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FRONTISPIECE.

THE MOUTHING BIT.

THE BRIDLE BITS.

A TREATISE ON

PRACTICAL HORSEMANSHIP.

BY

COL. J. C. BATTERSBY,

LATE FIRST NEW YORK (LINCOLN) CAVALRY ("THE GALLANT FIRST NEW YORK"),
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PUBLISHERS' PREFACE.

A long and varied experience with horses, in both civil and military capacities in different countries, gives Colonel Battersby the ability to be of essential service both to the horse and to his owner in this volume. The treatise is not on bits alone, but on breaking and training horses for every use to which they are respectively adapted, particularly to their use under the saddle and before the carriage. The important part played by the bit in its various forms in rendering the horse the docile, willing servant he is, in promoting man's profit and pleasure, leads to the adoption of the title of the book. It is at once specific and comprehensive. Tender consideration and respect for the horse is the impression the author makes and inculcates—that by proper mouthing, training, use and treatment he can be made all the more serviceable, and at the same time more agreeable to his rider or driver in the performance of his work.

The position Colonel Battersby had as Assistant Inspector General in Sheridan's Cavalry Corps, and under the gallant Custer and his ever successful commander, is a guarantee that he may be considered authority on what he says regarding cavalry bits and bridles. The characteristics of a large number of the animals used as carriage horses, as depicted by the author, together with his clear explanations as to the style to be sought and the method to secure it, are well worthy the attention of breeders, while no horseman can peruse the volume without profit to himself and essential benefit to the noble animal in whose interest the book is largely written.

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THE BRIDLE BITS.

“Be ye not as the horse and mule, which have no understanding, whose mouth must be held in with bit and bridle.”

INTRODUCTION.

Of all the instruments in general everyday use the most indispensable and the most universally employed in all the great operations of life, for both pleasure and profit in every land, is the bridle bit. Apart from the farm, truck, cart and car-horse bit, it is least understood and most abused in all its secret and various practical applications of any instrument used. If mechanics must serve their time to learn to handle the tools used in their trades, why not the equestrian? Yet there is no implement in such general use of which the dictionaries and encyclopedias are so neglectful, and in some respects silent, as this. While Webster's dictionary explains and illustrates nearly everything from a needle to an anchor, from an elephant to a mouse, and from a condor to a tomtit, it neglects to illustrate a bridle bit, and one cyclopedia gives no explanation of the terms: snaffle bit, bar bit, bridoon bit, Pelham bit, martingale, bearing rein, rein, saddle, bridle, harness, etc., etc., but ignores them altogether.

It is therefore, no wonder that a general ignorance pre-

vails of a theoretical, as well as a practical knowledge of horsemanship, when the instruments employed in the first principles of its arts are repudiated by a pretended repository of general knowledge, and the people thus left to the stable-boy instead of the library for information on the subject. The bit has a wide field in both its general use and its individual operations which, in the saddle horse's mouth, is or should be magical. Every horse we see employed has a bit in his mouth; every race is lost and won with the bit, and under its management millions of dollars a year change hands.

The utmost art of the maker of fancy iron jewelry is centered in the bit and its appendages, of every stylish equipage. The bit plays its part in all the equine feats, interests and operations in every land, whether civilized or barbaric, in both peace and war, and in the truck, cart, car and agricultural interests it plays its most humble yet important part. While in war, a nation might as well lay down its arms as to relinquish the bit.

Aside from the use of bits in the mercantile world, in the quartermaster general's department of the army millions of dollars were spent for bits alone during our late rebellion. There were employed in the cavalry branch of our gallant army 375,000 horses. Every horse had two bits assigned him, and without counting the renewal of the supply after the ordinary losses in war, this number alone will suffice to show the demand there was for a supply for that single arm of the service, in which at the present time there are only 20,000 bits supposed to be in actual daily use.

Outside of this number which is used only with the saddle, the demand for other branches of the service and in civil life, is beyond an exact calculation, but an approximate number and value may be guessed at when we consider that there are thirteen millions and eighty-four thousand (13,084,000) horses and mules in the United

States and Territories ; and, as every animal in use requires a bit, we may allow that 12,000,000 of animals are employed, and that this number of bits is in actual daily use, while the surplus in every stable would cover the whole number of horses in the country, and if the average price be allowed of fifty (50) cents, we have a trade value in bridle bits alone amounting, at a low estimate, to \$6,542,000 against \$994,949,376 worth of horse and mule flesh subservient to the bridle bit, in 1883.

To show how little the saddle and harness were used in New York City some thirty years ago compared with the present time, there were only two harness stores in the city where a first-class outfit for a gentleman's stable establishment could be procured. These were Wood Gibson, corner of Broadway and Fulton street, and Trainer's, corner of Broadway and White street.

The opening of the Central Park gave a stimulus to both riding and driving ; but while the latter has made gigantic strides, the former advanced slowly up to within a year or two. When it will end is uncertain, for in the United States the custom is to run a thing "into the ground," and when it becomes vulgar from common use, it becomes unfashionable and is then dropped altogether. Then great sacrifices are made in the sale of the material.

The only branch of equestrian amusements that we may really expect to see last, is one in which money is to be made. We hope, however, that the fashion for riding will last until stockmen begin to feel a regular demand for saddle horses, and that they will breed up to the style required. At present it is ridiculous to compare the animals, for both saddle and harness, with the advertisements vaunting their "superior qualities" when they are offered for sale. Now, however, that hunting, racing, steeple-chasing and other sports and amateur accomplishments in the saddle have become so general as a means of enjoyment, and a taste for everything equine is

being cultivated and developed in both sexes, it is necessary to study and practice "the art and science" of horsemanship, so long as the mania lasts; otherwise the prospect of broken necks, as the result of unskilled enthusiasts in equestrian performances, are likely to render the amusement and criticism of spectators anything but agreeable to the riders.

There is general ignorance in this country in regard to the respective uses of the great variety of bits, as well as in regard to the proper way of holding and fingering the reins, the delicate use of the bit and the management of the horse. The consequent uncertainty of performance is inevitable with men who bravely try to imitate a kind of horsemanship to which they were not trained in youth, owing of course to a want of place and opportunity and general daily practice in the field.

Heretofore practical horsemanship had been little known in our more Eastern States; having fair roads we preferred the buggy to the saddle, but in consequence of equestrian tastes acquired in the late war by the enormous body of cavalry that the emergency created, amateur riding is now more practiced as an amusement than as a necessity. There is raw material in the young people of both sexes in the Southern States, of which excellent riders are made. A country life and "dirt roads" in the interior require the daily use of the saddle as a means of intercommunication, and this has necessitated horsemanship and given an excellent seat to many whose training and skill have developed with their years.

Forty years ago a clerk in a New York counting-house would have been reprimanded by his employer, and run the risk of dismissal, if he were known to keep a horse. Times, however, have changed and with them many despotic restrictions and fanatical ideas, and now clubs for every game, accomplishment and amusement that tend to develop the muscle and the mind exist and are being

openly organized. "Dandy" Marks was the observed of all observers, when some forty years ago he used to drive down Broadway in his tilbury and bob-tailed tandem. In this enjoyment he had the New York City field to himself with the exception of Doctor Hugh Caldwell, of peninsular war fame, who knew how to sit and drive.

Now that the game of polo calls for the small, active horse, powerful bit, and delicate and skillful handling in sudden stops and short turns, we can fancy the dexterous use that was made of the bit in olden times when hand to hand encounters were common between tilting knights and champions of rival armies, who were jealous of each other's prowess, and whose honor, valor and fame were decided by the address, skill and gallantry of the respective contestants in the fight.

With what ancestral pride can the Lords and Commons of the British Isles, at the present time, point to the rusting armor, the blood-stained spear, the iron gauntlet, the sword and sabre-tache, the spur, battle-axe and breast-plate, the armorial bearings and crests awarded for gallant deeds, the antique saddle, the fancy shabrack, the weather-beaten bandoleer, the costly bridle, and the gorgeous bit that are handed down from warriors of old. Their skillful use decided the transient fates of nations, made kings and emperors, and overthrew and established thrones and dynasties, with their frequent invasions, their terror and their sway; now they rest in the silent and majestic dignity of victorious death, as material evidences of the truth of the history that they made. Apparently conscious of their own renown, they prove to the sceptical mind, whose prejudiced thoughts, mingled with silent admiration and affected scorn to suit the new state of things that, through the events which followed in the wake of bloody onslaughts and exterminating wars, waged by their dexterous and incessant use, the Anglo-Saxon race is free,

and that the titles and escutcheons that they gained for their gallant lords, and which are secured by patents royal to succeeding generations, are no empty heirlooms to be lost in the lapse of time, or battled for again. Their work is done, and they now hang in the dust and cobwebs of ancient halls, and the nooks and corners of castles that they won. These very castles gave shelter to sovereigns and subjects, generals and glittering staffs, nobles in armor, assembled armies, and brilliant gatherings of the beautiful and admiring fair. All this contributed to the pride and power that followed in the train of the war-horse and the bit, and the independence of a great and a mighty empire.

It is therefore to the study and practical knowledge of the special uses of the more modern bits, in these days of more peaceful pursuits in private life, that we invite the attention of the would-be horsemen who have taste and talents for equestrian enjoyments.

We cannot refer to history without being reminded of triumphant entries of vast armies returning from foreign wars to cities and capitals of their respective nations, headed by their leaders, be they sovereign or subject, mounted on chargers of "high and lofty mien," champing on their bits dripping with foam, while the tinselled and dazzling bridles of scarlet and gold shivered in the breeze, to the wonder of the vulgar and the envy of the great.

The bit long since established its virtues, both in peace and war, and it is still called upon in a figurative way to adorn the painter's canvas by throwing the Arab steed into all the graceful attitudes portrayed by art. Here we see pictured in all the shades and brilliant coloring of semi-barbarous tribes, the Arab chief, the Eastern prince, the Cossack of the Don, the nimble Circassian and the Spanish grandee, mounted upon horses to match their respective spheres. The bridles, of various degrees of

costliness, that dangle from their bits are adorned with gold and silver ornaments, costly jewels and delicate workmanship, of which not only the rider but the horse seems proud, and, while wondering at its power and romantic history, we grant the bit the symbolic palm.

Under the restraint of the bit "the horse paweth in the valley and rejoiceth in his strength ; he goeth on to meet the armed men ; he mocketh at fear and is not affrighted, neither turneth he back from the sword ; the quiver rattleth against him, the quivering spear and the shield." Thus anterior to and since the days of Xenophon on the plains of Babylon, vast legions of men from remote ages have been manœuvred and led by generals and monarchs, who held the bit in one hand and the destinies of nations in the other.

Empires and nations rise, decay and fall,

But still the bit survives and rules and conquers all.

Fig. 1.—MOUTHING BIT.

CHAPTER I.

HORSEMANSHIP AND TRAINING.

Before proceeding with our subject it may be well to define the words horseman and rider, so that we can better understand their true definitions. The word horseman, in its original and proper sense, is the term used to denote thorough skill in the knowledge and management of the horse under the saddle, while the word rider is applied to a man on horseback, and whose skill is described by the prefix good or bad. But at the present time in the United States the word "horseman" is applied to a man who can ride a horse fifty or a hundred miles on the stretch, or until he drops dead while the rider survives. To a man who likes, fancies, sells, buys, cleans, drives, trades or spends his time or money with horses, while he may have no disposition or ability to get on a horse's back, this slang word, "horseman," is applied. The terms horseman and rider are equivalent to the words musician and player, for while any number of people can play, but a small percentage of them are musicians. It is unfortunate that the word horseman, like the word city, should take such

a wide and meaningless range. But in using the words farther on, the reader will understand our meaning of both, for with us they are by no means synonymous, any more than speaker and orator are in the oral world.

. HORSEMANSHIP.

Horsemanship is considered by some to be more of an art than a science—that one has nothing to do but to learn the knack of sticking on and then ram a horse at a fence, whether he will or no, and expect a safe leap beyond all peradventure, not considering that the source of the bound is in the horse's brain, which must be prepared before the body. Art is manifested in matter, in operations of the physique, while science appertains to the mind—the invisible. The man at the helm understands the art of steering, while science and the compass tell him where to go. Thus, in horsemanship art and science are combined, and so closely connected in any critical performance that they are inseparable for success. The theory and practice must be united, as well in the horse as in his rider, for in equestrian feats these are the exercise and power of mind over matter, and when theory and practice are united and in proportion, and the material and opportunities good, success follows.

