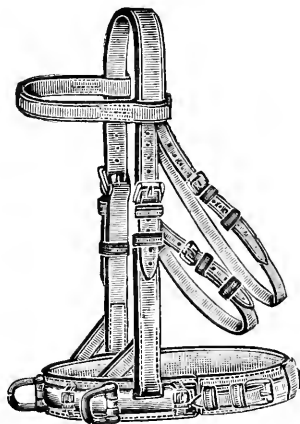


JUPITER, 3 YEARS OLD

This bay has received the honors of a Great Yorkshire and Peterborough winner, is a rare combination of a show-ring horse and a natural high-priced runner; some show-ring hunters are but half-credit performers; Jupiter could fail to come up to a horseman's expectations.

be expected to be graceful on a horse, though they may ride well in other respects, just as men and ladies are often first-rate dancers in spite of having bad figures.

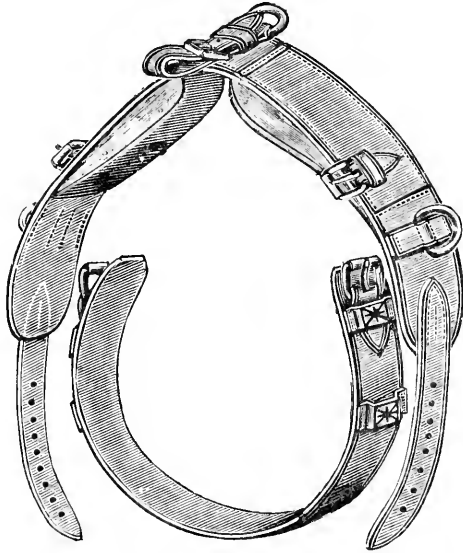
Natural agility and aptitude for picking up anything quickly ought to make clever and strong-nerved people ride far above the average, and perhaps be first-rate. But practice and good tuition are absolutely necessary and a change of mounts. Moreover, we must never forget that in riding there are innumerable styles, viz.: 1. A finished horseman or woman. 2. A rough-rider. 3. Those having strong seats and inferior



CAVASSON FOR BREAKING

“hands.” 4. Those with weak seats, but superior “hands.” 5. Riders who know about horses theoretically, but have a superficial knowledge about the practical side. 6. Those who have a practical knowledge as regards riding, but who are lamentably deficient in veterinary information and who cannot recognise when a horse is ill, and believe him to be lazy or a cur when he is really unwell. 7. Those who can ride an underfed horse, but who would be uncomfortable on a corned-up mount. 8. Those who can sit composedly and be mere passengers, and who leave everything to their mount ; riding

with a loose rein and as loose a seat, and never attempting to pull their horse together. 9. The flat-race seat, ever on the alert to start quickly and finish with a rush. 10. The steeplechase seat, which has longer stirrups, and is something between a flat-race rider's and a buoyant hurdle-



BREAKING ROLLER

11. A hunting-seat, with longer stirrups and a tendency to sit down in the saddle. 12. Those which indicate that a rider has schooled a young horse, which he still cannot completely trust. 13. A confidential seat, showing that the rider is ready for all kinds of riding—the military, erect, full of martial fire, with such long stirrups that there is no rising when trotting.

All these are merely hastily jotted down divisions into which riding may be divided, and there are other divisions and still more subdivisions. Yet a good breaker ought to know a considerable amount about them all, besides possessing good-tempered patience and plenty of pluck. The rest of the breaking will be done through will-power, amounting to animal magnetism.

When being broken a young horse requires firmness, patience, and time. He must not be made nervous, nor be made sore by the saddle or collar. He must be taught to stand quietly whilst he is being saddled or harnessed, and this makes a difference in the subsequent value.

It is impossible, as I stated before, to learn to ride from a book, yet a few hints are advisable, because nine people out of ten ride abominably when compared to a natural horseman, who notices defects: though politeness prevents him from ruthlessly criticising.

Let us begin with common faults. The average person whom you meet jogging along the road has not an air of security. Too frequently he carries his hands too high—yes, *much* too high. Now a good horseman rides with his hands close to his horse's withers, and, when using both his hands, carries them even lower than the withers.

Another common fault is putting too much pressure on the near rein, thereby giving your mount an uneven mouth. This is a particularly bad fault, and one which a horseman could not

be guilty of, or he would not be justly termed a horseman.

It is very unsightly to have the curb-rein rather loose and to ride the horse entirely on the snaffle. This can be avoided by riding an ordinary horse in a bit, such as is commonly used by polo-players.

Another flaw is riding with very short reins. I do not wish to convey the idea that the reins themselves are unusually short, but the horse is not given sufficient head by the rider. When he comes up to a jump the poor horse cannot clear enough ground, and is half-strained by being ill-treated in this manner through a nervous rider's cowardice. Now the worst that is likely to happen when a horse jumps "big" is to shoot his rider over his head, and possibly give him a kick when galloping on. This fear of being jumped off, through your mount covering more ground than you desire, must be got rid of. It is impossible to ride well if you are afraid to give your horse sufficient rein to clear the obstacle you put him at. It is also encouraging to would-be sportsmen, who are nervous on this point, to remember that, when a horse covers a lot of ground when jumping a fence at a good pace, it is pretty easy to sit him. And to prove this, take the case of a hurdle race. The horses go at their jumps at such a hot pace, that the motion to their riders is skimming over them, not unlike the sensation of a good swimmer being carried over waves.

There is a certain amount of excuse to be

made for men who have ridden a good many bucking horses if they ride with unbecomingly short reins. The fact of the matter is, that it unnerves lots of riders if they feel any moment their horse may buck them off. This applies more to riders of young horses whose tails are not straight out, or when they are tucked tightly into their haunches. When riding three-year-olds it is a natural impulse to hold reins rather short, as the more liberty your mount has, the easier is it for him to kick you off. This habit is to be avoided. Not only is it bad horsemanship, but it looks ungainly, and gives the rider a different kind of seat. He looks rather anxious with both arms stretched out—very different to a finished horseman riding with fairly long reins on a made horse.

Another point worth noting is the lack of character which is too often shown in a man's hands when he is on a horse. To call him a rider would be hardly accurate, for he jogs along and twists his horse about so awkwardly, that very little sympathy between rider and horse can be detected.

Some people ride fairly well with the left hand and not well with the right. Others hold their reins well in the right hand and badly in the left. It is a point immediately noticed by all who are thoroughly accustomed to horses.

If the hands of a rider are good, it by no means follows that his seat gives the impression of strength. Very often a man who is able to twist a well-schooled horse wherever he wishes, appears

to have quite a loose seat, and others having irreproachable seats have rather ugly hands than otherwise. Of course we see both good hands and good seats—which means brains allied with practice—and, alas, bad ones also, which means that practice is needed.

Good riders have brains on a horse at all events, and often off them too. For men who can take care of themselves over horses are pretty quick in other matters as a rule.

Let us point out the defects in different kinds of seats: 1. Loose seat, with stirrups which are too long. 2. The reverse. 3. A rider who does not use his calves to grip with, as he ought to do.

In fact, a good horseman has a species of an all-round seat. He grips with his calves, not his thighs, and also saves himself the exhaustion of gripping all the time, by riding partly through good balance and also through knowledge gained from the horse's mouth, and from the way in which his horse moves. Thus, he anticipates kicking, shying, refusing, a stumble, rearing, bolting, and other equine peculiarities which he is familiar with, because he has ridden all sorts of mounts in his time; and so is able to quickly make up his mind whether the one he is riding is going to be troublesome or not. A good horseman, therefore, has the great advantage of being able to get on confidential terms with his mount in a very short space of time. He can tell in the twinkling of an eye if he is likely to have a fight for the mastery, and knows that when the

battle is fought out decisively, and he has won, it will save him similar trouble in future—for a horse once thoroughly beaten by a resolute horseman rarely plays up again—though, of course, examples could be quoted to the contrary. But this only applies to a really ill-tempered horse, who refuses to be cajoled and needs a hiding.

It has often struck me that men who are thoroughly accustomed to riding possess a "seat" which is in harmony with their character. A very pliable man has a pliable seat, a nervous, high-strung person has a nervous, high-strung seat, and so forth. All this appears likely, if you admit that character is discernible in writing as many people maintain.

RIDING HORSES UP TO WEIGHT

A very popular saying is that a horse "having a lot of blood can carry far more weight." This is true in a sense. It would be, perhaps, a good deal more accurate to state that his pluck permits him to stagger under an unfair weight, and though at the time he may not, under excitement, appear to feel it, he ultimately will.

If a horse is only capable of carrying eleven stone, it is absurd to imagine that you can continue to handicap him with a couple of extra stone, without nature disapproving of this burden by making him stand over on his forelegs and straining him equally behind. It must be so.

In jump-racing the very headlong pace makes them carry the big impost—such as twelve stone

very often—with marvellous agility. They get over the big fences with a skimming break-neck dash, and the distance is rarely more than three miles. But out hunting, matters are quite different. The going is often much heavier, the time is extremely long—hours instead of minutes.

This, however, is a subject on which men who are fond of riding “blood ’uns,” incapable of carrying them, are very touchy on. Being unwilling to believe that they are actually straining a game “blood ’un,” they continue to believe that pluck is asked to set natural laws at defiance. Look at the heaviest impost ever allotted to a Grand National horse. You must admit it is too much to give even the best and gamest jumper that was ever foaled.