It is a mistake to think that strength and brute force, or hap-hazard practice, will insure success. If, to keep the ship in her regular course and prevent her shipping a sea, a gentle touch of the hand on the wheel will suffice, what an infinitesimal touch on the reins should suffice to guide, with the same hand, so small an animal as a horse. Yet we often see the reins and bit handled with the same amount of strength that would manage the rudder of a seventy-four-gun battle-ship.

By way of distinction we designate the bridle with a single bit and two reins, like the Pelham bridle, a double-reined bridle, for the reason that it has only one bit, one

headstall and two reins, and is therefore double-reined. But the bridle with two bits, two headstalls and two reins, like the bit and bridoon, is a double bridle in three respects. It is customary to call the bit and bridoon a double-reined bridle, but as it has three distinct sets we consider it a double bridle.

In referring to the bits or bridles we will designate each name or number, as may be convenient. These are the great and ordinary bits of the world, and although they are used in different ways, both double and single, and additions are made to render them stronger, more secure or ornamental, to suit the fancy and special cases, they all answer the same purpose, that of controlling the horse according to his peculiar disposition and the service required of him. As a general rule, horses that require bits of extraordinary power or severity are either naturally vicious or headstrong, or were spoiled in breaking, the latter being the most prolific cause.

As we cannot satisfactorily describe a bit without describing its peculiar uses and effects upon the horse, we must allude to training, riding, driving and horsemanship, and the advantages of skill and proficiency in handling the reins, and shall begin with

THE MOUTHING BIT.

This is the first and only bit that should be used with a young horse during his first year's training or breaking into the use of the bit, in any shape for riding or driving, or until he is put to his future employment, be that the saddle or harness. In breaking in a young horse the evil most to be feared is the chafing or cutting of the corners of his mouth by the pressure of a bad bit—bad for the purpose of mouthing. The regular mouthing bit, represented on page 16, is a large-sized, clumsy snaffle, with one joint in the center between the bars. The bars

are an inch thick at the guards and taper slightly to the joint, from which a flat oval plate of steel about an inch and a quarter or so long is suspended by two small rings, and from three holes in the lower edge of the plate three iron tags hang.

The operations of this bit are as follows : The thick bars, at the guards, is where they press the corners of the mouth, and being large they are not so apt to cut and chafe the mouth as small bars are, for by constant chafing and breaking of the skin at the tender and bare part of the mouth it becomes callous, and the horse is apt to ignore the gentle pull of the reins ; and by the driver's getting in the habit of pulling at the bit, he himself becomes a puller by degrees, thinking that that is what his driver wants him to do, for horses are often puzzled to know what we mean, and to know how to use the bit so as to reach their understanding is the result of theory and practice. The tags upon the oval plate hang upon and tickle the horse's tongue, and thus keep him playing with the bit, his mouth in motion and himself on the move. The guards are double and long to prevent the possibility of drawing the bit through the mouth, and thus giving the horse an advantage in a struggle with his trainer.

The rings are large to admit of strong headstall and reins, which are buckled on, and are so adjusted as to be just long enough to reach and fasten on to the surcingle when the horse's head is in its most natural and easy position. The reins should be fastened to the surcingle, so as to pull straight and square for this purpose ; if the reins are not so made, a knot should be tied on the loop of the reins and the loop, being exactly in the centre, fastened to the terret on the pad of the surcingle, so as to keep the horse's head straight to prevent accidents and ensure an evenly made mouth and carriage. A crupper is used to keep the surcingle in its place, and especially so

when the reins are shortened as the mouthing progresses. In the future degrees of mouthing and breaking in, in the progress of which we are to be led or guided in the management of the pupil, when disposition and temper are a study, a well set up horse has his mouth on a level with the line of his back ; but while we cannot change the natural angle of a neck, we can improve it a little as to grace, whatever may be the angle. This is to be attended to in the first lessons in mouthing. There is nothing better calculated to expose the "lunk-head" than the using of all sorts of contrivances to make him hold his head up, and thus try to play carriage-horse with a plow-horse.

FIRST DEGREE.

The colt is now patted, caressed and turned loose into a yard or paddock where he can walk about playing with his bit, and where he feels disposed to make friends with any person he can reach by walking up coaxingly, ex-

Fig. 2.—SECOND LESSON IN TRAINING.

pecting or asking, in horse pantomime, to take the thing off. We can fancy how he feels, and how charitably we should feel towards him while he is studying his A, B, C. In this way he learns to yield to the pressure of the bit, and becomes so sensitive to the least pull of the reins that the motion of his tail will affect the crupper and communicate the touch through the reins to his mouth. We are now making a mouth for a horseman, not for a mere rider who depends on the reins for his seat. Resist-

ance to the pull of the rein is what the mouthing bit and these lessons teach the colt not to try. He is like a man in a straight-jacket—he can do nothing.

All the articles used in the first lesson are the mouthing bit, crupper and surcingle, and should not be changed until the second degree requires something else. To facilitate the making of the mouth and obedience to the touch of the reins on this bit, two hard rope lines, fifteen feet long, with handles made of double plaited rope the thickness of a clothes-line. These should be fastened by spring hooks to the rings of the bit and passed through the terrets on the surcingle, and the trainer, taking the reins in both hands, drive the colt quietly on a beaten track that he knows ; and when used to this, after several lessons, place a number of wagons, carts, buggies, etc.,

Fig. 3.—HANDLING REIN.

about forty feet apart, and drive him through them quietly on a walk, making the figure 8, right and left and back again. As the colt learns these lessons and goes through the wagons, turning of his own accord, place the wagons closer together, thus making the turns shorter. When he knows what you want him to do he will like the exercise, and expect to be petted when his daily business is over and his head rubbed with a wisp.

Handles of reins are about two feet long, and the reins one and a half inch in diameter ; and the lines are one-half inch in diameter. The cavesson and lunge are used in the third and future degrees.

Time, patience, gentleness and regularity with the use of these three instruments and the reins are necessary to break in and make the mouth what it should be, especially for the saddle. Instead of this, most young horses come to our city markets broken in with all kinds of bits ; frequently with small sharp bits, with which colts

are usually ridden by farm boys after the cows—and when put in harness, and are at all fast, are trained on the road to pull the buggy by the bit, for which accomplishment they are recommended as “smart” and “likely critters.” The young horse is thus brought to the sale stable and sold to a new master, when he has to undergo the torture of submitting to strange voices, hands, feed, place, smells, saddle, harness, work and bit. But we have him fresh, perhaps, from the farm yard, and the questions are: What is he fit for? What bit has he been broken with? What bit will he bear and go best with? If he was handled on the farm it is likely he never had a mouthing bit or cavesson on, and that the man who bred or broke him never used or even saw a mouthing bit, cavesson or lunge, or would know what they were for if he did see them.

These are some of the risks we have to run in selecting a young horse for a special use. A young horse is like a girl; he must be tried in harness before we can tell what his future will be. A girl don't remain what she is. If she is good, she gets better after marriage. If she is bad, she gets worse. Bad dispositioned girls seldom reform with experience, and generally get worse and more hateful under oppression or coercion, while many are beyond the reach of kindness. If the colt has been pretty well broken in, in the farmer's way, for general use, the work he is to do, and the bit he is to wear for the future at that work, should be judiciously selected and put on an old and easy-fitting headstall, and if he takes to it and it suits him it should never be changed, nor he from his adopted service. He will not make a saddle-horse to-day and a harness-horse to-morrow. His life is too short to learn any two things perfectly, as the means used to train him for one occupation neutralizes his proficiency in the other. If you select him for a saddle-horse, take care that he is one. The saddle-horse is created, not made.

We may make his mouth and teach him to do many things, so that we can use his natural, mental and physical qualifications in teaching him accomplishments, and to look upon his rider as his friend and companion ; but, while these are natural under proper treatment in this peculiar service, he was a saddle-horse before he was foaled. If not, he never could be made one, although he could be used and tortured as a riding horse ; but he don't " fill the bill."

In dwelling on the term saddle-horse we do so to impress the reader with the idea that he is a peculiar specimen of the species. He is the embodiment of all that is great and grand in the equine nature—in his breeding, shape, figure, symmetry, quality, muscle, bone, durability, mettle, endurance, temper, disposition, instincts, style, action, intellect and pluck, all of which require to be of the first order, for he has many things to learn in the space of some five years, when he must be able to master his profession before he gets too stiff to please, and to take things as they come. Yet, with all the above qualities, he may be unsound and not worth a rap. But if he possess all the qualities we seek, and it is intended we shall require in him, no wonder he is associated with angels and chariots in heaven, as represented in many parts of the Bible, and especially in Revelations. His work is so varied, and at times so complicated, that, failing in respect to one qualification, he would be sure to fail in some performance at, perhaps, a critical moment when life or death, loss or gain, depended on his perfection in one point and performance therewith. When we occasionally see a born saddle-horse, or the material for one, we follow him with a covetous eye, and wonder if he ever went to school and if his owner knows what he has got.

But, apart from a day with the fox or stag hounds, the saddle-horse, for mere pleasure in the less arduous duties

of an ordinary riding-horse, should have all the above qualities, which, although undeveloped, give him the moral and physical aptitude for pleasure and general service under the saddle, as well as the usual desire for the companionship of his rider and ready obedience to his will. The saddle-horse is different from the racer, which is bred, kept and used as a racer alone, the only object in breeding and training him being speed. The latter is earning his living under the pig-skin before the saddle-horse is taken in hand to mouth and train, or is even backed. If forty years ago our fancy time was "2:40," and by mere breeding and training for trotting alone we have come down to $2:8\frac{3}{4}$, what wonderful feats are possible for the saddle-horse which has all the necessary qualities and all required advantages in training for both the trotter and steeple-chaser, if he be properly bitted, mouthed, trained and ridden. For if the sixteenth of a second makes the difference between victory and defeat in trotting, what a difference there must be between the certainty and uncertainty of the performance of a hunter that is properly and one that is improperly handled, when the future of a man's neck depends on that difference! The few accidents that occur in a winter's hunting in the British Isles, with one hundred and twenty-four (124) packs of hounds, bear ample evidence of the perfection of the system adopted in breeding, training, and the principles and skill practiced in riding, which is the greatest and most perfect of all the different kinds of horsemanship throughout the world; for the horse and his rider must be of one mind in taking the chances that, under the most favorable circumstances, attend the strain that is forced upon both in taking a leap that, in cool blood, would seem like madness.

It is an interesting coincidence, that during the last forty years the reduction of trotting time has kept pace

with that of the ships' voyage to and from Europe. The trotting time has been reduced in the ratio of a second to a day, *i.e.*, from 2:40 in 1840 to 2:8 $\frac{3}{4}$ in 1885, while the voyages of forty days in 1840 are reduced to seven in 1886, thus gaining the advantage of thirty-three days, and on the trotting of eight and three-quarter seconds. In this respect the telegraph and the telephone have had a pretty close race, but whether the trotter will ever exist that will reduce the time by two seconds and three-quarters and thus get even with the voyages is a question of great interest to breeders. That it will occur we have no doubt, for there are many geldings of extraordinary capacity that might have worked wonders in the stables had they been kept as sires.

Any person possessing a taste for riding or driving must admire the variety and perfection of the bits manufactured in England, some of which are here represented. The best maker is rewarded by the patronage of the crown, and he becomes "maker to Her Majesty." This is his patent, and he is then patronized by the connoisseurs—the rank, wealth and fashion of the land—and the demand for exportation to the colonies and the United States is enormous. To get the most out of everything with the greatest facility, the very best articles are used. This is so in the choice of saddle and harness bits.

Some parents and teachers are too apt to put inferior instruments or tools into the hands of children, if they put any; and if any person objects, they say, "Oh, it is good enough for a child;" so, on this principle the child is expected to succeed in doing something with a tool that the very best workman or professor could not use successfully. Look at the box of tools that is given to a little boy. There is no steel in any of them, and having no edge they won't cut, and nobody would take the trouble to sharpen them if they had. So the child's efforts to follow the example of some man he saw at work,

fail, and he becomes discouraged after repeated trials. Instead of the best kind of drawing pencil and paper, inferior paper, and perhaps a slide case-pencil is given him to draw with ; and when he tries his best, with his nose on the paper and his tongue out, he fails to represent anything. Then, when he tells his mother that he cannot do it, she says. "Oh, go on ; try again." "But I can't mamma." "Well, then go to bed." This is sense vs. instinct. The time comes in after-life when we look back at the useless things that were put into our hands while children, struggling to learn that which with the very best advantages was a strain upon the child's patience and faculties, and unproductive of any advantage.

This is unfortunately often so with the young horse. Anything in the shape of a bit or bridle is thought good enough for a colt. So intelligent an animal as a horse must, like the child, wonder why he can't do what seems perfectly easy when done by others. The fact is that with an inferior bit, a man fails to convey an idea to the colt. We have a *quasi* equestrian monument in our mind's eye, to be erected to the memory of and out of respect for Mr. Bergh, for his having procured a law to protect horses, and that makes "assault and battery" in the stable a penal offense. But his full measure of charity for the horse will never be exhausted until he regulates by law the width of the horse-stalls, which are now so narrow that a poor, tired horse can't straighten out his legs when he lies down. Mr. Bergh himself knows, perhaps, how he suffers in a night's journey in a train, when he can't straighten out his legs.

There is a very prolific source of abuse in chucking at the horse's mouth with the reins to make him go on or stop. With a severe bit, this is torture; with any bit, it is cruelty and wrong under any circumstances, unless in a necessary case. The horse throws his head up as if to say, "Stop ! I will ! I will !—don't ! don't !" But the

heartless savage chucks the more, to punish the horse for, perhaps, a little impatience under the pressure of late hours and an empty stomach that makes a horse, as well as a man, impatient. We don't believe there is one civil riding master in twenty who instructs his pupils in the nature and uses of the bits he gives them to handle. Are there any? Equestrian pupils are left to find out and learn from others as best they may, as boys in public schools are left to themselves to learn to write without regular daily instruction. It is well they are not allowed to take their copies home. Why?

In parts of the world where it is considered superfluous to devote either time, patience or kindness in breaking

Fig. 4.—WILD.

in young horses, brute force and cruelty are resorted to, and they soon tell on the spirit of the animal, which never recovers from the unnatural treatment and abuse. The Mexican lop-eared ass is an evidence of this, for cruelty is the only word he seems to utter or represent, with a repeated Au-eh? Au. We captured a band of wild horses on the plains of the Pacific slope in the early days ('49) of California, and while handling a young, spirited animal, with appropriate consideration for his surprise at being a captive, a Chilian, who was looking on, said, on seeing our treatment of the colt: "That is not the way we break in horses in Chili." As we were curious to know the course pursued there, we handed him over the colt to break in according to his Chilian method. He tied the colt's head, with a lasso, to a tree in his front,

and tied one hind leg by the foot to a tree in his rear, giving the colt about six feet play of both ropes. He now took off his jacket (red leather of native tan and grease), and taking it by the collar, beat the horse in the head, right and left, until he (the Chilian) was as tired of the performance as we were at seeing the brutal Chilian plan. We stood amazed at the process, and although our blood boiled with indignation, we resisted the temptation to interfere, for it is by doing wrong that we learn to do right, and as this was an experience new to us we were willing to sacrifice a wild horse to learn from it. The

Fig. 5.—TAMING.

result of this beating was, as both the Chilian and we expected, perfectly successful. The colt was tame beyond conception from the time he was taken from the trees, and gave no further trouble in handling ; but his spirit in that short time was broken, as the horse life was taken out of him forever, and so perfectly subdued was he that he walked listlessly about with his head and ears down, heedless of what went on around him.

This, of course, was abuse in the extreme, but it serves to show that milder acts of cruelty and rough treatment have proportionate effects, and that a timid young horse, while bridled up in a new position, with his mouth full of loose iron annoying him, should be kept out of the

hands of a man who loses temper and patience at his awkwardness and unintentional disobedience or mistakes. Besides, some men with the best intentions have peculiar ideas of what is right; and as there are men born for every business in life, those who have dealings with the minds and dispositions of animals should be selected according to principle, and thus the right man put in the right place. Yet in the family circle, as well as in the stable, there are men with furious tempers who are candidates for love, domestic happiness and willing obedience of all around them. How common it is for an inconsiderate, nervous "crank" to take a young, inexperienced and timid girl at her parents' hands to wife, and

Fig. 6.—TAMED.

expect her to fall into all his ways and pleasures, and please him in all his whims and fancies. And when she fails in trifling points, she has to submit to his irritable disposition and sallies of temper, and thus, before she has had time to know his nature and ways, his likes and dislikes, and to learn to comply with a heart-felt desire to please, her spirit becomes broken. The strain is put on too soon, and many a good girl gets spoiled by such men, who think the whole art and science of pleasing must be embodied in their wives' dispositions, and none in their own. The anger, selfishness and unkind treatment of such men are out of proportion to the supposed neglect or offence. It is unfortunately sometimes so on both sides, "when Greek meets Greek."

But, fortunately for our equine companion, we find this

less common in the stable than in the social circle, where the girl or the boy at a certain age has some means of defence from undue parental coercion and restraint, but wherever they go they are apt to carry in their expression that peculiar and unmistakable hang-dog lip and cheek as evidence of sulk and dissatisfaction incident to cuffing and scolding, forced obedience, and consequently unhappy homes, like the Mexican ass. Forcing compliance in either man or beast, is done under protest of the forced, at every step, rather than through a spirit of cheerful compliance, fostered by that kind and gentle treatment to which the domestic animal will always yield. The child that is scolded, the dog that is whipped and kicked, the woman who has an irritable, nervous crank to please, and the horse that is chucked, are alike ruined in such moulding of their tempers and dispositions. Persons thus persecuted have two faces—one for the house and the other for the street. The house face prevails, because it is most used.

THE SADDLE-HORSE:

If the reader has a fancy for the saddle, we would like to have him understand that the saddle-horse's mouth is, or should be, very sensitive to the guiding touch of the reins, while it should resist the straight pull in being lifted at the leap. This strain should come on the bit from both reins equally, to insure which the reins must be held in only one hand, and that the left, assisted, if required, by the right or whip hand. The best bit for this purpose is the plain snaffle. Being simple in its operation, it is less apt to confuse a horse than any other bit used in riding. If held by expert hands, it is not so apt as others to give uncertain signals and cause the horse to make mistakes at critical moments, when it is out of his or his rider's power to rectify them. The voice of the rider and not the bit should have a general

controlling influence, as much so in proportion as the balance seat should support the rider in the saddle instead of the reins, and it is in this that the horseman has the advantage.

STEPS AND MOTIONS.

Every horse has a peculiar step and motion, either easy or rough. Under the saddle they are felt more than in any other service. As the horse is built so are his steps

Fig. 7.—SNAFFLE BIT.

and motions, and like those of men, they cannot be materially changed, for the peculiar shape and construction of the frame naturally creates them; while the riding and the bit used may tend to make them better or worse in the horse. The fox-trot is the gait of a spoiled horse. This gait is created by bad riding, or by using the bit and bridoon at the same time. With this gait it is “heads or tails” which gets tired first—the horse or the rider.

The flat-footed man, instead of walking from his toe, walks from the inner side of his foot; his step is short, and having no hollow in his foot, he cannot bend it and he consequently picks up his foot before his step is quite finished. Horses, in the same way, from either some malformation or the use of the wrong bit, badly chosen and worse held, have very objectionable gaits and mo-

tions. We have heard pupils of both sexes profess a dislike to riding, for the probable reason that they were put on such horses to take their first lessons and became disgusted. A dog-cart that goes hop-pid-de-bob would be a bad vehicle to recommend to a novice, if we wanted his opinion of the pleasure of driving.

A well-proportioned horse has no naturally contracted motions, and the facility with which he can do everything encourages him in all his performances. He is always at his rider's service with a cheerful air. He should be ridden with a snaffle; or, if he has on a bit-and-bridoon, ride him in ordinary on the bridoon. He wants to be free, and the curb is out of place with him except on special occasions, when it serves the double purpose of either showing off or gathering him up for a canter.

HESITATING STEPS.

The difference between the step of a horse going from his stable and that on his returning to it, is very great. The former is hesitating and disagreeable under the saddle, while the latter is most desirable and pleasant to the rider; yet both the rider and driver feel the reluctance with which he steps out in the former, while in the latter he is like another horse—free and easy. A knowing owner will, for this reason, let his horse be tried by the purchaser on his return to his stable, if he be one of the hesitating kind.

NATURE, ART AND SCIENCE.

Nature and her daughter, Art, must unite in the physical and mental training of the saddle-horse. When ready, Art calls in her sister, Science, to her aid to enable her to perform great or critical feats by combining the efforts of the three, and uniting, with the indispensable power of science, the ideas of two heads on one thing.

Then the sleight-of-hand in the use of the bit and the imperceptible motions of the rider's body and limbs, and sound of his voice, are the qualities necessary to equestrian success. A saddle-horse is like a piano—to get what you want out of him, you must use your legs and arms, feet and hands, eyes and ears, mind and heart, voice and vigor, body and soul. This is the result of time, patience and careful study and practice for years.

DIFFERENCE IN HORSES' IDEAS.

The difference between horses' ideas is so great that, while one is impatient to go on, another is watching for excuses to stop, or he hesitates in his step till a hint from the knees or touch of the spurs gives him to understand what you want him to do. Hold the bridoon, slack the curb-rein, give him the spurs and let him off—in a walk. Well patronized country taverns are famous places for buggy-horses to find excuses to practice their propensity to stop and turn in. The advantage of this is, that a man always knows where to find his runaway horse. These are good horses for drinking drivers; they take them straight home. Indecision or uncertainty in the rider's mind or action is so instantaneously communicated to the saddle-horse, that we would urge more careful schooling of pupils by competent instructors, and this cannot begin too early in life or in the course of instruction.

INSTRUCTORS' ERRORS IN PRINCIPLE.

With young horses some trainers, and indeed military instructors and writers, advocate a system that creates and nurtures doubts and uncertainties in the mind of the horse, at a critical moment of action—a most fruitful source of accidents to both horse and rider in the hunting field. Their plan is to ride the colt up towards the fence and then turn off from it. This is to be re-

peated with the idea of making the colt familiar with the habit of approaching a fence quietly. The effect of this is, that the colt is systematically trained never to be certain of what he is to do, and as great exertions of the mind and muscle are necessary to take the leap, the colt should unmistakably understand, long before he nears it, that his rider intends taking it at any risk, so that he may prepare in time with both will and muscle-power to gather himself for the bound.

A man is not physically stronger one moment than he is the next, but his will power is greater, which gives force power to his muscles in action; and to have a horse's mind and spirit prepared for action, is as necessary as to have the body ready and in condition and trim for general use and special performances. We know that this is so with ourselves, and horses are flesh and blood, body and mind, as we are, and with the advantage of peculiar instincts, require the same preparation for great physical feats; yet how many race-horses fail by a length that could be made up but for their being the victims of customs and fashions which it is not our design to explain in this volume. Those men who have means to indulge in fashions and fancy, are like the cockney who went on a visit among country cousins that did all sorts of extraordinary things, which the "green-horn" also did, because everybody did them; and when he hesitated he was urged on by being told that gambling was the custom in the country, and that "everybody did it." So when he lost all his money and returned to the city, he was laughed at by his friends, whom he told that he couldn't help it, because everybody did it. If the gentlemen who spend so much time and means on the turf, understood a little more of horse nature and nature's laws, their "seconds" in the races could be made "firsts" with very little trouble and much less expense.

CHAPTER II.

ENGLISH VS. IRISH RIDING.

At one time, and it may be so still, the English rode with a slack, while the Irish rode with a tight rein. The former generally used the Pelham bit, while the latter almost invariably used the snaffle. If these men changed horses as they stood, bridles and all, they would run the risk of breaking their respective necks, for although each horse wore his own bit, the manner of holding the rein

being new to each, the results, as we see in hunting plates, might vary—the horse in or on one side of the fence and the rider on the other. Our invariable rule is, never to face our horse, young or old, to a fence of any kind that we know he is able to take, without making him go over or through it at the risk of his neck or our own. Any other course is fraught with danger on very trifling occasions. Our rule is the best to make a safe and fearless hunter and steeple-chaser.