Polo-ponies, like steeplechasers, are usually expected to carry more weight than a common-sense sportsman ought to wish them to. There are thoroughbreds who carry thirteen stone without seeming to feel it, but they are *quite* the exception to prove the rule.

A great deal depends on how carefully a horse is nursed when doing a big run, or any other performance liable to cause a strain of the back tendons. Yet another point worth considering is the make and shape of your mount. Weak pasterns, generally very long and sloping, denote weakness. A narrow chest and tucked-up flanks, a poor measurement round the girth, *all* point to a speedy breakdown of a blood-weed if forced to carry weight beyond eleven stone at the outside, even when fit.

How many Grand Nationals had been ridden before the great Cloister beat the record, which had previously outweighed twelve stone chasers from winning the best known cross-country prize? Does not this appear first-rate evidence to prove that thoroughbreds are not adapted to gallop at topmost speed at such a cruelly heavy weight?

Those who are determined not to be convinced only listen to arguments which deal with exceptional horses under exceptional conditions. They may be likened to people referred to in that popular saying, "None are so deaf as those who won't hear!" Probably because they do not wish to.

BEARING-REINS are evils; unjustified even when the cruel plea of senseless fashion is urged.

A horse that will only hold his head up when driven in a bearing-rein is a slug, or at all events a fraud in harness. The very fact of wearing a bearing-rein is sufficient to prove that he will not hold up his head sufficiently high without it.

Perhaps he is a bad kicker, and his driver does not want him to get his head down and cave in the splash-board.

This fretting custom ought to be abolished by law, aided by the Royal Society for the Prevention of Cruelty to Animals.

LUNGING OR RINGING

In many dictionaries this word is not given. This is what a horseman implies when he lunges a horse. He fastens a rope or rein to a break-

ing-bit and makes the horse circle round him, like a circus-horse. This teaches a youngster obedience, and, if cleverly and resolutely done, tires out a high-couraged horse. Unhappily, lunging is frequently abused. When *well* done it helps to make a horse, but when *badly* done mars the temper at the beginning of schooling. All these points ought to be remembered by the would-be-breaker, unless he is indifferent to a raw and callous mouth, which has been made hopelessly bad from being jagged.

If the nose-band is adjusted too high, it has little power, and if too low it is apt to cause needless pain. The eyes of colts have often been seriously injured by the lunging-rein of an ignorant "breaker."

At first a colt must get used to being held by the head, which induces many sensible owners to provide head-collars even for their foals. When the colt is used to being handled all over, he is led about and afterwards driven in long reins, with no conveyance attached to the traces, which are tied so as not to flap against his sides.

Bad lunging is apt to produce spavins and curbs, as the colt's head and shoulders are forcibly hauled into the circle which the horse goes round in, and his quarters are driven out by the whip.

A horse, therefore, should only be lunged at a walk, until he learns to easily circle round his breaker on his own account in a comfortable canter. A skilled person will, single-handed,

lunge a horse in many different ways, and, by heading him with the whip, change him without stopping. When the horse goes easily, without persuasion from his schooler, let him be lunged on the snaffle instead of on the cavassan. He should grow accustomed to feel the stirrups against his sides and to carry a dumb-jockey cross. The rein buckled to the cross should be long at first, and shortened afterwards by degrees.

It is better to fasten the strap from the cross to the cavassan or head-collar — whichever is



PILLAR REIN

used—than to the bit. When a horse is left some time with the strap buckled to the bit, he is apt to lean on the bit and go to sleep—the lips then become raw and afterwards callous.

It is a good way to groom a horse by fastening him on the pillar-reins with a snaffle-breaking bit, or a mild snaffle in his mouth.

Colts should be broken as much as possible without putting them to any pain, and without startling them unnecessarily with any strange sights or sounds.

Certainly let youngsters get familiar with common objects of alarm, such as motors, traction-engines, trains, even hens popping out of hedges unexpectedly.

It is easy enough to get a friend who possesses a motor—granted you have not one of your own—to go backwards and forwards in your stable-yard; at first slowly, then more quickly, until your colt is quite accustomed to the noise and sight of a car whizzing past him.

At first the youngster should be led up to the automobile, afterwards led round, and allowed to sniff even the car itself. Pat him on the neck and make him understand that you are not frightened with the car yourself, and that there is no occasion for him to be frightened either.

Walk him past it; trot him past it; and do not start the car—at first—alarmingly close to him. Start it some little way off, and let it run slowly past him. Turn the car and meet him quietly, by free wheeling.

In this first lesson in motors a decisive victory will be gained by the breaker if he succeeds in introducing the colt to a car without unduly frightening him.

Do not take the colt on to main roads until he has ceased to feel alarmed by a car and its driver in the stable-yard and the private drive he knows; and therefore feels at home in.

Horses are, as a rule, naturally docile if firmly treated by those who understand them, and their nervousness is more often the result of being driven and ridden by nervous people than is generally imagined.

They very soon learn to lead and to know that when the near rein is pulled they are to go to the left, and when the off rein is tightened they must

go to the right. After a touch with the whip and both reins held evenly they soon grow to understand means that they are to move forward.

In a few days, with firm handling, the colt can be girthed with a surcingle or pad. A horse-cloth he soon grows accustomed to, also stirrups. Nor does he mind his legs handled and feet taken up—being affectionate, he finally becomes attached to his breaker.

The lunging lesson has taught him a considerable amount of obedience. But a horse should be accustomed to a breaking-bit before he is taken out of a stable, with a dumb-jockey on his back.

When you first put on a breaking-bit, only rein his head to that point he naturally carries it—let it be high or low. He will find that he cannot lower his head, and that raising it will loosen the bit. By degrees tighten the rein until you get his head and neck as near the position as the conformation of his neck and shoulder will allow, without irritating his temper.

If you rein him too tightly during the first lesson, he will paw, sweat, and perhaps rear.

Horses should never be on a tightly buckled rein for more than half-an-hour, as a longer time destroys all good effects.

A young horse's mouth should be wetted before he is bitted, and he should have a drink of water when the bit is taken off, and his neck gently patted.

Before a colt is mounted he can be taught a

great deal by the breaker on foot, with a plain snaffle or a double bridle.

Turn him either side, and make him collect himself. Change the lunging-rein and put it on the opposite side, in order not to give him a one-sided mouth. Teach him to back from a slight pressure on the rein. In fact teach him to be handy.

Lunge horses over low but solid objects, such as a very low rail, which will not give. Do not dishearten a colt by schooling him too often over the same place during each lesson. Take him not more than three times over, pat his neck and then give him his food as a reward for good conduct.

CHAPTER XXII

VICIOUS HORSES

ANYBODY who goes round a first-class trainer's stud cannot help noticing the quietness of the horses. Hardly any of them lash out or show an inclination to bite an admiring visitor, for the very simple reason that they are firmly handled, never played with, or patted in a finniking way, and made "soft."

What valuable hints an average owner can glean from watching the manner in which the best blood-stock is managed! Surely if valuable racehorses do not have their tempers unnecessarily upset, ordinary hacks, chargers, and hunters should be looked after on similar lines? In fact the average horse can be made gentle or vicious, according to how he is handled, ridden, and driven, for unconquerable hereditary ill-temper is quite the exception.

Although instincts of vice are sometimes ingrained in an animal's nature, the common tricks, such as rearing, kicking, and jibbing are usually acquired, and can therefore be traced to bad riding or driving, or maybe a horse has been stupidly harnessed, badly bitted, and has learnt to resent being tortured unnecessarily.

In some cases vices cannot be eradicated, but

occasionally animal magnetism, or something akin to it, may convert an apparently worthless mount into a useful one, though it may not fetch much money when sold. After quoting a number of instances showing the likes and dislikes of horses, the logical deduction follows, that if the latter are disregarded, trouble will ensue.

The hysterical horse is an equine fiend. A bay charger was drafted out of a cavalry regiment and became the property of an owner who had a particular weakness for awkward horses. And this one fully satisfied him, from an eccentric point of view. She not only resented being broken to harness, but squealed with a piercing noise that could be heard half a mile off, and kicked so incessantly that nobody could go near her heels. Yet, when her harness was taken off and a saddle put on, she became perfectly quiet, and glanced round most amiably. Her antipathy to pulling any sort of trap seemed unaccountable, because she was apparently designed by Providence for harness, having essentially hackney shoulders. About the only person who put this hysterical mare in the shafts half drugged and wholly starved her. Of course as a carriage-horse she was not worth the price of her hide, but she was a cheap mount for an impecunious elderly gentleman, whom she would have carried to perfection, and gone as quietly as a donkey on the sands, though in the stable she rarely missed an opportunity of running at her groom open-mouthed. The origin of this mare's hysteria can probably be traced to being teased

by troopers, who derived amusement from her abnormal squeals, and mischievously wished to cultivate them.

Unquestionably those who watched that mare kick and heard her frenzied snorts will never forget her dislike to breeching, blinkers, traces, lunging-rein, and carriage whip.

Whenever a horse nervously sidles into, or out of, his stable, it is rather an ominous sign. The betting in such cases is about even money that the animal has previously met with a mishap that will make him troublesome for life. It may be that he is prejudiced against gates, having formerly been trapped. Possibly years before we saw him, a stable-door may have blown to just as he was being led out. Anyway, it is advisable to watch an animal of this sort very carefully, and, if possible, find out its pet iniquity early rather than late. However, to show that every buyer should not invariably be unnecessarily suspicious is proved by the following anecdote:—

Some years ago one of the smartest cobs—he was christened Nobby—had a run of bad luck as a five-year-old. He lost his character through a drunken groom thrashing him with a whip, until he, in self-defence, kicked the trap to pieces. A day's hunting was a delight to him with a good boy on his back; no persuaders were necessary, for directly the cob felt a sharp-pointed rowel he resented the insult by parting company with his rider.

Purely owing to Nobby's force of character, he was doomed to be sold privately to the first

person who, after being made acquainted with his faults, should venture to give anything approaching a fair figure for a first-rate miniature hunter—when he did not buck—and a capital trapper—when he did not perforate the splash-board.

For several months nobody was bold enough to invest. The people in the neighbourhood respected Nobby, but they did not wish to own him. So, until a desirable customer arrived, the cob was lent "meat for manners" to his owner's nearest friend. No amount of work tired him, and he ingenuously kicked whilst he gaily trotted along, and periodically broke a shaft rearing, even though his "corn was knocked off." A change for the better came over the cob's fortunes one day when a stranger took a fancy to him, but he never had him "vetted," and gave a cheque for the amount asked, without attempting to haggle. And though warned that the temper of his purchase was not angelic, he immediately harnessed him to a brand new trap, and, to the surprise of onlookers, drove Nobby off. Nor, though the stranger was an inferior horseman, who allowed the reins to fall quite loosely on the cob's back, did anything startling happen. It disappointed the eager spectators to watch such unusually docile behaviour on the part of a generally acknowledged vicious trapper. And when months afterwards the last purchaser of Nobby declared that "he and the cob suited one another exactly, and nothing would induce him to sell him," the statement was received with awe by those who were considered good horsemen, and who had ridden

and driven Nobby in his most troublesome moments. Just as true ghost stories have an explanation, so this anecdote may be at all events partially cleared up. The high-couraged cob resented being made to trot, walk, or canter as a strong-willed horseman wished him to; yet he willingly trotted along with an entirely fresh master, who never attempted to fret him, and who was not afraid to trust him to work honestly. There seems no other conclusion, and to prove that this theory may be correct, I give the following tale, which was told to me in Australia.

At Tattersall's Auction Rooms, Townsville, Northern Queensland, a stock-horse was sold to one of the most timid riders in the Colony, who put a saddle and bridle on his purchase and rode out of the yard, fully believing that he had bought an exceedingly quiet animal, because he had been told by somebody in the repository that his new mount would suit him exactly. The buyer thereupon jumped on the stock-horse, and contentedly rode off. But had he known that the brute invariably put good riders down, he would have been so unnerved that he would have immediately dismounted. Happily in blissful ignorance he proceeded on his way, and for months afterwards never had his faith shaken; but in a luckless moment up country he tumbled on to a pal, who looked hard at his friend's horse, and then exclaimed, "I reckon since we parted company you've considerably improved in riding!" The nervous man asked for an explanation. "Why, the bay you're on was the worst horse they ever

bred on our run. Before you bought him not a hand on the place could sit him." It was true! A man who could lay no claim to being a horse-man or a rough rider had induced a confirmed buckner to complacently amble along a Bush road with him. But to pretend that he had succeeded where better men had failed would be a false statement. For only so long as he believed that he had bought an unusually quiet horse could he ride the bay with comfort; and on ascertaining that what he had imagined was a new chum's mount was a buckner in disguise, he promptly got rid of it: considering that the risk of keeping a horse with such a black past was too heavy for a nervous man to incur.

Let us find another illustration in England. When Sea-Song was running on the Turf, he afforded another instance of a vicious horse being magnanimous; or, perhaps, he was forgetful. Just before he was saddled for a race at Ascot, I saw a young lady look with wonderment at his leather muzzle, and then, with the confidence of ignorance, walk round to his hind-quarters, and stand within easy kicking distance, whilst she pointed at his heels with her parasol. Every second I was in terror lest the queer-tempered racer should injure her, for she waved the parasol so close to him that, knowing his character, I was surprised at his forbearance.

I implored Sea-Song's admirer to excuse me for capturing her very artistic Sarah-gamp, and for gently removing her out of reach of one of the worst-tempered horses I had ever seen in

training. However, my recompense was a disdainful glance, and that young lady doubtless left the Meeting in complete ignorance that, when Sea-Song ran twenty minutes afterwards, he might have pulled the race off had he been less eager to savage the jockey, whose mount won by a short head.

A few horses get a reputation for vice that they do not deserve. For instance, just before Flying Fox's Derby, if his temper was not upset, the much-coveted event was a gift for him. As a matter of fact, that Derby winner was certainly not a troublesome horse, though he was high-couraged, and, not improbably, might fight with a jockey who tried to punish him at the post. As a matter of fact, Mornington Cannon, during a tedious delay, did venture to enliven him with the whip once or twice before the flag fell at Epsom.

Many a good horse has been spoilt through getting too much corn, and not sufficient work, during a long frost. In one case, a first-rate natural hunter, after being ten days in the stable, was taken out and kept waiting at a railway crossing. An express train flashed by, the engine-driver let off steam, and either frightened the horse or else gave him a good excuse for rearing. Ever afterwards, when a steam whistle sounded close to him, the person who was on or behind him had a lot of trouble; in fact he nearly reared back into the trap on sighting an engine. Yet this performance was principally due to vice, for directly his head was turned

towards home his manners improved, and he would face sights and listen to noises which he pretended to dread when leaving the stable. Under good management this horse might never have become a confirmed rearer, though his sire was distinctly sullen, it must be admitted. He gained the mastery over nearly every one who was not particularly strong in the saddle, and was certain to "play up" when a stranger got on his back, and, though a magnificent fencer when hounds were running, he would repeatedly refuse little jumps in cold blood if his temper was roused.

It is well to remember that there are two distinct kinds of rearing, and, though both are exasperating, one is decidedly less dangerous than the other. (*a*) Some horses will stand on their hind legs fighting the air, out of sheer temper, yet are much too fond of themselves to come over backwards. (*b*) Hot-headed rearers are more dangerous than collected ones, because they are more inclined to lose their balance, when inexperienced riders clutch the reins. But clever horsemen rarely get hurt by this class, because directly their mounts feel like performing, they shorten one of the reins, and give him a reminder with a whip or stick down the withers. If this form of correction is done in a resolute manner, it is surprising how weary a rearer gets of being punished without being able to continue his pet trick, for horses cannot comfortably get on their hind legs with their heads crooked.

It is only fair to give horses their due, and add

that they would be almost free from this diabolical vice if riders had mild bits instead of sharp ones, because Bush horses have a clear conception of bucking, but hardly ever rear extremely badly; simply on account of being ridden in snaffles.

To attempt to decide what is the nastiest trick a horse can have would be very indiscreet, as good riders may consider that unexpected kicking is more treacherous than anything else; it certainly is a horrid vice. A well-known man to hounds, who is a member of a north country hunt, had, and still may have, one of the best examples of an incorrigible kicker. This equine phenomenon considered it necessary to unseat his owner, who was a crack horseman, at least once a day, out hunting. If the animal could have talked, he might have humanely asked, "When shall I buck you off?" The owner was bound to get a pearler, and usually the hunter doubled himself up and sent his rider flying clean over his head on the way to the meet. Naturally nobody was over-anxious to ride this inveterate kicker, his owner and groom excepted; nevertheless he had several good points, or, as may be easily imagined, a bullet would have terminated his career, whilst he was in the prime of life. He was too good to shoot.

Not only could this horse gallop and stay, but he was a wonderfully safe fencer, and was worth 300 guineas to a man who was prepared to sit on a monomaniac kicker. For, mind you, he only bucked once a day, but once was enough.

Those who have watched the pair have felt puzzled to know which was the better sportsman, horse or rider.

Perhaps it is worth mentioning that this kicker was perfectly quiet in harness, and an excellent leader in a team. This fact leads one to suppose that at one period in his life a rider got on him, and applied a sharp pair of spurs, and was immediately rebuked by being kicked off. Certainly a great number of horses who kick badly would be much quieter if hacked, hunted, or raced without rowels being used. In nine cases out of ten "persuaders" are more ornamental than useful on a high-mettled hunter who jumps "big."

Whoever has tried to stop a runaway has experienced a most disagreeable sensation, and the following anecdote may show that sharp spurs ought not to be worn on horses that pull like blazes, and finally get out of hand. A successful steeplechase trainer had an unusually fast thoroughbred cob, who, with a feather-weight on his back, was accustomed to lead second-class 'chasers in their gallops. To describe his disposition as being as hot as mustard would be scarcely doing it justice. When galloping he fretted because he could not cover the ground more quickly; he was troublesome to pull up, and would prefer to break a blood-vessel rather than be passed. It is superfluous to add that he was not a novice's mount. Nevertheless, a conceited young gentleman, with a loose seat and indifferent hands, one morning induced the owner

to allow him to ride this 14-2 cob instead of a stable-boy. The result was disastrous.

The novice, arrayed in white breeches, elegant butcher boots, and alarmingly long-necked spurs, was cautioned against his mount, and, above all, told to take his formidable spurs off, or the trainer would not answer for the consequences. The novice haughtily refused. "You're welcome to ride him in spurs so far as I'm concerned," said the trainer; "but if anything happens please don't blame me."