CONDITION OF THE RIDER.

There is no time when the man and horse are safer than when the rider has had his dram—just one “horn” to give force to his intentions. The old hunter knows it, from the dash and wild recklessness of his rider’s manner

and the unmistakable exercise of his hand and knees. Unless it is a steamboat, a barn or a locomotive, he knows he has got to take it flying; and if we can judge from experience, equestrian feats can be performed under such influence with greater safety than by sober carefulness, for confidence is imparted to the horse. He knows from experience that there is no back out possible, and that he can't do his work by halves, neck or nothing being the rule on *that* day. A few inevitable mistakes and falls over, in the early training, make a horse careful in after years, and ensure a clean bound if well ridden, to avoid a repetition of some unfortunate experience on a similar occasion. It is better to make a bad leap than to spoil the horse by going back to make another charge at it. If he refuses, which is justifiable on some accounts, it may be from some misconception on his part of his rider's intentions—from the slack of the reins or relaxation of the knees—that the rider changed his mind, or he may have found that his stride in approaching the fence at a canter would take him either too far from or too near the fence, and consequently refused, fearing a certain fall on or fall over. But this is the rider's lookout, as he should be master of the situation. His rider, however, if a horseman, knows the cause, and taking him to it again, squarely, goes over it flying. In such possible complications in the heat and excitement of the moment, when the hounds are in full cry, the snaffle, or the Pelham, used on the snaffle, are the only riding bits proper to use on those occasions.

HORSE-LEAP CHURCH.

In County West Meath, Ireland, there is a church near Kilbeggan called "Horse-leap Church." It takes its name from a great leap that was made by a horse while out hunting with the hounds, over a *baurene* (narrow road) on either side of which there is a stone wall. The

baurene is wide enough for a cart to pass over. The horse took both walls and road in one leap, thus clearing all from field to field. Although we have seen the leap, we are not prepared to give heights and distances; but two walls and a road will give an idea of the nature of

Fig. 9.—HORSE-LEAP CHURCH.

the feat. For practical purposes the walls would be at least three feet high and the road twelve feet wide.

In ordinary stone-wall jumping the horse should break off the same distance from the base that the wall is high to insure a safe and flying leap; but in such a leap as that referred to he should break off at least five feet from the base of the wall to describe a segment of a circle sufficiently high to take him over the second wall. On

Fig. 10.—JUMPING THE BAURENE.

approaching high walls and other big fences the trained hunter is given to understand that a leap is before him and that he is to take it. The rider in the above case rode for both walls and the horse knew it. This was no

chance leap; both intended it, else it could not have been done. The safest riding is in taking the country as it comes, "unsight, unseen"—"neck or nothing." By this, the horse is inspired with confidence; knowing that he must take what comes, he takes equal chances with a bold and fearless horseman, who must be an expert rider to ensure success—for there are some leaps, such as a foss wall, that a mistake would render deadly to either man or horse—but luck, on which many depend, is sometimes friendly to the uninitiated. However, riding up to a wall to see if there is a ditch, pile of stones, cow, flock of sheep, or a pile of fence rails on the other side, would spoil the best hunter in the world.

TOPPING THE WALL.

What is termed "topping a wall" is by the horse striking the wall with his hind feet to send him with renewed effort or spring beyond some object on the other side that

Fig. 11.—TOPPING THE WALL.

he did not see till half over, and to do which he had not used power enough in his spring when he rose. This is considered very superior training. It is the work of the snaffle bit, and could not be done with any other bit with any degree of certainty. The very pretty performances of horses in a circus are done under the influence of constant training where the feats are to take place. The same man has the horse alone, and being perfectly docile and tractable, in cool blood and under strict obedience, and when there is no danger or excitement, the object

of the training is reduced to a certainty. If we contrast this state of things with the condition of a horse tearing across a rough country for miles—meeting fences and rivers he never saw before, one field plowed and all mud, the other all stones and the fence between—a double ditch or deer-park wall—the horse winded by the heavy canter in the mud and a fence to leave behind him or flounder at its base, he will perceive that it is nice training to unite two minds and two bodies at the same moment to accomplish these deeds that nature has left to the horse alone to perform. No other animal can do it and carry one-seventh of his own weight.

In training horses for the saddle for hunting and steeple chasing purposes, it is necessary to do so in the region where they are to spend their future career, so that they shall be familiar with the peculiarities of the

Fig. 12.—THE POUND WALL.

fences and the nature of the country, thus insuring their own and their rider's necks. Owing to the nature of the country the Galway horse is a famous wall jumper. The favorite place for the sale of these hunters is at the fair of Ballinasloe. There is, next to the fair green, a cattle pound, the paved yard of which is lower by some eighteen inches than the ground outside. If a man wants to sell his hunter, he is asked if he can jump the pound wall. If he can, he will be able to sell his horse, all other points being satisfactory. If he jumps in, it is understood that the jumping out is the necessary test to insure the sale. Hundreds gather around to see the performance. Four feet in, five feet six inches out, sells the horse. The jump

is off a cobblestone yard. If the horse fails and his rider is obliged to come out by the gate, he pays the keeper regular poundage, and gets laughed at for his failure, besides losing the sale. Some sales are made conditionally—so much if he jumps in, and so much if he fails to jump out.

The recent performances of the horses Leo and Lord-of-the-Isles at the horse shows in Madison Square Garden, New York, established the fact of the great mental and physical powers and capacity of the horse in everything to which he is properly bred and trained. We have heard of and seen horses take wonderful leaps over rivers, drains, double ditches, and deer-park walls of lime and stone, coped on top and some having broken glass bottles sunk in the mortar while wet, all varying in width and height from twenty to thirty feet, and from five to eight feet; but these feats were done in open daylight in the field, and under the influence of the greatest excitement, when both horse and rider were tearing away in competition with others in mad pursuit of some fair opportunity to accomplish a deed that would henceforth mark a period in the extraordinary feats of both horse and horsemanship. But to keep a horse like Lord-of-the-Isles tied up for days in a four-foot stall, with but little exercise and that under cover, and then to bring him out at night, mount and ride him by the glare of electric lights at a six-foot-six-inch bar fence and clear it—he weighing 1,100 pounds and his rider 145 pounds—is a performance that the equine world may well wonder at, and Mr. Primrose, his owner, be proud of. The horse was ridden with a heavy snaffle bit, and, besides the weight of the rider, he carried that of the saddle, thus making about 160 pounds, not including the shoes—say in all 1,260 pounds. The gallant Leo performed the same feat, in the same place and at the same hour, the year before.

THE USE OF THE EARS.

If a pair of horses, fresh from the straw yard, be hitched to a street car and driven three or four miles, stopping and starting on the way in obedience to the reins when the bell rings, before they enter the stables again they will have learned to stop and start of their own accord to the bell signal as well as if they were at the work for years. The voice can be made equally effective in many respects as the bit, and thus save the horse many of its unnecessary tortures and annoyances, especially so with the saddle-horse, whose actions are so varied and often sudden as to require the use of the reins, if not the voice, at every caprice of the rider ; but the horseman has this secret at his command, and it tells in his performances.

If we would study the nature and anatomy of the horse and see how well he is provided with every necessary faculty and means to use in our varied service, we could make our associations with him more agreeable to both. His ears are so peculiarly shaped and set on that he can throw them forward at will to hear in front, and backward to hear in the rear. In these motions the ear takes a peculiar turn, so that the inside or hollow of it is turned towards the sound. One ear can be thrown back to hear in the rear, while the other ear is thrown forward as he sees and hears in front. This peculiarity in the actions of the ears was not created without a purpose, and trained horsemen and experienced drivers dispense with a great deal of the bit government by taking advantage of the ready use of this organ, to which the horse is ever alive, so that the ease and grace of the thorough horseman is concealed in the apparent mystery in his skillful management under all circumstances.

If a bird's feathers are wet it cannot easily fly ; for the same reason, if the horse's ear be wet he cannot

hear so well, so he throws it back to keep the rain from getting into it. The normal position of the horse's ear when he is inactive is thrown backwards, but when he is at work it varies with circumstances. When active, or expecting orders, it is vertical; when he is cross it is also thrown back, and when listening, or looking to the front, it is thrown forward. (See fig. 13, cuts 1, 2, 3, 4.) When the saddle-horse is in action he listens attentively to the

Fig. 13.— POSITIONS OF EARS.

least sound of his rider's voice, which he expects to hear, and therefore by giving him the habit of listening to and obeying the voice, the use of the bit is reduced to a minimum.

USING THE HORSE AS A WATCH.

The horse in his natural state, when roaming in wild bands over vast plains and through the foot hills of great mountain ranges, makes a different use of his ears to what he does when domesticated—confined and worked—where all his wild feelings and natural propensities are reduced to the requirements of an artificial and humdrum life, to keep pace with the tame surroundings of a stable yard, and the unnatural confinement in even the most gorgeous stable and stall, loose box or sheltered paddock. To him the very best and unlimited domestic home is a prison compared with the smallest privileges he enjoys in his native sphere. A wild band of these untutored lords of the plain roamed in defiance of capture during many years on the vast plains in the region of country bordering on the Yuba and Feather Rivers in one direction, and the foot hills skirting the coast range

of the Sierra Nevada, in California, in the other. The leader of the band was a jet-black horse, tall and graceful, with a coat that shone in the sun like a silk hat. His formation was of the Flying Childers mould and his style equally suggestive of what he would do under the saddle. The band was familiar with every path, gulch and Indian trail in all that region, which was traversed by horsemen and pack trains passing to and from the mountains, and, although strangers to the *quasi*-civilization that followed the discovery of gold, they soon fell in with the new state of things and took advantage of unwary travelers who used no precautions to picket their animals and set a watch.

The habit of these horses was to stealthily approach an emigrant camp where saddle and pack animals were turned out loose to graze for the night, and getting mixed up with the wild band, each horse selecting his favorite for the night's play would, at the sight of a man on horseback, at the dawn of the early morning, swinging a lasso, stampede and take with them, in their wild flight for the far-away, all the fast horses and mules that fancied the change from slavery to freedom, and thus became willing converts to freedom's cause. These horses had been so long frequenters of those parts and so frequently chased, that they became so watchful and wary that a man on horseback swinging a lasso was a terror to them, and they consequently became trained to sudden flight and great speed. There was evidently a strain of fine blood in them that came from a superior black sire with white hind feet (an evidence of blood, especially in the chestnut horse), that it was said broke away from a train at the time of the emigration to Oregon, anterior to the discovery of gold in California.

Captain Binnix, of Feather River Road ranch, lost by the wild horses a fine Kentucky mule, worth \$300, and vowed vengeance on the band, offering half the value

of his mule to any man who would recapture her. As there was pleasure and probable profit in the enterprise, we arranged with the captain to ride off next day in search of the band to see what could be done. The history of the horses and the numerous attempts made by different companies to capture them was related by Binnix as we rode over the plains, where a large herd of antelope seemed surprised at our intrusion.

Towards evening we came in sight of the horses, which were some four miles off and moving on a path at right angles with our course. We both dismounted, and with our horses and a Newfoundland dog took a direction several points to their front, so as to meet them rather than follow in their track, for the wind at the time would be favorable to our detection. Making no usual show of a desire to chase them we got within a mile of their course, when we left our horses in charge of the dog and approached within 500 yards of them, alone. All at once the band faced to the front, and turning short around dashed off, enveloped in clouds of dust. On returning to Binnix, the first thing he said was, "Well, what do you think of it?" We mounted and as we rode towards home we came to a wet, gravelly place where the water from a gorge in the foot hills ran down into the plain and meeting a concealed bar of brick clay rose to the surface, passed over the bar, sank, and was seen no more. The Honcut creek meanders through this part of the plains and discharges into the Feather River near the Buttes; but although there was not water enough at the bar to afford a satisfactory drink, all the animals of the plain called there and pawed holes in the wet gravel and passed on down to the Honcut to quench their thirst. We dug a hole in the gravel and when it was full watered our horses. We said to Binnix: "If you will come here this day two weeks we will give you your mule." He smiled, but agreed to come. He went home and we to Marysville.