Directly they got off, the novice lost his head. On this diminutive racehorse he made the running, and, finding the pace too hot, he did his best to pull up. He tugged at his reins, leant back in his saddle, did everything he knew to prevent the pace growing more and more like an express train—to no purpose.

With bit tightly between his teeth, this miniature "blood 'un" went quicker and quicker, for, unknowingly to his rider, the sharp rowels went deep in, drawing blood and sending the pace-maker frenzied. The horses behind came along too, making matters worse, causing the frenzied leader to forget all else except a desire to increase the pace. The winning-post was passed in the best time he ever made, as going harder than ever he whizzed by and made straight for home.

As they neared the stable, rider and ridden were oblivious to all else. Neither were less frightened than the other—at headlong pace, when turning a sharp corner round the village street, quite close to the training stable, the novice

fell off and lay unconscious, until found half-dead with fright and real injuries.

The feather-weight pace-maker's reputation became worse than before. Needless to add, the novice did not buy him; he was virtually useless for racing purposes, having got unnerved, yet out hunting six months later a lady rode him to hounds.

He was a grand fencer, and quick as a needle, and at eight years of age he took harness without a murmur, and became one of the best leaders of a tandem in town. Needless to add he was not designed by Providence to make a comfortable wheeler; in fact, he would have been almost undrivable as such.

CHAPTER XXIII

SEATS AND HANDS OF ENGLISH SPORTSWOMEN

A SCHOOL-GIRL cannot be expected to pick up much about hacking, let alone hunting, if she trots after her riding-master only twice a week during the term, and has a favourite "screw" at home, whose worst vice is shying feebly in consequence of defective eyesight.

It may be taken for granted that not one girl in a hundred can look well nor feel thoroughly at home on a horse, unless she has overcome the fear of cutting a voluntary, and has also been shown the faults and virtues of all styles of riding.

To begin with, there is the limp way of sitting on a side-saddle, and feebly holding the reins in a half-hearted manner. It is exceedingly exasperating from an accomplished horsewoman's point of view. Let us describe how a demure young lady, with no resolution—say an amiable person like Amelia in "Vanity Fair"—would hold her reins. Also how she would sit, after even capable instructors had endeavoured to teach their pupil to cut a presentable figure in Rotten Row, or along country lanes, or out hunting. She would appear to ride faster than her horse, and would bump bump in her saddle most unnecessarily on the "hard, high road." Surely,

too, the chest of this colourless young lady would sink into her back, which, in consequence, would be unbecomingly rounded, whereas her face would be downcast and droop like a withered fuchsia. Added to these sad defects in the rider's personal appearance—easily remedied please to note—her hands would nervously clutch the reins either too tightly or too loosely. Her horse, therefore, might fall when stumbling, or it might rear and fall back upon her. We consider that this modern Amelia would give her hunter a bad sore back, because she would sway in her saddle. She would obstinately refuse to correct her faults, and would prefer to ride in an ungainly fashion. Yes, the idiosyncrasies of horsewomen are frequently observed, though perhaps not commented upon, by observant passers-by. As we have seen, demureness is noticeable in the hands and in the seat; moreover, the love of admiration comes out too. Every day you may notice some fair equestrian, with chin haughtily posed in the air, yet despite this seeming indifference to the sterner sex, the lady uses her eyes in a fascinating manner, and attracts attention by sitting on her side-saddle in a provokingly jaunty attitude. Alas, this exaggerated self-assurance turns, what otherwise might have been good style, into abominably bad form.

Had such giants of literature, as Shakespeare or Lord Byron, been horsemen at heart, we should have had the fact artistically recorded that the individuality of riders may be sought for in their "hands and seats." There is really

nothing odd about this. Cannot you tell vivacious or phlegmatic girls from the way they dance? The same idea may be applied to riding. In addition to those ladies already mentioned, there are go-betweens, who, on rare occasions, can perform very creditably on any horse they have grown accustomed to. It is somewhat difficult to class such people, if want of nerve alone prevents them from distinguishing themselves on strange mounts.

Quite a piteous sight to witness is when a timid rider puts her horse at a fence, which neither has the smallest intention of jumping. The animal makes a rush at the obstacle, but, instead of taking off, whisks round: the lady having unconsciously pulled him round. Finally, she hits the horse, and terms him obstinate or stupid. Yet, had she been mounted on her favourite hunter, this sort of thing might never have taken place. She might even have got a reputation for being a hard rider to hounds, and, after a good run, might have been presented with the brush, though she would not have earned it. Evidently much depends upon whether a rider with a medium nerve is mounted on a horse that she knows. Other ladies worth drawing attention to are those blessed with any quantity of pluck, who "go like smoke," although the less said about their hands and seats the better.

Without possessing something akin to animal magnetism, it is impossible to excel in riding, even granted a large stud of hunters is placed at the equestrian's disposal. It is perfectly true

that all true lovers of animals take a pleasure in studying the likes and dislikes of an organ-grinder's monkey, a costermonger's donkey, or a high-priced polo-pony—in fact, any creature they happen to come across. It improves their hands to lay up such a curious store of knowledge, which will eventually come in handy. For not only does every horse require to be ridden in a slightly different way, but your mount's confidence must be won; further, it is plainly your duty to know (not to guess) that the bit is suitable, the shoes are comfortable, and that your girths are neither too tight nor too loose. If you can squeeze two fingers in between your girths, they are about tight enough. When jumping, sit right back and give the horse his head—very few ladies can help a horse by pulling him together on landing; interference in this way usually means that the rider is clutching on by the reins.

Those who have lent good hunters to ladies feel much concerned about their backs—for a side-saddle is very apt to raise unsightly sores which take time to heal, and cause what was a previously sound-backed horse, to flinch with discomfort.

In these cases prevention is better than cure. Have a sheep-skin numnah; apply soothing lotion to the first sign of soreness, and let your saddler do all which lies in his power to prevent a bad "sit-fast."

Possibly the reader who is tired with the mention of so many valuable books—they daze him, and he does not know which to choose—wishes

to have one work named on which he could pin his faith. It is a difficult task to state what is the best book under such circumstances. But a hitherto unmentioned work ought to meet his case. It is entitled "Modern Practical Farriery. A Complete System of the Veterinary Art as at present Practised at the Royal Veterinary College, London," by W. J. Miles, M.R.C.V.S., L., including practical treatises on Cattle, their Management in Dairy, Field, and Stall, by John Walker; Pasture Grasses and Forage Plants, by Samuel P. Preston; The Practice of Sheep Farming, by Charles Scott; and the Diseases of Cattle, Sheep, and Pigs, by T. J. Lupton, M.R.C.V.S., L. Published in London by William Mackenzie, 69 Ludgate Hill, E.C. This is all in one volume, and illustrated; but the illustrations are somewhat old-fashioned and clumsy. The first picture is The Roadster, which certainly does not convey the impression of a modern hack, although in the illustration the Roadster has a saddle on. Nevertheless "Modern Practical Farriery" is a valuable work, especially for those who are engaged in agriculture. It is a very big work indeed. Deserving every respect, it is possibly about the very best to be recommended to the man who wants only one book—and why should not a lady study such a work also? A good work, in nine volumes, is "The Horse: Its Treatment in Health and Disease," by Professor Y. W. Axe. Price, 8s. *net* per volume. The Gresham Publishing Co.

In all works there is rather a sameness; they

appear as if written on text-book lines, with but scant originality, and they rarely convey the impression sufficiently that it is impossible to learn only out of books, however painstaking authors may have been when compiling them. Nor are they written enough with the view of guarding against disease. It is true equine ailments, like the poor, are with us always, but the average keeper of a stud does not try sufficiently hard to prevent the thousands of evils which are bound to attend neglect. In plain language, he does not act sufficiently on his own sound common-sense.

Glean knowledge from vets and practical grooms and horsemen who rarely read books, and have learnt nearly all they know from the study of horses in actual life : apart from standard words on equine literature.

The average lady rider is less versed in the ins and outs of stable-management and veterinary which so many of the stronger sex possess. As a matter of fact, a lady who is fond of this subject is invaluable to her husband. Take a celebrated case—Mrs. Arthur Yates, wife of the owner and trainer of steeplechase horses. You may rest assured that lady knows more about horses than most men. Others of her sex, who are willing to learn, could do the same. Change of mounts alone will give that confidence which is essential. You cannot fall into a natural seat without having this advantage over the lady with a solitary horse, or at most two or three.

Both styles should be mastered—the Rotten-

Row Society way of sitting on a strong well-bred hack and the cross-country seat, which may be seen in the first flight in Leicestershire. The Duke of Beaufort's; Vale of the White Horse, make crack riders observed. But many a good run in a little known country has surprised first-rate judges used to fine performances in all places, no matter whether hounds are after a fox or a hare, or in a warm or a cold climate.

According to Miles, "The position of the stirrup has much to do with the seat of the female equestrian. The stirrup must be correctly adapted to the length of the lady's leg when seated in a square and exact position in the saddle. The *modus operandi* is as follows: Let the stirrup-foot hang down freely from the hip-joint, the knee slightly flexed, the toes raised and turned towards the horse's side; then, while the foot is immovable in the stirrup, let the strap-holes be taken up and permanently kept at the approved length. The pressure of the foot in the stirrup should come alone from the toes to the arch of the foot, which will give the desired elasticity of movement in the quicker paces of the horse. Should the lady be impelled to the endeavour to retain her foot in the stirrup, her weight must preponderate on the left side. On the contrary, if the stirrup be too short, it necessarily gives a rolling motion to her body, destructive alike to grace, elegance, and security of seat, and will prevent her seating herself back sufficiently in her saddle. Thus much of seat and stirrups. The arms should be held freely and unconstrainedly,

but near the sides. The motion of the bridle-hand must be like that of skilled pianoforte-players, confined to the wrist."

From the above may be gathered the style of the work referred to. It is, perhaps, rather heavy. For instance, it might have been nearly as explicit to have simply told the reader to pull her stirrup-leather up to the length which suits her best. Anyway, this ought to be done; and to do this with success, it would be wise to get the advice of a good lady-rider, and even a man, who understands this ticklish subject. Take the joint advice of both as to whether you ride too long or too short. If the man thinks one way and the lady critic another, you better strike the happy medium.

Too much stress cannot be laid on the advisability of learning practical riding from men and women who have never perhaps written a line on the subject, but who know what they are talking about, and can show your faults and try hard to rectify them. Six months' riding, under the tuition of an acknowledged master or mistress of this art, will teach you more, with plenty of change in mounts, than you will ever glean without practice, if you assimilate the best passages in equine literature.

Before touching on other topics connected with horses, such as their numerous ailments, I cannot draw too much attention to the interesting Badminton Library, which should rank as standard works on those subjects they deal with so minutely. Another kind of book still

up-to-date, though written many years since, is "Riding Recollections," by the late Whyte-Melville. He was a pretty and well-turned-out sportsman, who wrote on the subject he loved, lived and died at hunting. Nevertheless he was not in the front rank of first-flighters. Nor is this to be wondered at, because to ride with the first-flighters in Leicestershire demands high-class horses which Whyte-Melville did not keep. In addition to this drawback, he had to contend with requests from the public and, possibly, publisher to produce constant work to satisfy their craving for his first-rate writings. And the literary gift is very finely edged intellectually, and is bad for riding. It makes men and women, too, have breakdowns from the sedentary life and the worry of following a precarious calling which teems with petty annoyances. Perhaps, for this reason, few literary men have performed over a country or between the flags as well as many other horsemen who have not penned their knowledge and rushed into the arena of print. The Badminton Library has the great advantage of being compiled by the best authorities on sport; and though the criticisms concerning Whyte-Melville not being a thrusting rider is not intended to cast any reflection on him, he was not only a good man to hounds only averagely mounted, but the finest sporting novelist who ever wrote grammatically and stirringly in the English language. This is acknowledged by all lovers of sport; and those who seek to fill the gap caused by his tragical death need not feel

aggrieved if their work fails to rank quite so highly as the writings of the author of "Holmby House," &c. &c.

Amongst influential authors of the present day should be mentioned Sir Walter Gilbey, who has written many interesting books on his favourite subject—the horse. They are accurate and practical.

CHAPTER XXIV

DRIVING

THIS subject is inexhaustible—one far too wide to attempt to make more than a passing sketch in such a work as this. Hundreds of first-rate works have been written on it, all carefully chronicled by Huth (*vide* Index).

Again it is necessary to draw attention to the Badminton Library, *re* driving.

But the average reader, with only a small stud and without having had the chance of being coached by a first-rate whip, perhaps only wishes to learn just a few hints, not gathered so much from books which they have already perused, but from practical experience.

It may safely be stated that for every man who can drive well, you can find a score who can ride well and who drive indifferently. They are certainly not so good with the reins as they are in the saddle.

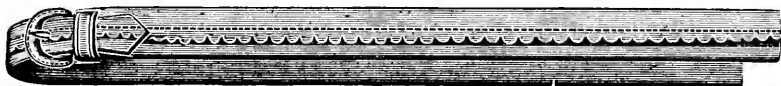
The best advice it is possible to give the would-be whip is to request him to serve an apprenticeship under a stern but good coachman, who can drive a team, catch his whip without any difficulty, and who can superintend the harnessing of a young horse who is put in for the first time.

When driving a single horse care should be taken not to press unevenly on the reins, the near one especially. Horses driven by good whips have even mouths. Do not drive with slack reins, as so many people do. Shorten your reins from behind, whether you are going down hill or on the level.

Find out the natural pace and action of your horse, and rarely drive more than seven to, at most, eight miles an hour, because first-rate whips



DOUBLE-STITCHED REIN



DOUBLE AMERICAN HAND PART OF DRIVING-REIN

scorn to drive like butchers' boys. Some horses appear to be moving quicker than they actually are. This is on account of their being well in hand and yet doing their work—running up to their bit, moving with their legs well under them, and looking and behaving as if they were thoroughly intelligent and alert.

In tandem-driving get a hot leader from choice and a temperate horse in the wheel. Of course a confirmed kicker in the leader is hopeless, and, if possible, more dangerously disastrous than a leader that jibs and a wheeler who pulls.

Bars in tandem-driving are not so safe as long

traces without a bar, *i.e.* fastened to eyes in the wheeler's traces.

Learn to drive to time. Unless you can get into the habit of covering a certain number of miles in a given time, going at one regular pace, and not spurting in order to make up for lost time, you cannot be considered an accomplished whip.

When putting young horses into a cart, hold the shafts well up so as not to frighten them. Gradually lower the shafts and draw them through the tugs.

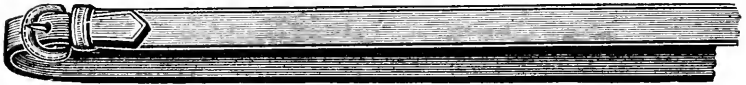
It is evident that it requires at least two, and it would be better to have three, good horsemen to put a youngster in harness; just the first drive or two. One should hold his head, the other two pull the trap up and gently and soothingly harness him, not expecting the horse to stand too patiently, and avoiding his starting off with a frightened bound.

Never put a young horse in up a hill, but on the level. Half the jibbers are caused through the carelessness of stupid owners or their grooms giving a horse sore shoulders by not gradually hardening their horses underneath their collars. Use a bass-collar if the shoulders are tender, or inclined to become so. On returning from the first drive or two, take the horse out most firmly and carefully, keeping the shafts well up and pushing the trap back, then let him stand for a minute or two—explaining thereby that there is nothing to be nervous about.

A horse that has grown frightened on account

of being startled or hurt through being carelessly taken out—the shafts have bruised him or the breeching or kicking-strap not unloosed—becomes troublesome afterwards.

Horses have long memories and do not forget anything which frightens them, especially during their first lessons at the most impressionable periods of their lives. This is especially the case with motors or threshing-machines, and nowadays it is impossible to avoid meeting motors; there-



HAND PART OF DRIVING-REIN



ORDINARY DRIVING-REIN

(Plain riding-reins have of course no buckles, and therefore cannot catch in the martingale)

fore a young horse must be thoroughly broken to them, and cannot be termed quiet to ride and drive if he dislikes them. A good plan is to turn youngsters out in a field where such objects of their terror pass and repass.

PATCHING-UP SCREWS

The word screw is far too familiar to need any explanation in this book or in any other. Needless to say, it means that such horses are invariably unsound, but by no means incapable of working in the majority of instances.

Knocked up through too much work is the commonest type of screw. Now what we are concerned with is how to cure this. What should we advise? The time-honoured remedy—hallowed by shrewd common sense—is to fire the game-legs if spavins, splints, side-bones, ring-bones, or curbs, and, after severe blistering, turn out for at least a six weeks' rest.

The above is sound advice, with no differers; in fact, carried unanimously by all who believe that red-hot irons, which sear deeply lined flesh wounds, cause inflammation to set in, which acts as a permanent bandage. There is no question that cures this way are effected; but why not try a running stream? A horse stood for an hour or so with a brook gurgling by is wonderfully refreshed, and, in some instances, tottery old screws have been sufficiently patched to stand up and prove winners over two or three miles on a steeplechase course.

Another good plan is to get horses used to a hose which pours an incessant shower or jet on their fore and hind legs, bracing them and doing more to make groggy legs reasonably strong than any other method which can easily be thought of.

Age and the extent of injuries or infirmity has to be taken into account. There is a turning-point in most horses' careers, when it just depends whether they are going to be worn up or continue to be pampered favourites, living on the best of oats and hay.

How can some of the ailments of brilliant screws be recognised? for there is no doubt that

some exceedingly handsome horses go through repositories and are knocked down at ridiculously low figures, if the animal is to be judged from appearances.

Never wish to detect a lameness; it will suddenly force itself on your notice. An imperceptible drop causes your suspicions to be aroused; you look again, and this time realise that you were absolutely right.

Never buy a lame horse excepting at screw price.

It sometimes happens that quite a handsome bay gelding or brown mare, just as the case may be, is knocked down for 14 guineas. The very lowness of the figure helps to scare away dozens of people who otherwise might have given a bid.

PART VII

CHAPTER XXV

SOUNDNESS AND UNSOUNDNESS

ONE of *Punch's* cleverest jokes was—"Advice to people about to be married. *Don't.*" My advice to those about to buy a horse, and questioning whether to have it passed first by a good vet, is—*Do.*

It takes a first-rate amateur vet to pass a horse, and implies as much practical knowledge as the average vet himself possesses. Pay a guinea cheerfully for a veterinary examination, only stipulating that in case the horse is *not* passed the vendor pays the vet, and, in case it *is* passed sound, the new purchaser pays.