In contemplating the capture of the band there were two courses to pursue. One was strategy in utilizing the horse's nature to our purpose, and the other dexterity with the lasso. We chose the former, for the latter—besides being tedious in capturing at best only one at a time—had been tried over and over again, and always proved a failure, for the reason that the pursuing horse carried ballast while the wild horse went “light mounted,” and thus their pursuer was always distanced. Taking these circumstances into consideration, we resolved to resort to strategy, and named that day two weeks for the accomplishment of the enterprise. The following Tuesday, arriving on the ground with all materials necessary, we set to work in hard earnest with crowbars, sledges, axes and coils of rope. Our only companions consisted of a friend of the genus homo, a well-trained lassoing horse and a Newfoundland dog, than which none more faithful could be found. We had not seen the band again till the day named for the capture, but we knew the direction in which it was every night. Night was the time to keep informed of its location and movements. The hearing of the horse, no matter where he may be, is very acute, especially so when isolated from civilization and thrown more upon his own resources to watch and listen for himself. Guided by this rule we combined our reason with the horse's instincts, and picketing him some fifty yards off from our bivouac under a bush, where no sound confused his hearing and by the light of the moon we could watch his motions, the work of the capture commenced.

We sunk live oak posts eight feet apart in a circle enclosing a quarter of an acre of ground, and tied them firmly together with four tiers of rope, making each rope fast around each post, so that they should not give way all round in case of a break at one point in receiving the charge of the horses when they found themselves shut

in. The gate had a trap latch and to it was fastened a trap cord one hundred yards long and reaching to the bivouac, and being sunk in the ground could not be discovered, but could be drawn by the dog.

All the Saturday night and early morning before the day named for the capture, our watch horse gave the usual and unmistakable signs of the proximity of the wild horses. These signs are peculiar to the tame horse when picketed out in a strange place. He listens, looks and watches in the direction of the existence or approach of other horses. On such occasions he is a better watch than the dog; for, while the dog is a sure and better watch and guard to give notice of local intrusion or danger, the horse hears sounds and sees objects miles away. "He smelleth the battle afar off."

He listens, looks in the direction of the sounds, and while he cannot smell or see, owing to contrary winds and distances, he can hear and feel the tread of horses in the ground beneath his feet. His ears point in the direction of the sounds, and on the approach of wild horses he becomes unusually restive and demonstrative, walking and turning round the more as the band approaches. By these and other unmistakable signs we knew that the band was not many miles away, and that the time had come to use such means as were necessary to draw the horses towards the place designed and prepared for their capture. Our assistant in the enterprise was rather sceptical respecting the success of our two weeks' hard work and pains, and we were repeatedly reminded that "Binnix will be here on Sunday for his mule."

It is well known to frontiersmen that wolves can be attracted by putting asafœtida in a rag and tying it to the bit of the bridle so that the heat and saliva from the horse's mouth will keep it moist and thus cause it to emit an odor that attracts wolves from a great distance. There is another odor equally effective with horses.

Being out of rations we sent our doubting Thomas on horseback at daylight on Sunday morning up the mountains for a supply, and on his return at four o'clock P. M., he found us lying on the grass, Binnix by our side, and the entire band of wild horses lassoed and haltered inside of the corral, each horse tied to a post, while we had the famous mule tied by herself to a stake some twenty yards from the corral by way of a triumph and a satisfaction in the face of all we had heard of the history of the band and the ultimate failure of our enterprise.

There was an understanding among the people in the country that half the value of the mules and tame horses captured by the band would be paid to any person who would deliver them up to their owners. With one exception this pledge was cheerfully respected, and we sold the wild horses at prices ranging from twenty to two hundred dollars. And we need not say that the gallant black became our favorite saddle-horse.

HABITS.

Habits, good or bad, are very readily acquired by horses. A few repetitions of the same thing will teach them to do anything in their way of their own accord. In this respect they are like ourselves.

“How use doth breed a habit in a man.”

If this were more general, the life of the horse would be stripped of half the terrors that are occasioned by the unnecessary use of the bit in unskillful hands.

In England, a team of draft-horses, six or eight all in a string, in both wagon and plow, are driven without reins, as oxen are with us, and it would be a reflection upon the instincts, tractability and intelligence of the saddle-horse if he were suspected of being less susceptible of obedience to the voice in his capacity than the more sluggish tenants of the back stables are in theirs.

INTELLIGENCE OF THE MULE.

When the mule in the ash-cart hears the empty barrel put on the sidewalk, he moves on of his own accord to the next barrel, and stops again of himself where he knows he is to stop ; and although anybody may see that his father was a jackass, unusual stupidity cannot be attributed to him on that account, for albeit slow and apparently stupid, if taken in hand when young he can be trained with greater facility than he gets credit for. It is the change of masters that spoils those animals that don't seem to know the difference between one owner and another ; but they do, and we should blend our senses with their instincts. "The ox knoweth his owner and the ass his master's crib." We should, therefore, take advantage of the natural faculties of those animals that serve us under physical restraint, and thus dispense with half the severity of the instruments we use to guide and govern them.

The ox and the dog are made perfectly subordinate to our will by voice alone. Recent exhibitions of trained horses prove that the horse is capable of moral influence, and that his understanding and tractability are of a superior order.

"Reasoning at every step he treads,
Man yet mistakes his way,
While meaner beasts, whom instinct leads,
Are rarely known to stray."

The cat, the most intractable and disobedient of our domestic animals, can be trained so perfectly that it will fetch and carry as well as a dog will, and can be taken from its home and made to perform before strangers in a strange house. This training of a cat is very unusual, but with judgment, skill and early training our experience has proved it can be done. Is it any wonder, therefore, that we plead for the horse, and suggest a more

general use of his ears in order to relieve his mouth from the unnecessary severity of the bit? Bad mouthing from the start has been the cause of the great variety of severe bits, some of which are represented among the illustrations, and are curiosities more for their unnecessary use and senseless variety than for the peculiarity of their complications.

We cannot conceal our surprise at the facility with which some men can make up their minds to part with horses already trained to their hands and voices, and buy strange ones that it may take years to train and know and be known as well. The hunter that is trained to his rider's hand, voice and ways, is valuable only to him in these particulars; to a strange rider he is dangerous until both understand each other. We see teams of coach horses purchased in the spring and sold in the fall, to be replaced by other stock the following year. The pleasure in driving, like that of riding, is in knowing one's horses—knowing what they can and will do under all circumstances. But if the pleasure of “coaching” consists in driving one coach after another in a procession at a gait regulated by law, if it was not for the name of the thing a man might as well drive a postillion for all the art there is displayed or necessary in driving in procession. Yet when anything is made fashionable by custom, the slave follows. But when the neck is in danger, and the man and his horse must be of one mind for either success or pleasure, we would recommend the retention of the trained horse that suits the rider, who in turn must suit the horse.

SIGNS OF GOOD AND BAD HORSES FOR THE SADDLE.

If we see a number of horses being led along a road, one horse hangs back and allows himself to be dragged along by the halter, while another trots up freely, ahead

of the horse his leader rides. The difference in the two dispositions, so opposite in their nature, is by no means an indication of their respective abilities ; for some of

Fig. 14.—LEADING THE RIDING HORSE.

our fastest horses are naturally lazy and don't lead or go freely, requiring the whip or spur to keep them up to their work, while the free and high mettled are nowhere in the race ; yet we prefer the latter for pleasure and the former for profit. The horse that leads well, and runs

Fig. 15.—LEADING THE SADDLE HORSE.

well up to the bit, has the first element of a good and pleasant saddle-horse, and is a good subject for the snaffle bit (fig. 7), which the beginner should learn to handle well before he uses the

PELHAM BIT.

The Pelham riding bit has a joint between the bars, like the snaffle, and is used with double reins. The joint, however, is more of a hinge than a loop joint, like that

on the snaffle. One rein that is always in hand works the snaffle and the martingale, while the other rein, which is narrow, works the curb bit and curb when necessary. With the young racer the curb rein must be fingered very tenderly, and be taken up to gather the horse's head or check him in his speed should he try to bolt, run away or exceed his time. If this bit has been well tested, and suits the horse, it is a nice one for a woman to use if she knows her horse.

The Pelham is a favorite with jockies and is essentially a racing bit, for the above reasons; besides, its being single, there is less annoying iron in the horse's mouth

Fig. 16.—PELHAM BIT.

to irritate him, or interfere with his wind on the home-stretch, than with the bit-and-bridoon. To the unnecessary or bad handling of the curb rein may be attributed many defeats on the turf. The young horse, in particular, is annoyed and fretted by its injudicious use by novices in the art of riding races or handling young, fretful horses. The unsteadiness of the horse, and consequently numerous false starts on race courses, may often be attributed to the use of both bits at the same time—the unmistakable evidence of bad horsemanship. Owners of race horses should see to this.

The Pelham bit enables a jockey to slow his horse up, so as not to beat his competitor more than necessary, or to right him should he bolt. Young, high-strung horses, two or three years old, have not had time and experience for sufficient mouthing and training to be steady enough to take the curb, spurs, whip and a strange rider, all at once, to insure a fair and certain start on a course where all is excitement around them. When the horse becomes restive at the starting post, it may be discovered that the curb or both reins are being used at the same time, and the horse, fretted and annoyed beyond endurance, is timid and afraid to start and run against the curb, the moral effect of which he has not had time to learn, while the physical effect of it maddens him. If we add to this the use of the whip and spurs at the start, while he is being held back, it will not be surprising if, when he does start, he should bolt before he reaches the quarter pole and run wild to his death against a fence.

There is no knowing what a colt or any horse may do with a strange rider, with a strange smell he may detest, strange voice he don't know or understand, strange knees, strange hand and a strange motion on his back, and perhaps a strange bit in his mouth. Indeed, we are disposed to offer any excuse for his actions, misbehavior or defeat, for his cool intelligence is confused and the "vim" and pluck that would serve him on the home-stretch are taken out of him before he starts. If a man from anger and excitement weakens and gets out of breath while sitting in his chair, how much is it possible that the fretting and annoyances attending several false starts may affect a young horse when he is getting winded on the home-stretch—a time when an extra respiration that he had wasted in anger and excitement, and one second he had lost before he started, would take him ten inches beyond the head and girth, a victor at the winning post?

A boy but a few years older than the horse he rides has

many things to learn besides sitting in the saddle. Instructions in and study of the nature and various powers of the Pelham bit and its effects on the different tempers and dispositions of horses should be incumbent on the professional jockey, on whose skill the reputations of horses, their victories and large amounts are staked. The Pelham, therefore, has all the advantages and disadvantages for victory or defeat. It is a compromise between the snaffle and the bit-and-bridoon, the subject of our next chapter.

CHAPTER III.

THE BIT-AND-BRIDOON FOR SADDLE HORSES.

We have no apology to offer for the man who prefers the old fashioned bit-and-bridoon or double bridle—he needs none. For ordinary use in the park or on the road

Fig. 17.—BIT-AND-BRIDOON.

it is the embodiment of perfection ; and although a substitute may be used to cater to the mania for new and changing fashions, it never can, by any device or alteration, be improved upon or surpassed. It seems to us that in putting it on a young horse for the first time, he is

used to it because his predecessors and ancestors had been adorned and ridden with it so long before. Its safety recommends it above all others for the side-saddle, but of course only so to the hand that can hold and finger the reins properly.

This bridle has two distinct bits—the curb bit and the bridoon bit. If one bit or rein should break there is one of each left. Each bit has a separate headstall, and to each bit there is a separate rein. A martingale is used with this bridle, and so looped on the overlapping girth that both girths shall fit tight to the horse. The rear girth should be buckled first and then the fore girth run through the martingale and buckled as tight as it can be drawn. When skillfully handled, this bridle, without being severe, is the nicest one we have for pleasure riding, and while the curb bit is not strong enough to hold in a hard-mouthed horse it is quite powerful enough for a horse well broken to its use. If a woman has her own well-selected saddle-horse trained to the bit-and-bridoon, and no other, she can always enjoy her ride. We do not recommend it for strength or security, but we do for the various degrees of physical and moral power it can bring to bear on the horse—from that of a silken thread to the full strength of the bits and reins, the latter being strong in proportion to the strain that the bit will bear and the horse requires. Reversing the order of things, the mouth has to be made to suit this bridle, for the bit-and-bridoon bridles are generally of the same material and strength, but varying in size, and the ordinary saddle-horse, for either sex, must have his mouth made to suit it, so that the hand that is used to the bridle won't have to change it.