From the above it will be gleaned that high-priced horses are, as a rule, subject to a veterinary surgeon's examination. It relieves the purchaser from all reasonable hazards, and enables him to return them in case the warranty is proved to be given without good reason; but the horse must be returned at once.

In the case of quite young horses, especially those bred from healthy sires and dams, those unbroken I particularly allude to, the risk of purchase without a vet's certificate of soundness is of course less.

Granted you make up your mind to abide by your own unaided opinion, the best thing to remember is to look dispassionately at the horse as he is trotted backwards and forwards past you at quite a slow trot, with a fair amount of liberty given to his head, through the groom who "runs him up" trotting him with a fairly loose rein. Notice if he goes in a level manner—does not drop on any of his feet, thereby indicating lameness.

Do not be on the look out to detect lameness in any one leg, just when he is run out at first, but give him the benefit of a wholly dispassionate opinion. If, after several times passing you, the horse unmistakably shows a tenderness on one leg, then pay attention to the leg he thus favours.

See if you can detect any reason for your suspicions that he is lame. If you subsequently find that there is nothing to further excite your suspicions, and that the difference in high and low ground may account for it, and there is no symptom of disease so far as you can detect, have the horse trotted past and re-past you until you have dismissed your first opinion, and you will very likely buy the horse and be right in doing so.

Try his wind with a good gallop, or with a stick, catching the bridle short and pretending to hit him. If he gives a broken-winded grunt do not buy the horse excepting at screw price.

Bad temper is not unsoundness, but should be taken into consideration, and it would be foolish in the extreme to buy a vicious or ill-tempered

horse—however sound he might be—if he would not answer your purpose, and only turn out to be YOUR master, instead of you being HIS.

A horse that you know intimately about, and which you consider will suit you, is worth paying a fair amount extra for. Nor is this all loss—as looking at others costs extra money, which you had better spend on the one you do know about and approve of.

UNSOUNDNESS

Blindness is one of the worst unsoundnesses, but is naturally less met with in young horses than in old. If a fairly aged horse shies without apparent provocation, it would be wise to pay great attention to the examination of his eyes.

And here it may be worth noting that one of our most eminent oculists—he is world famous—was asked by a patient to be kind enough to carefully examine the eyes of an old brougham horse she had grown fond of, and whom she felt safe with until quite recently, when he took to shying in town. The oculist kindly examined the horse, and though several well-known vets had recently done so, and declared the horse to be sound in wind, limb, and eyesight—especially eyesight—the oculist staked his professional opinion that the horse's eyesight was extremely defective.

The eye, which is one of the most valuable and delicate organs conceivable, is made up of Conjunctiva, Cornea, Sclerotic coat, Choroid coat, Retina, Aqueous humour, Vitreous humour,

Crystalline lens, Capsule of lens, Iris, Pupillary opening, Corpora nigra, Ciliary ligament, Hyaloid membrane, Optic nerve, Arteries, and Veins.

The question how far the scientific aspect of the case should be followed here is a moot point, depending largely on the type of reader of this book. Supposing a scientific amateur, I refer him to "Horses and Stables," by Lieut.-General Sir F. Fitzwygram, Bart., and published by Longmans & Co., or to "The Horse in the Stable and the Field" ("Stonehenge"—Routledge and Sons). Better read both, and then, if his scientific ardour remains unquenched, let him read "Anatomical Outlines of the Horse," by M'Bride and Mayer (Longmans, Green & Co.). If he is not satisfied with book-gleaned knowledge, let him accompany several vets, who have a large practice in town and others in the country, and see cases of all descriptions. As a finishing touch, let him study in a similar manner under an oculist with a large and varied practice, and then, and *not* till then, will he be able to pass a horse's eyesight with confidence. But he will have spent far more in acquiring this knowledge than he would have saved had he employed a good vet to tell him, for a guinea, that a horse is sound or unsound which he thinks of purchasing.

Closed eyes, intolerance to light, are natural symptoms of inflammation, caused no matter how, especially when they are accompanied by profuse tears.

A somewhat old-fashioned work—yet a very practical one, and by no means out of date, owing

to the strong common-sense of its author—is “The Illustrated Horse Doctor,” by Mayhew, published by W. H. Allen & Co., London. On page 45 is a very useful passage: “Never buy the horse with imperfect vision; never have the interior of your stable whitewashed.” Then what colour is to be employed? Probably blue would absorb too many of the rays of light, at all events it seems preferable to copy Nature. Green is the livery of the fields. In these the eyes take no injury, although the horse’s head be bent towards the grass for the greater number of the hours. Consequently the writer recommends that green wash, which is cheap enough, should be employed instead of the obnoxious white for the interior of stables.

Mayhew, in his article on cataract, says that “Cataract is a white spot within the pupillary opening. The spot may be indistinct or conspicuous—soft, undefined, or determined; it may be as small as the point of a needle, or so big as to fill the entire space; in short, any indication of whiteness or opacity upon the pupil is regarded as a cataract.

Now prevention is better than cure. It is evidently the duty of the humane and careful horse-owner, who does not wish to go through a scientific course to learn the diseases of the eye—and they are numerous—it is evidently the duty, I emphatically repeat, to keep your stable sweet, to have the walls the reverse of dazzling white, not to have racks immediately above a horse’s head, so that the seeds of hay are apt

to fall into their eyes when hay is put down from the loft above. It is equally obvious that drivers should be extremely careful not to unnecessarily injure a horse's sight through hitting him—even unknowingly—in the eyes, whilst driving. In fact you should never hit a horse beyond his withers. Breed, too, from sound horses—especially those with good wind and eyesight. Let constitution be paid great attention to, for, with weak constitution, there is a tendency to weak eyesight, and, in fact, weak everything else.

A stable ought to be well lighted with a flood of natural light from a window above the horse's head. And, when you have paid true attention to these seemingly very right acts to do, study more advanced causes and treatment of the eye; but lay to heart the simple ones first, for, if you neglect those, you are unlikely to divine much benefit from incurable eye diseases when they are brought home to you through a favourite or valuable horse being rendered worthless to you—partly because you took insufficient care of him, or because you bought him after paying very little attention to how your horse or mare was originally bred.

BROKEN WIND

A thoroughly broken-winded horse is naturally valueless for fast work, as, being once broken-winded, means being always so. Heaving flanks, a chronic cough, all point to this disease, brought about through over-straining, under-feeding, or

even over-feeding on bad hay and mouldy oats especially. Bad drainage also assists.

All that common-sense dictates to keep a horse in good health helps to prevent a horse from going wrong in his wind, and *vice versâ*. Hereditary disposition in this case, too, plays a large part, and never breed from a broken-winded mare; and, if you insist on doing so, use a strong cob sire who is unquestionably sound, as small horses on the whole are less liable to go wrong in their wind than very big ones.

Always when buying a horse get the purchaser to give a written guarantee that your future horse is sound in wind, limb, and eyesight, if you dispense with a vet's examination, or unless you buy a regular screw at screw price.

Advice to those who own broken-winded horses is to get out of them, no matter at what temporary loss. Should you feel a desire to keep them, change their food, give a small allowance of hay, put sawdust litter or peat moss in preference to straw—which they might eat; give linseed mashes frequently.

The best chronic cough ball is:—

Gum Ammoniaci	.	.	.	.	.	3j
Pulv. Digitalis	.	.	.	.	.	3j
Pulv. Camphoræ	.	.	.	.	.	3j
Pot. Nit.	.	.	.	.	.	3j
Pulv. Belladonnæ	.	.	.	.	.	3j
Bals. Sulphur	.	.	.	.	.	3j
Picis. Liquidæ	.	.	.	.	.	3j
Lim. Cont.	.	.	.	.	.Q. s. ut ft. bol.	

Omni nocte.

SPAVIN

According to Mayhew, in his by no means antiquated work entitled "The Illustrated Horse Doctor," published by W. H. Allen & Co., London, and written from a kindly point of view for amateurs and vets, but essentially a purely veterinary work—

"Spavin and splint both are the change of ligamentous structure into bone. Spavin occurs at the inner and lower part of the hock; splint also may be sometimes found at the same part of the knee. The name splint is likewise applied to any bony enlargement upon the shins or below the hocks and the knees.

"A few hints on this disease, so often spoken about in the hunting-field, stable, at horse-repositories, and in smoking-rooms, yet often not so readily detected by horse-buyers as some of them would be willing to confess—yes, please lay these well to heart and it may save many a 'fiver,' many a 'tenner.'

"Examine a horse by peeping through his hind-legs, and through his fore-legs afterwards. Get a groom to hold up his fore-leg when you feel for a spavin. Get a vet to show you a spavin, afterwards contrasting that unsound horse with a sound one—who naturally has not a spavin.

"The sound horse has both legs alike. But the spavined horse has an enlargement—it may be a big one that hardly causes lameness; it may be a hardly discernible one which causes the horse to run out palpably unsound—though,

when he warms up to his work, his lameness wears off until it is only noticeable to a professional dealer or a skilled vet. For this reason, always examine a horse when he is quite cool, as by so doing you have the double advantage of seeing him afterwards when he has been sweated in a gallop.

“Some spavined horses only show their affliction when a rider’s weight is on their back. It is, therefore, best to leave a horse in his stable for an hour or more after your first examination, as by then he has cooled down sufficiently to trot out lame if he has a spavin, which did not show itself when you saw the horse at work, but perhaps *not* in the stable previously.

“The cause of spavins, no matter which kind they may be—bone, bog, or blood spavin—all are produced by strain or concussion; in most cases the result of pulling or carrying more weight than the horse is fitted to naturally. The bones become callous, or, in the case of a bog spavin, you get a soft enlargement in the front of the seat of bone spavin.

“Blistering, after severe firing, is the usual fate of the spavined horse, if his owner wishes to work him and is not ashamed of the unsightly blemish. In veterinary counter-practice, the treatment commonly adopted is that of blistering and rest, with, if possible, a run at grass, or three months in a straw-yard. In blistering for the cure of bone-growths we should always advise hydbiniod of a strength varying from 1 to 7 to 1 to 12 of vaseline or lard, or lanoline.”

The tendency of men who love riding well-bred horses too light to carry them, swells the number of spavined patients for vets to treat but not to cure ; for spavin is an incurable disease, inflicted often through thoughtless cruelty on a too willing horse, who has done all to carry out his master's or mistress's wishes in jumping or galloping through heavy ground, or pulling a carriage up-hill when the driver's or the rider's common-sense should have revolted against doing an unnecessary cruelty which has caused a spavin for life and made the horse unsightly by disease, and lessened the value of the patient by quite seventy-five per cent.

Unhappily half the people who ride and drive horses and understand spavins are inclined to ignore the pain they inflict through straining them ; and those who spavin their mounts out of ignorance inflict as much cruelty unknowingly as many a professional torturer has done in the past, when thumb-screws, racks, and iron cages were in vogue.

There is one inexorable law in connection with nature, and that is, abuse it and you must cause injury in proportion to the abuse. To make this clearer, take the case of any act of cruelty. Smash a horse's feet on the "hard, high road," and you produce navic.

Strain a youngster in heavy going and you set up a curb. Gallop a horse unfit, cruelly hard, and you will get a broken wind ; more especially if you feed him on bad hay and inferior and dusty oats. On the other hand, treat

a stud with all the common-sense you possess, be generous in every conceivable way, and, with ordinary luck, your steed will more than repay you for your large-heartedness, by giving you exceptionally good runs when you are well mounted and hounds are running, or equally in harness by not falling sick or lame, when other horses are knocked up through selfish brutality.

Ring-bones, side-bones, and navicular diseases are the result of concussion, and caused through trotting on macadamised roads in a great many instances.

The first two named diseases are treated by firing and blistering and turning out to grass. But navic—which is caries of the navicular bone—is a hopeless lameness which is never likely to cause other than trouble and loss to whoever owns a horse with that complaint.

My experience is that some of the best-shaped and finest hunters in England have gone lame through navic, and many a good judge of shape has purchased a handsome horse, who jumped magnificently when tried, but, when brought home, had unquestionably navic. Here is the great advantage of a warranty, because a horse that is so guaranteed can be promptly returned if he is worthlessly lame from navic, which often does not torment a horse for a few days, during which time he may be sold.

Do not unnerve a horse for navic. It is a needless cruelty, as, if you sever the nerve, the result is that all feeling in the part severed is dead, and the horse may charge a post and rails

with his fore-feet and injure his rider from such an act caused by insensibility to all pain in his feet through having been unnerved.

Occasionally a horse is thought to be suffering from navic when, in reality, he is painfully and very apparently lame from blood corns deeply seated. Now, by carefully paring the hoof and letting out some of the blood—and this had better only be done under the direction of a vet, the operator being a skilled shoeing-smith—then the supposed subject of navic, when shod with leather and comfortable shoes, trots happily henceforth to the pleasure of his owner, who may have got a dead snip or a first-rate bargain if he can so manage to make a handsome horse sound which a few days before was supposed to be chronically and even worthlessly unsound.

Supposing it had been navic. How can a very imperfectly trained amateur vet tell that a screw is suffering from this incurable disease? The sufferer usually points one of his toes in a manner which would excite the suspicion of a practical vet. There is a good deal of heat in the feet, Another sign which is well worth noting is a difference in the shape of the hoofs. Again, if there is no other apparent cause for lameness, and all these symptoms are present when the horse is in his stable, and not trotting sound from being roused out of pain by excitement, then avoid buying that screw, for it is ten to one he is a “wrong 'un” of the deepest dye.

SPLINTS

“ An exostosis from the lower part of the small metacarpal bone, connecting it by bony union with the large metacarpal bone.”

In a case where the splint does not cause lameness, blister ; in advanced cases, fire, blister, and give a run out to grass. It is best and cheapest to consult a vet for splints. A small splint often causes lameness when a larger one does not.

“ Side-bone is a conversion of the lateral cartilages found on the wings of the coffin-bone into bony material by the deposition of lime-salts.”

RING-BONES

This is a term given to an abnormal growth or deposit of bone upon the pasterns or lower bones of the legs. Both these definitions are taken from “ Veterinary Counter-Practice,” as it is the best one which can well be conceived. The treatment of side-bones and ring-bones is either a blister or deep firing.

If the owner is wise he will pay cheerfully for a practical “ vet,” but if in the early stage, and the horse is only apparently strained and knocked up through hard work and concussion, turn the horse out if you can spare him, and you will have most likely prevented a disease which is troublesome and painful to treat in the advanced stage, for firing is a permanent blemish which no novice can overlook.

Curbs are the result of spraining a ligament

through heavy work, and are very easily detected by a bulging out or enlargement immediately beneath the hock joint. The treatment is the same as in ring-bones or side-bones.

When riding three-year-olds, heavy breakers are very apt to cause this disease, which a light-weight would never have given. Horses having crouched hocks not infrequently have them. In fact, many a magnificent jumper has been fired for them, and performs admirably after them. But it is a needless cruelty to give a horse curbs through asking him to carry more weight than nature fitted him to.

CHAPTER XXVI

PRACTICAL SHOEING

WITHOUT a practical reference to shoeing, a book on these lines would indeed be unpardonably incomplete. But the subject is a wide one, and opens up a branch of equine literature that is already fairly well supplied with scientific work.

Under the circumstances my readers must forgive me for touching bluntly and endeavouring to give sufficient hints to those who want some practical knowledge, which, if they wish to add to, let them learn from a first-rate shoeing smith in a shoeing-forge how to make a shoe fairly well and put one on. Certainly learn to take a horse's feet up; without that knowledge your stable education is very hazy, because you would be unable to personally pick out your horse's feet.

Do not allow your horse's frog to be touched, or only very slightly—just to pare off the roughest portion. Be sure that the frog touches the ground. The horn which grows on the outside of the foot ought not to be ragged above the shoeing-nails.

Have your horse's shoes looked to every fortnight in case they want removing, and let the smith shoe each one all round at least every month. Some people may not agree on this point, but in the long run it will prove an

economy, as your horses will work better if always well looked after by a capable smith, than if you go to the opposite extreme and allow unreasonably long hoofs which require an enormous amount of paring, in some cases varying from two inches to as much as six inches, or even more.

The man who owns horses frequently shod—say once every month—will probably be careful to have their feet well washed, will prefer good straw of a night to sawdust or peat-moss, and will always see that his horse's feet are well cared for in every respect. The pick will be used to clean them out, and directly they show any sign of being odoriferous and to develop "thrush," they will be dressed with good thrush-dressing, such as the one I give under that heading, as being one of many useful receipts for common diseases.

The neglectful groom or owner is careless about hoof-dressing and dirt on the outside of his horse's hoofs, and allows dirt to become encrusted in such a manner that it is bound to cause ill-health and to give the painstaking smith unnecessary trouble if he wishes a horse so neglected to trot soundly.

In the daytime, of course, a horse ought not to stand on anything in the shape of bedding, and all droppings should be removed.

Stuffing hoofs with cow-dung is most popular, and there are so many advocates for this method of keeping the feet cool and healthy that I hardly like to suggest that, in my opinion, it is unneces-

sary if the feet are well washed twice a day, and where a good water-hose is handy to play on the legs and feet ; stuffing feet seems wholly unnecessary in cases where the horse is sound. But dry the feet, and if you bandage them do not leave the bandages on for many hours at a time, thereby doing more harm than good. And rub the legs with both your hands when you take the bandages off. Fold them up neatly, ready for future use. All these little acts of kindness help to make you a master of stable work, and an owner who will not allow a groom to harbour any unpleasant smell in your stable.

These methods just laid down help to encourage a good shoeing-smith to take a pride in keeping your horses sound by shoeing horses well that are worthy of being well shod. You may be sure, indeed, that in stables where Condyl's fluid or Jay's disinfectant is never used except when the vet insists on sanitary grounds—he is called in when you have lamed your horse through gross neglect of common-sense and sanitary rules—you may be sure, I repeat, that in ill-kept stables, unsweetened and badly ventilated, the feet are neglected as much as the grooming and the feeding, and the horse goes wrong through all-round mismanagement.

The concave-seated shoe, the hunting shoe, the French shoe, the half-moon shoe, the bar shoe, the pattern, the leather sole are all referred to by "Stonehenge" in an exhaustive chapter. But for ordinary hunting I recommend the ordinary flat shoe.

In cases of forging or clacking, very common in young horses, and largely due to carelessness and often from weakness, a horse ought to be shod with a concave shoe and clips on the side, and shoe short in front, and leave the horn over the shoes in the hind shoes.

Then we have frog-pads to keep the jar off a horse's foot, thus preventing navicular disease.