Some hunters are so used to a tight snaffle rein in taking fences that, in turning them round on a road with the tight bridoon rein, they are apt to dash over the fence before the rider can stop them. With the side-saddle

this is rather dangerous ; but to avoid it the horse should be ridden on the curb and care taken not to use the knees or make any of the usual motions of the body known to the horse in earnest riding, while the turn on the road is being made. We always ride with a tight rein, and preferring a strong puller on the snaffle, we have had some experience in these impromptu exercises of horses' propensities to take fancy leaps without leave or license. The bridoon rein on which the martingale hangs is less than one inch wide, but its strength corresponds with the power used with it in holding the horse up while riding in ordinary, lifting him at the leap or in bearing the strain of the martingale, if necessarily short. No arm can break it.

The curb rein is narrow, not only because the strain on it is slight and corresponds with the strength of the bit and the possible strain it is subject to, but because both curb and bridoon reins are held in one hand and their alternate use frequent. If the horse and rider be mutually agreeable and they like each other, and in passing through a strange country, unknown to both, they come to two roads branching off to the right and left, the horse knows as well as the rider does which road his rider intends taking. Instinct is at play, and the knowledge is communicated from the hand through the reins to the bit, thence to the brain. If the rider don't know which road to take, he had better give the horse his head and let him take his choice. If the object is to go home he won't go astray. Phrenology is not limited to the functions of the human brain ; it takes a wider sphere, and descends to the lower animals. Among our domestic animals it is applicable and unmistakable in the dog and horse. Peculiar formations of the skulls of these two friends of man vary, and the intellectual of both can be picked out by feeling them in the dark. And, although we can see a faithful and intelligent dog's soul in his eye as he looks

straight into ours with a love and devotion so evident in no other beast, the intelligence and devotion of the horse are manifested in other ways without being so demonstrative.

Would it not be well, therefore, to consider the unreasonableness, amounting to cruelty, of handling or holding and guiding these two servants entirely by physical force? To tie up a Newfoundland dog (the close friend, protector and companion of man, woman and child), and keep him in solitary confinement—while all he loves dearly as his life are at play around the stoops and halls of the family home, and perhaps all walk out and leave him chained to whine, pine and cry for his liberty to join in the evening stroll—is a kind of cruelty far in excess of flogging and starvation. How many affectionate animals have died of broken hearts, and how near does this kind of cruelty go to the breaking of the spirit, if not the heart, of favorite animals around us that, fearing inconsiderate abuse, suppress their torturing grief as they fawn at our feet and coaxingly, and in their own way, ask permission to lick the chastening hand.

The horse, like the dog, enjoys his freedom, and if he does not whine and cry, he neighs, and tries in other ways to make known his wants. While he is subservient in every respect to his owner's will, and would enjoy a gallop on his own account in a grass field, he is closely confined in a narrow stall from year to year, tied up to a manger with a short rope or chain as if he were a Bengal tiger; and when he is put to his daily toil his education is so neglected that he knows no moral restraint. He is pulled, hauled and chucked with his mouth full of iron, that being the only means adopted and used for his guidance, with no more consideration by some men than if he were a saw log. The saddle-horse, however, is more exempt than the harness horse from the usual tortures and abuse, and needs the consideration due his nature

and his duties, of a kind and sympathetic master, who would enjoy his rides more if there was more social intercourse between them and more use made of the voice and less of the bit.

THE CURB.

The curb should be outside of the bridoon bit, for if inside of it the constant pressure of the bit on the curb would hurt and chafe the under jaw-bone. Yet we often see it hooked on inside, more from ignorance, perhaps, than from any judgment or fixed ideas on the subject, which is the excuse we offer for noticing it.

THE MARTINGALE.

When the bridoon rein is drawn straight to about one inch above the pommel of the saddle, the rings of the martingale should just hang easy on them when the horse holds his head in its normal position (fig. 18). If he

Fig. 18.—ON THE BRIDOON.

Fig. 19.—ON THE CURB.

attempts to throw his head up the martingale will, at this length, check him. In leaping, the martingale must be lengthened and wholly powerless, else the horse may be thrown over the fence. As trips, falls and other accidents are always possible, the bridoon rein should be always in hand, held firmly, yet not drawn tight, and the horse should always feel its pressure lightly, while the curb bit is kept in reserve for occasional use; but on no account, occasion or consideration should the curb

and bridoon bits be used at the same time, for that is contrary to common sense and the first principles of the arts and science of horsemanship. Yet, this error is a common practice.

When the bridoon rein is tight the curb rein should be about three inches longer, so that, should the bridoon be suddenly drawn tighter, the curb rein will be free; and when the curb is needed, with the thumb and fore-finger of the whip hand draw the curb rein through the fingers of the left hand till it is about two inches shorter than the bridoon rein (fig. 19). The horse is now on the curb, his head is gathered, and he is light in hand and ready for instant obedience and action.

To drop the curb rein and resume the bridoon, the bridoon rein is drawn through the fingers of the left hand by the two fore-fingers and thumb of the whip hand; the curb rein is then allowed to slip through the fingers till it is slack and the pressure is felt on the bridoon rein again. The horse now knows he is to resume his walk or trot, and takes his head. In cantering, the curb rein is taken up to gather the horse's head and to make him go lighter in hand. We cannot too urgently impress the reader with the fact that the great pleasure derived from riding is, in having a well-mouthed horse, a perfect knowledge and command of the bridle and bits, and the same bits and bridle, without a change, used at all times, with the same horse.

Although we like the Pelham bit and bridle for the side saddle, yet for the safety of the horsewoman we would prefer the bit-and-bridoon—fearing accidents to the bit and rein. Three accidents are possible to the Pelham bridle: The bit, rein or curb might break; there is then no alternative, but a clean runaway in the absence of moral control and “trust to luck.” All horses' mouths are not made to order, and the same bit, bridle and saddle should be used, so that the horse will

feel at home, as we do ourselves in old clothes. A woman's arm is not strong enough to contend with a hard mouth or pulling horse, in either riding or driving. The power, therefore, should be in the bit, and besides having her horse, in either service, well-mouthed, she should have the strength in the bit in proportion to a possible necessity, so that she could use it at her option to lighten up her horse's head and control him in any emergency. Her horse must be so trained that the bit-and-bridoon will be powerful enough to master him, for this is essentially a woman's bridle, and everything should be equal to it.

If a woman's horse becomes restive from undue use of the curb, or any other cause, and she be not *au fait* in its management, a straight runaway on an open field or road might be less dangerous than contending with an untrained or strange horse in a fit of capering, rearing and plunging to get free from the curb, which should be dropped when he shows any disposition to cut up capers, as he is likely to do if he shies at anything—for, unfortunately, it is customary to chastise horses for this habit, which arises from a naturally timid and cautious disposition to keep out of danger. Of course the chastising makes him worse, knowing that when he sees anything to fear and shies at it, he will get whipped or spurred. When a horse becomes restive and rears, it is frequently from too much pressure of the curb, which he may not like or understand, and thinking he is wanted on his hind legs (for the curb has a tendency to cause him to throw up his head to ease his under-jaw from the chain) rears accordingly. As a saddle-horse may balk from bad riding, and a harness-horse stop from bad driving, or both run away from bad handling, we must examine the bit and see where the fault is; this the experienced eye can see at a glance.

THE CURB AND MARTINGALE.

The curb and martingale have no fellowship with each other. They belong to two different bits or different reins, for, while the curb cannot be used on the bridoon, the martingale should not be used on the curb rein. The use of either one needs judgment, whether put on at all, or used at all when on. To be effective, without overcontrolling the horse, they require very nice adjusting in regulating their controlling power, so as to be easy and agreeable to the horse when slack, and yet be so nicely held as to remind him they are there when required. The whip, the curb and the spur unite in their respective appliances to keep the horse alive to his duties and ever ready to obey with alacrity his rider's will, whether conveyed by word, bit or motion of the body or limbs.

CHAPTER IV.

Fig. 20.—THE CAVALRY BIT.

THE CAVALRY BIT.

The cavalry bit, with arched bar and single rein, is very powerful. It is used with a strong curb chain; in the mouth of an untrained horse and in the hands of a

bad horseman it is cruelly severe. Resistance to it on the horse's part, or undue use of it on the rider's, are both alike wrong, and from lack of primary mouthng, daily use and due training, the results of superficial education are evident in every move of both horse and rider. Nothing in equestrian practice pleases a recruit better than to use this bit and keep his horse on the dance all the time, with his chin on his breast to show him off, thinking it looks stylish. For the service our cavalry horses have to perform, this bit is too severe when used alone by unskilled hands. Using the same kind of bit with every horse is a great error. It is well enough to call them regulation bits, but to some horses they are regulation tortures. Horses are not like castings—made to order and all run in the same mould.

MOUNTED POLICE.

The New York mounted police use this kind of bit and curb with a single rein, and be the horse hard or tend-

Fig. 21.—MOUNTED POLICE.

er-mouthed, fast or slow, sluggish or high-mettled, he must submit to its severity. The men as a body, of course, are not practical horsemen, nor are they subject to regular drill to improve them in that accomplishment. The result is that their horses are always on the curb or dance, without any interval of relief, and are thus ren-

dered incapable of some possible performance necessary in the course of their duties.

It is necessary to have perfect control of the cavalry horse in action. For this purpose the bar of the cavalry bit is arched to such a degree that when the rein is drawn backward, the arch is pressed forward against the roof of the mouth, and thus pries it open, while the curb chain presses on the under-jaw, which combined action brings the head down in subjection to the hand, or causes him to rear. No horse could swallow this bit if nothing broke, and he is, therefore, always under control. But there is

Fig. 22.—MOUNTED POLICE BIT.

a limit to the frequency and the degrees of this use of such a bit, for an undue application of it keeps a nervous, sensitive animal on the dance, fret and sweat while he is on duty, and, besides tiring, takes out of him the vim and fire that could be reserved for a better purpose when required for the benefit of the service and not for the vanity of the rider. This haggling and yanking at the bit is done, perhaps, some twenty times an hour while the horse is under the saddle, whereas once or twice a day on such duty might suffice, if necessary at all.

Bits such as these are used mercifully in countries

where men are on horseback from childhood ; for, having a perfectly balanced seat under all circumstances, they are not dependent on reins to balance them in their own or their horse's critical motions and performances. Not so with the recruit, in our service and the European, who enters the cavalry school at eighteen (an age at which and from which no man could be made a horseman, in possession of the necessary knowledge of the horse and of all the arts and science that, from youth alone, can be and are acquired and mastered as he advances up to that age); there is too much to learn beyond the mere cavalry drill and the necessary riding that attends it on ordinary duty, in either peace or war. The horse, his rider and the sword have been inseparable since wars began, and they ever will be ; and the more perfect the horseman the more dexterous he can be with his weapons. But as the cavalry saddle, bridle, seat, training and duties are different from those in that branch of peculiar horsemanship (in the field) that excels them all, the character of the riding must necessarily be different also.

CHAPTER V.

THE CAVALRY BIT-AND-BRIDOON.

The regulation cavalry bridle, as used in the United States army, has two bits, a curb, two reins and one head-

Fig. 23.—CAVALRY BIT-AND-BRIDOON.

stall. The curb bit is the same as that described in the preceding chapter. The bridoon or watering bit has no guards and is used with the curb bit as an auxiliary when the horse is mounted, but is used alone in going out to water. The bridoon has rings and a single loop-joint between the bars, the same as the snaffle. It has four distinct uses: First, that of a watering bridle; second, for easing the mouth from the curb bit; third, for certain uses of weapons in action, especially the sword; fourth, for leaping. But owing to the trouble it gave in changing from the use of one bit to the other and the care of it, it was thrown away by many men in the cavalry service during the war of the rebellion, and then there was no relief from the

curb bit until the men got well shook into their saddles and learned to use it in moderation.

As the ground and country that cavalry has to cross, manœuvre and fight over in war time is never made to order, the horse should be bitted to meet every emergency, and as leaping with the curb bit is both uncertain and dangerous for both man and horse, the bridoon or its equivalent should be available. However carefully we may plan and provide in peace time for certain services in the field in war, we find that, when put to the practical test, some things are objectionable and even useless, and therefore abandoned. The watering bridle was one of them. It was cumbersome and took time to put on the horse in critical moments, when suddenly attacked on picket posts or during halts when the order was given to ungirth, unfold blankets, take off the bridles and "saddle up."