To insure good shoeing, by all means select a smith or his under-smithy that has a good temper, as instances are not unknown of a hammer coming intentionally into contact with a restless horse's back when the man's patience has been worn out through the horse lashing out or causing unusual trouble during the process of being shod. For this reason, and for many others, it is well worth an owner's while to periodically visit the shoeing forge he patronises, and to personally see that the horses receive fair treatment, and satisfy himself that the smith who works for him is thoroughly master of his trade and is steady.

CHAPTER XXVII

TEETH

A HORSE ought to have forty teeth ; but even people quite used to driving and riding get a little addled over the age of a two, three, four, five, and six-year-old, although they are perfectly aware that after seven a horse becomes aged, and it is a matter of guess work to tell his years to an absolute certainty.

In order to make the study of teeth an easy matter to reckon, I have arranged the following table, as being simpler than a long treatise which might help the exceptional reader, but hinder others from comprehending on account of its long-windedness :—

Milk Teeth up to those of a Yearling.

When a foal is born, the first and second grinders or molar teeth have already broken the gums.

At the end of a week, if not sooner, the first pair of temporary incisors appear.

Within six weeks the next or lateral pair come through.

In sixth to ninth month, the last pair.

Thus we have the above milk teeth, as seen before there are any permanent ones.

Milk Teeth up to those of a Two-year-old.

At two the inner wall of the corner teeth has grown up level with the outer wall.

They look worn and smaller than those of a yearling.

Permanent Teeth.

At three, or a little before the two centre milk teeth fall out and two permanent teeth grow in place of them, or a little before.

At four, the next two milk teeth are replaced by permanent.

At five, or a little before, the last two milk teeth are replaced by permanent, and the horse has a full mouth.

A full mouth at five years of age is thus reached.

At six, or a little before, the inner wall of the corner teeth has grown level with the outer wall.

Seven is an aged horse, and, therefore, as there are no special marks to positively swear to, we must accept the fact if we choose, or reject it if we prefer to do so.

The apparent length of the teeth, and the appearance of them, being those of an old animal, all help to scare a purchaser from buying an old crock for a seven-year-old. Yet it is somewhat strange that actually the teeth in an aged—a very aged—horse wear down. Nevertheless, although this is the case, the appearance is that of being long in the tooth in every sense of that well-known phrase. Receding gums are a sure sign

of old age, and they are always accompanied by deep hollows over the eyes, unless the poor old quad has been unblushingly faked by a professional horse-coper of the first flight in equine villainy.

CHAPTER XXVIII

USEFUL MEDICINES FOR COMMON DISEASES

BRAN MASH

POUR boiling water on half-peck of bran ; stir it well and give it, when sufficiently cool to give, without any likelihood of burning horse's mouth.

Give mash at night, and do not disturb patient any more until morning. Take care to guard against any chills which may be caught in the stable through bad ventilation. Avoid draughts particularly, and use disinfectants to purify the atmosphere, even after all droppings have been removed.

BLISTERING OINTMENT

The prescriptions for the above are numerous, but, whichever is used, care should be taken to mix Hyd. Biniod with lard, vaseline, or some equally soothing ingredient to prevent intense irritation, which otherwise would amount to torturing the patient unnecessarily.

Clip the hair off before rubbing in the blister well.

FOR A SPLINT OR SPAVIN

Hyd. Biniod	. . . . .	̄j
Adipis	. . . . .	̄vij

M. ft. ungt.

HOOF OINTMENT

Barbadoes Tar	}	Equal parts
Burgundy Pitch			
Russian Tallow			

LOTION FOR CRACKED HEELS

Sulphate of Zinc	. . . . .	ʒj
Sugar of Lead	. . . . .	ʒj
Water	. . . . .	A reputed quart bottleful

This is also largely used for sore backs, shoulders, and the like.

PHYSIC MASS

The following formula for a mass which is plastic, ductile, and soluble was published some years ago by Messrs. Elliman & Co., the makers of the well-known Embrocation:—

Pulv. Barbadoes.	. . . . .	10 lbs.
Glycerin	. . . . .	1 lb.
Castor Oil	. . . . .	1 lb.
Powdered Unbleached Ginger	. . . . .	$\frac{1}{2}$ lb.

Dissolve the aloes in the glycerin by means of a water-bath, then add the castor-oil, and, lastly, stir in the ginger, previously sifted through a coarse sieve.

The above receipts have been taken from "Veterinary Counter-Practice," which is, perhaps, the best book written in any language on this subject. It is written expressly for chemists and druggists by qualified and experienced members of the Royal College of Veterinary Surgeons. Published at the offices of *The Chemist and Druggist*, it can be obtained at 42 Cannon Street, as well as in Melbourne and Sydney.

Without any hesitation I consider this book has supplied all necessary information which a reasonable practitioner can require; but for the unqualified reader it has this very natural drawback—it does not diagnose the disease, of course. Its value lies in prescribing for stated diseases. If, therefore, you treat a patient for stoppage instead of for influenza, you may kill that patient unintentionally, but must not blame “Veterinary Counter-Practice” for wrongly diagnosing the case. It is purely a book for professionals, but of equal interest to those amateurs who only use it discreetly.

COUGH BALLS

For Acute Cough

Pulv. Camphoræ	ʒij
Ext. Belladonnæ	ʒij
Pulv. Opii	ʒj
Pulv. Physostigmatis	ʒj
Pulv. Scillæ	ʒss
Pulv. Anisi	ʒij

Excipient q. s. ut ft. bol.

This ball may be given night and morning, and a little lin. saponis prescribed for the throat if a difficulty in swallowing is evinced.

A very good powder for coughs is the following:—

Pulv. Digitalis	ʒss
Pulv. Belladonnæ	ʒj
Potass. Chlor.	ʒj
Potass. Nit.	ʒj
Pulv. Opii	ʒss
Pulv. Glycyrol	ʒiv

M. ft Pulv. Omni nocte c. cibo.

THRUSH-DRESSING

Sodium Chloride	3j
Russian Tallow	3ij
Tar	3vj

M.

Harvey & Co. (Ltd.), Dublin, wholesale agents, Barclay & Sons (Ltd.), Farringdon Street, London, sell a valuable specific for curbs, splints, and spavins.

WOLF TEETH

Horses occasionally suffer from superfluous teeth, which cause them so much pain that it is necessary to have them drawn, or, as is too frequently the case, knocked out by a smith in a too rough and ready manner.

If a horse will not masticate well and eats on one side of his mouth, have his teeth examined, as it is more than likely he suffers from a decayed tooth and will get quite well again if the tooth is extracted.

Unfortunately horse dentists are rarer than is desirable. There are, however, a few who perform operations which are little short of miracles to those who have watched them, without chloroform, pull out teeth when their patient is a confirmed biter and kicker, and has previously savaged grooms—yet has always showed symptoms of kindness towards his hitherto unknown operator, who may have learned secrets of dental extraction from Indian tribes. I allude to a well-known German equine dentist who recently astonished clever trainers with his practical skill.

PURGATIVES

Barbadoes aloes, 4 or 5 drachms, is usually sufficient for an ordinary sized horse ; 6 for a big cart horse.

Linseed oil is also useful instead of a physic ball, say 15 oz.

EPITOME

Do not permit hay to be scattered about and trampled upon ; nor allow corn to be mouthed over and thus become sour.

Feed regularly ; keep bowels open with a weekly bran mash on Saturday night, and occasionally on other nights when the work is fairly light ; next morning give a teacupful of linseed, boiled until it is as fine and free from lumps as fine oatmeal porridge ; mix linseed thus made with crushed oats, bran, and chop ; occasionally give a few carrots.

If a horse is inclined to eat his bedding, use peat-moss instead of straw, or even sawdust ; but if you bed them down in this manner, be careful that the urine does not saturate the peat-moss or sawdust and remain in the stable. It must be taken out and the floor most carefully brushed and disinfected the first thing in the morning, directly your groom arrives, or you stand an excellent chance of setting up an irritation in the hoof which may terminate in thrush, or something more serious and more difficult to cure.

Avoid draughts, yet ventilate with windows high above the horse's head, and harbour abso-

lutely no smells. Have thoroughly warm rugs for winter and light ones for summer, but let rugs be the only warmth imparted to your horse; let him not be warmed by the dropping and stifling stench as occurs in so many ill-managed stables, which are putrid with foul air.

Only feed your stud on the primest old hay and the best old white oats, and, not infrequently at hours which are unknown to your grooms, make an inspection of your stables, and ascertain personally that your horses actually eat the food which you pay for.

CONCLUSION

My task—it has indeed been a long one: years of study, varied with many earnest conversations sometimes with scientific vets, at other times with high-class practical vets, or owners of valuable studs, grooms, and book-makers—these last-named no mean judges of blood-stock either—my task, I repeat, has now drawn to a close with this result, which leaves so much untouched upon since the early authors rocked the equine cradle of literature up to the present time. What a span indeed!

Emperors, poets, statesmen, historians, sportsmen, men of letters, as well as matter-of-fact business men, ALL have swelled a first-rate literature on Horses and Brilliant Horsemen; and yet Huth merely recorded their names and the titles of their works.

Equine literature is a *stupendous* output; in

point of genius it is fit to rank with books and essays on any subject. If these chapters have emphasised this fact sufficiently, and interested my readers, they will have achieved the object of the author.

THE END

Webster Family Division of Veterinary Medicine
Cummings School of Veterinary Medicine at
Tufts University
200 Westboro Road
North Grafton, MA 01536