THE BRIDOON BIT IN ACTION.

The watering or bridoon bit, or its equivalent, is used, or should be, in riding forward at speed, sword in hand to point or thrust. The curb bit in halting, falling back, turning round, or throwing the horse on his haunches to deliver a cut to the right rear, or in delivering the rear cut and point, and other assaults, is used as follows in the

CAVALRY CHARGE :

As a cavalry charge frequently resolves itself into a *mêlée*, a series of hand-to-hand encounters take place before the soldier gets out of the fight, if he ever does. Should the enemy's line be composed of cavalry, and it breaks, and the pursuers with spurs pressed home and bridoon rein in hand, bring it to bay, cuts, points, parries and guards are resorted to in quick succession, in both attack and defense, as circumstances require at each eventful moment in the progress of the fight for life.

death or victory. No sooner is a thrust made at a right front attack (for which we are using the bridoon rein, fig. 24), than we are assaulted on our right rear with the first cut. To meet this onslaught we slacken the bridoon rein, take up the curb, drop the point of our sword to the rear,

Fig. 24.—CHARGE—POINT TO THE FRONT.

guard the assault, and with a sharp and dexterous turn of the wrist and a slashing cut, draw the edge of the sword across our antagonist's face, clap spurs to our horse and dash on, or turn for assault or defense.

The horse still on the curb, we are assaulted on our right front, and as our antagonist's sword comes down upon our guard (the point of our sword well turned to the right), we draw the left rein shorter than the right, to

Fig. 25.—CUT TO THE REAR.

turn our horse's head away from the sweep of the sword (fig. 25), then, throwing him on his haunches, deliver the right or right rear cut, parry or point, pass on, turn short round to the right or left, and attack him in the rear. Our antagonist disposed of, the curb rein still in

hand and spurs pressed home, the horse dashes on as the victor or the vanquished to meet another foe, or rejoin the ranks. The fate of empires have been decided by cavalry charges in less time than it takes to read this paragraph. Cavalry attacks are sharp, short and decisive, for either victory or defeat.

The interested reader will understand that, to get a balancing purchase to enable the swordsman to put more power into the sword-arm in thrusting to the front, the left hand pulls on the bridoon bit while the right hand delivers the point, rendered all the more effective by the velocity of the charge. Pulling the bridoon rein with all one's might for the instant, balances the body and thus gives the right arm corresponding power to push, which it could not have if the body had no support from the bridoon rein in running the antagonist through. This lever power could not be had from the other rein, for the severity of the curb and curb bit would not admit of it from that source; and the horse, instead of rushing forward in response to the spurs, would halt and fall back, the very reverse of the action necessary to give additional force to the forward thrust in such a hand-to-hand conflict, which frequently takes place in cutting down the cavalry antagonist, capturing the standard or the defenders of batteries that have got the range, and are mowing down the troops of the assailant. If we reverse this action of the arms and rest the left hand on a box the height of our knee, what strength it gives the right arm to lift a weight that, from want of balancing powers, we could not "wind."

In pursuing a defeated army the infantry soldier turns his bayonet to the cavalry pursuer, who, in passing him by, gives him a slashing rear cut, and should he fire after his assailant the next swordsman cuts him down before he has time to reload or fire again. But in these days of modern improvements in fire-arms the pursuing cavalry

soldier is at a disadvantage in his conflict with the infantry soldier, armed with a magazine gun; yet, under all circumstances, men in action do the best they can, and in this emergency the pursuing blood-thirsty cavalier brings his bit again into requisition, and attacking a pursued man on his left, suddenly throws his horse low upon his haunches, and with the assault or rear cut hews the man down with a single blow. The expert infantry soldier parries the sword with his bayonet, while the expert and cool-headed swordsman lets the parry pass his feint and then delivers his cut. The expert swordsman takes care, when he can, that his parry ends where his most effective cut or point begins, and is delivered in the opening made by the parry. In these critical movements of both the horse and rider, and the necessarily dexterous handling of the sword or lance, it will be perceived that the bit plays the most delicate and necessary part, and that without it nothing could be done.

In some cavalry schools of practice we have seen the same pace kept up in delivering both points and cuts, but this is contrary to the plainest rules of common sense and the Eastern swordsman's effective practice. For, if we cut to the rear while we are charging to the front, the speed neutralizes the force of our cut, because we are moving away from instead of to the object we assault—on the same principle of rowing with or against a stream. In rowing down stream we have the advantage of the force of the current against our oars; but, if we row against it, the water gives way with the oars and we lose power that we gain by the resistance of the current against the oars in going with it. So that when the pursued and pursuers are going the same way the halt of the latter is indispensable for an effective cut to the rear; besides it is safer to entertain the antagonist till disposed of, rather than to pass on and leave him in a condition to keep up a magazine fusillade at the cavalry target. In

such instances of life and death struggles by the individual members of a squadron or two of well led cavalry, pending great battles, the loss of armies and the fates of empires have been decided. There are so many advantages necessary to the success of cavalry charges, that it does not always depend upon the judgment of the commander. The ground and strength of position will often favor the numerically weaker force.

FOREIGN OR EASTERN BITS.

It may be argued that in Spanish-America, Spain, Tartary, Circassia, Arabia, and Eastern countries generally, the curb and ring bits are used singly on all occasions. We are aware of this; but, in the first place, the horsemen in those countries are in the saddle from childhood and know how to use the bit and spare the horse; and, secondly, while we have imported and adopted the bits, we have left the riders at home. The curb bit in the cavalry service, as in the hunting field, should never be used in leaping, and as battle fields are geographically uncertain, cavalry should be prepared to take things as they come. But only one bit and two reins—one mild and the other severe—on the Pelham plan, is the best bit for the cavalry horse and the service he performs.

With the curb bit alone the horse can be manœuvred in any way, but he cannot be made to leap unless he chooses, for the use of the curb defeats the effort. It intimidates and confuses the horse when he is calculating his distance and taking the measure of the object before him. It attracts his attention from his work, and drawing his head down convexes his crest when it ought to be concaved, and instead of giving him his head as he wants and needs it for both wind and action as well as observation, he is held down and back, both of which are the very reverse of what we want him to do; hence the

numerous accidents. Those who doubt the judgment of the horse must yield to the fact that the most ordinary horse or animal of any kind puts muscular power to his bound in proportion to the width or height to be leaped.

As we bid farewell to the cavalry regulation watering bit, on campaigns, we do not do so without recommending a substitute not unknown to the service, and one that is calculated to answer all the requirements of both bits and the advantage claimed in resuming its use. We must consider that we cannot have everything our own way while the horse we ride has to do the work. His ideas must be consulted as to how, not what, is to be done. Give him to understand by proper means what you want him to do, and leave the performance to him. If the rider don't know how to give his horse to understand how high or how far he is to jump, he had better learn.

CHAPTER VI.

CAVALRY OR MILITARY BIT.

The old cavalry or military bit, with rings in a line with the bar for bridoon reins, is preferable, as regards the rings and their purposes, to the regulation cavalry bit now used in the United States Army. For the curb and bridoon reins work the same bit, but with different powers, meanings, effects, times and results. In the use of the rings for the bridoon reins, we dispense with the watering bit on campaigns and adopt a steering apparatus far better adapted for practical purposes in the field than the bridle now in use. Our reasons for recommending it are drawn from our life-long practical knowledge of horses and horsemanship of different kinds, both civil and military, thus taking in a wide range of experience, alike in America and Europe; and we have no hesitation in say-

ing that it is easier and better for the horse, while his rider can do more and do it better with it than with the regulation bit as now used with the watering bit. The great advantage is in the two rings for the bridoon reins, which, when drawn, do not put any strain on the lever and the curb that the curb rein alone works with such effect on the most trivial occasions, as described in the preceding chapter. In this bridle we have the principles and advantages of the Pelham, thus abandoning at certain times, for convenience, the troublesome watering bridle, which our men in the late war found of more use for carrying bundles of hay and straw to their horses than for riding with, and it is doubtful if its value in this respect was equivalent to the trouble of carrying it.

Articles furnished cavalry soldiers are not always put exclusively to their legitimate uses. His hat holds alternately his head, water and grain; his blanket covers his body and keeps it warm at night and cool by day—carries corn in the ear and chaff and utensils to camp. His shelter tent (“a covert from the storm and a shadow from the heat”) carries bread, sanitary supplies and ample loot. His bridle serves as a halter; his saddle bears his body on the march and his head in the hour of repose; his surcingle binds on his saddle on the daily march and serves as an impromptu trace in hauling boxes of mud to chink his winter hut, while his saddle blanket, at the last sound of the evening trumpet call, covers his feet and keeps off the chilling midnight air. His pistol kills a foe to-day and a friend to-morrow; his sword hews down men at morn and noon and bread in the bivouac at even, and at night marks his shallow grave. By proper instruction the recruit can soon learn to understand how to ease his horse’s mouth and still have a rein to balance himself till he gets his seat.

The argument against a substitute for the watering bit will be that a horse can’t drink with the curb bit, and

that if the curb bit or rein should break or be cut he has the bridoon to fall back on. Horses can drink all they want with any bit. The sacrifice is so trifling, compared with the advantages of dispensing with all extra encumbrances on campaigns, that we consider the preference is due the proposed change and general adoption of the single bit with rings at the guards on a line with the bar. In the last winter of our civil war, scores of our cavalry horses in Camp Averill, near Winchester, Va., were without blankets and halters, and were consequently tied to stumps with the curb bridles on and bits in their mouths, the watering bits having been thrown away. As Assistant Inspector General in Sheridan's Corps, one of our duties was to send to the War Office weekly returns of every article on hand and everything needed. But it was in vain we reported a lack of horse blankets and halters, and asked for a coil of rope to make halters of. The horses stood to their bridles fast to stumps, ate, drank, raided and rested during all that winter without any relief, irrespective of the numerous reports and requisitions made for these and other things, the assertion of the Inspector General of the Corps, Otis, to the contrary notwithstanding.

By the resumption of the old bit we would get rid of the tortures of the curb and the trouble and annoyance of the watering bridle, which, although but a few ounces weight, is an encumbrance which tells on long marches of days at a time, while it serves no purpose to relieve the horse in any substantial way. It does very well at stations, in peace time, when men have nothing else to do but to play at soldier in riding out to water, exercise, drill, clean barracks and horses and take care of such things as make up the general assortment of cavalry equipments. But in "grim-visaged war," when an army strips for a campaign, all superfluous camp articles—such as tents, baggage, cooking utensils, forges, tools, women, non-

effective men, and wagons and horses not needed—are sent to the rear to lighten up and disencumber the army in the field, we propose abandoning the watering bridle with the rest, and thus obeying the mandate of a necessity and ages of experience, place our reliance on the altered regulation bridle to the Pelham plan with two reins, as proposed and shown in the foregoing cut with rings for bridoon reins.

If expedition in saddling up be any advantage, we gain on it by having only one instead of two bits to put on ; and, although the time it would take in camp to put on an extra bit be but a moment, yet that moment, when suddenly attacked at a disadvantage at an outpost in war, could always be turned to better account in preparing to repel the attack of a cavalry force yelling like demons on its approach, within fifty yards, perhaps, of the post, than in fooling with a dispensable article that had better be at home. It may be said by a strict disciplinarian that a cavalry force should not be surprised ; this is true, but surprises have taken place and always will while wars are possible. A horse can drink all he wants with even two bits in his mouth, and to carry an extra bit all day for the sake of its convenience to the horse in two minutes' drinking every twenty-four hours, is certainly not an equivalent to the relief from its use and care. If the bits were kept with a steel polish, as in the civil service, there might be a good reason for using the bridoon bit on fatigue duty to spare the curb bit from dirt and rust after it was hung up clean and ready for parade ; but we see no other valid excuse, so long as the curb bit with two reins will answer the purpose.

Experience in war relieves an army of a vast deal of unnecessary encumbrance, which is added to by the apparent necessity for small and trifling things carried with it as a convenience for each individual composing it. An army thus encumbered is like a written speech ; it loses

half its force in details, which the off-hand, extemporaneous speech dispenses with, and exposes the facts without the fogs. (See our paper on the subject to General Milroy, December, 1883, and deposited in the Cavalry Bureau, War Office, Washington, D. C., and subsequently partially acted upon in Sheridan's army, and perhaps in other armies during the latter end of the war.) In March, 1862, when the Army of the Potomac moved on Richmond, the First New York (Lincoln) Cavalry Regiment took forty-eight quartermaster wagons on the campaign. Three years afterwards, when with Sheridan in the Valley of the Shenandoah, the regiment was brigaded, and when the brigade moved again on Richmond and on to Appomattox, it was composed of three regiments—the First New York (Lincoln), and the First and Third West Virginia (the Second Virginia remained in the Valley)—there was but one wagon allowed to the brigade, thus in stripping this veteran and experienced army for the campaign, 190 wagons, 764 mules and 191 drivers were dispensed with, and there being none but the amunition and necessary supply wagons to cut up the roads and impede the progress, the army moved with effective celerity.

But this is not all. In the spring of 1864, when the Army of the Shenandoah was under marching orders for the summer's campaign, an order was issued by the commanding general, stating in detail each article to be supplied to and carried by each man and horse in the cavalry arm of that army. Besides sabre, carbine, pistol, twenty rounds of pistol and forty rounds of carbine cartridges, three day's rations and feed, the soldier's kit, or, as they call it in the West, the "possible bag," was to contain soap, towel, socks, comb, brush, knife and fork, tin plate, shoe brush and blacking, and numerous other articles of convenience that even the soldier himself don't like to leave behind. To test the presumed capacity of

the cavalry horse as a beast of burden, we ordered a man weighing 175 pounds to fit himself out with a full supply of this regulation outfit and rode with him to Adams' express office scales in Martinsburgh, West Virginia. We ordered the horse stripped of everything, and the man with his accoutrements and the trappings of his horse put in the scales, which balanced at 280 pounds. Of course the three days' feed and rations for the man and horse became less, daily, till exhausted ; but the weight was there to start with, and with the exception of the rations there was no reduction in the weights, except that of the cartridges, in the event of an argument with the enemy.

After many serious arguments the campaign resolved itself into a retreat from Lynchburgh to the Ohio River. In passing through the Cumberland Mountains on the way, the horses being overloaded, gave out, and some four troops were shot on the road in one day. The best horses, being unequal to the weight, were the first to fail and be shot. We state these circumstances to show the advantage and the disadvantage of two systems—light and heavy marching—and that there is a point at which to stop adding to the articles in a soldier's kit and the horse's equipments.

CHAPTER VII.

MEXICAN RING BIT.

The illustration below represents the principle of the Spanish ring bit as used in Mexico and all Spanish-American countries. It far excels the curb in both power and severity. The ring being inflexible, it is the most cruel of all the bits when in unskilled hands.

Fig. 26.—MEXICAN RING BIT.

While the curb is broad, flat and comparatively pliable, the ring is hard and unyielding, and consequently instant obedience is the result of the slightest touch of the rein. The ring passes through a loop-hole in the back part of the apex of the arch in the bar, while the front of the tongue of the arch is rounded off, like the top of one's thumb, so that when it presses on the roof of the mouth it opens it but don't cut the bars in doing so. The ring passes out at the upper corners of the mouth and around the under jaw, and when the rein is drawn the arch is thrown forward against the palate and the ring pressed against the bones of the under jaw, where the curb

presses and exercises its masterly functions, but with double the severity of the curb. Across the middle of the arch in the bar of the bit there is a small bar from which hang two or three copper tags, which act on the same principle as those on the mouthing bit and for the same purpose.

This ring bit is used with a single rein. In handling the lasso it is most effective. Its simplicity and convenience recommend it for the expeditious manner in which it can be put on, there being no curb or extra parts to look up and fit on; but we recommend it only to the hand that is skilled in its use and well balanced in the saddle. No novice should use it before putting an old horseshoe in his own mouth and letting some awkward fellow drive him round a while with it and chuck him now and then. That would give him an idea of how his horse would suffer in uncultivated hands. The ring bit is a terror to all horses subject to its control. The best made ring bits are manufactured in England. The cut given represents one of English manufacture, intended for a large horse. We bought the original in the city of Mexico and used it under protest on a favorite horse we took there from New York. Some horses don't take to it. It is too severe for the timid, high-strung animal, and too cruel if used on a "lunk-head" or large horse that would not yield to it. In our opinion the ring bit is fit only for small horses that can be stopped short, turned round and thrown back at will. The large ten hundred weight horse cannot bring up such a heavy body suddenly in answer to its severity. Such heavy horses should be trained to its moral rather than to its physical power, *i. e.*, if trained to it at all.

The system of brute force pursued by horsemen in the East is practiced on small, short-legged horses that can manœuvre on a limited surface. "In France," says Capt. Nolan, "they make their chargers canter round a

sixpence and pull up and turn round at speed. This they do by tying the horse's nose down with a standing martingale, attached to a spiked snaffle. They then fasten a rope to the rings of the snaffle and longe the animal on a very small circle, with a man on his back who strenuously applies the whip and spurs. After a few days at this, they practice the horse at starting off at speed and pulling up on the spot, when their charger is ready for the field." This training is entirely mechanical. The horse feels no friendship towards his rider—only fear. But this is not training. The horse's disposition to submit to moral influence is not cultivated, nor does he do anything of his own free will—it is all brute force; but even with this it could not be made so effective on large, heavy horses as on small ones.

If we observe the peculiarity of the horsemen of each nation, we will find that the character of the riding, feats and exercises are regulated by the breed, size and style of the horses of the respective countries. Thus, in Mexico the bull-fighter's horse is not only a small, thin, active mustang, but he is blindfolded (and not unfrequently purposely blinded) before being taken into the arena to face an infuriated bull, maddened by fire-crackers fastened to darts stuck in his skin, and the sights, sounds and smells of thousands around him, and rendered fierce and fearless by the challenges of the red flags and the blood of others beneath his feet. Large horses would have no chance or advantage in such a contest, and when we consider the practice of horsemen in the Eastern countries, we find that their expertness with spears, sharp swords, small, active horses and powerful bits, are due to the peculiarity of the different breeds, for it is at the very threshold of circumstances that every nation has its peculiarities, as well in its practices as in its productions and amusements.

In using the ring bit with our large saddle-horses,

patient training is necessary to get them to take to and understand it. On the retreat of the Army of the Potomac from before Richmond, in 1862, we put our Mexican ring bit on a young, high-strung horse of fine speed and action. He went perfectly wild. The first thing he did was to run away with it, and in trying to stop him the ring broke, when the horse, taking his head, dashed into the ranks as if he expected relief from the troop horses. He seemed maddened and acted like a horse with a bee in his ear. On the same day, at the battle of Savage Station, we went in search of a canteen of water, and on returning the horse took fright again; and having no control of him with a broken bit, he "swallowed" it and dashed through a quartermaster's tent and stores on fire, near Savage Station, and again rushed into the ranks. He certainly declared war against the ring bit; but as he was too good an animal to conquer in such a way, and thus break his spirit and otherwise trifle with his disposition, we humored him and never put the bit in his mouth again.

On another occasion—in a charge on cavalry at six o'clock in the morning of June 5th, 1864, at the battle of Piedmont, Va.,—the curb of a regulation bit broke and he dashed through the enemy's ranks like a shot, and, bringing him round by degrees, he rejoined the regiment. This horse was wholly unmanageable with any bit when he took it into his head to run away. But after we became better acquainted and he began to know our voice, we had rings put on the guards of a regulation bit, and henceforth always used the bridoon rein, except in action, when necessity required the curb. If we must keep such powerful regulation bits we must have horses' mouths made to order, for the question is not what bit will suit the horse, but what horse will suit the bit. We used the altered regulation bit with this horse until he became accustomed to it, and never used any other with him to

the end of the war. We rode him at three steeple-chases and won the regimental challenge cup three times, and brought it and its gallant winner home "when the cruel war was over."

CHAPTER VIII.

EASTERN HORSES.

Horses found their way into Europe from the East, where they were highly prized and used for the saddle. The smaller the horse the easier it is to handle him and use him to a powerful bit. And as horsemanship and swordsmanship were highly estimated accomplishments, and inseparable in those countries in ancient times, as they are still in many parts, the art of single combat required the nimble action of the small horse to charge, strike, wheel and retire to insure victory over a less active foe, unskilled in the game of cavalry tag.

As a test of horsemanship and training it is a common practice in Mexico to ride the small, active mustang at full speed against a stone wall, and rein him up to a dead stand with his forefeet against the base of the wall. This is certainly a great feat, and one that could not be performed by our large saddle horses. It shows the power of the bit and the training of the horse to its use in yielding to it instantly, instead of resisting its power.

Captain Nolan, of the Fifteenth Hussars, and of Bala-klava Light Brigade fame, contends that "the English horse has no superior in anything." But both Nolan and Sir George Cox wrote more from theory than from practical knowledge or unbiased minds. Nolan says: "I have heard it said that the English horse is not adapted, like the Arab and others of Eastern breed, to skirmishing,

to pulling up from speed and turning quickly. The better* the horse the more adapted to all feats of agility and strength. No horse can compare with the English, no horse is more easily broken in to anything and everything—and there is no quality in which the English horse does not excel, no performance in which he cannot beat all competition.” Gammon ! This is strong language and savors of partiality rather than prejudice, for further on he extols Eastern in preference to English horses.

The captain goes on the Irishman’s principle that one horse “is as good as another and a great deal better,” for he proceeds as follows : “An officer in India made a bet that he would himself ride his charger (an Arab, little more than fourteen hands high) four hundred measured miles in five consecutive days, and he won the match. The horse performed his task with ease, and did not even throw out a windgall. General Dumas relates that the horses of the Sahara will travel during five or six days from seventy-five to ninety miles a day, and that in twenty-four hours they will go over from one hundred and fifty to one hundred and eighty miles, and this over a stony desert. Diseases of the feet and broken-wind are almost unknown among them. What would become of an English cavalry regiment if suddenly required to make a few forced marches or to keep up a pursuit for a few hundred miles ? Their want of power to carry the weight and want of breeding makes them tire after trotting a few miles on the line of march.

“Our cavalry horses are feeble ; they measure high, but do so from length of limb, which is weakness, not power. The blood they require is not that of our weedy race horse (an animal more akin to the greyhound and bred for speed alone), but it is the blood of the Arab and

*The word “better” has a wide range. There is no horse of any breed or country that is not “better” for some things than others are, and in our opinion Nolan uses the word at random.

Persian to give them that compact form and wiry limb that they need. The fine Irish troop horses, formerly so sought for, are not now (1853) to be procured in the market. Instead of the long, low, deep-chested, short-backed, strong-boned horse of former days, you find nothing now but long-legged, straight-shouldered* animals, prone to disease from the time they are foaled, and whose legs grease after a common field day. These animals form the staple of our remounts.

“The English cavalry are not what they should be. If brought fresh into the field of battle, the speed of the horses and the pluck of the men would doubtless achieve great things for the moment; but they could not endure, they could not follow up, they could not come again. All other reforms in our cavalry will be useless unless this important point be looked to. It is building a house on the sand to organize cavalry without good horses. Government alone could work the necessary reform by importing stallions and mares of Eastern blood for the purpose of breeding troop horses and chargers for the cavalry of England. I had heard of fine horses in Russia, but I complacently said to myself, ‘Whatever they are they cannot be as good as the English.’ However, I went to Russia, and seeing is believing. Their horse-artillery and cavalry are far better mounted than ours; and their horses are immeasurably superior in those qualities which constitute the true war-horse, namely, courage, constitutional vigor, strength of limb and great power of endurance under fatigue and privation.”

It would certainly be very hard to reconcile these two opinions as coming from the same writer. It goes to show how prematurely a man can make up his mind to become an author on the strength of his theories or par-

*No straight-shouldered horse could be a successful racer or steeple-chaser, for it is one of the most indispensable formations in a fast horse or jumper to have an oblique shoulder. A straight shoulder means a short stride, and racers with short strides are distanced and get run off the turf.—[AUTHOR.]

tialities, and thus ventilate his opinions or prejudices to a world of men of experience, hard practical knowledge and common sense. We cannot always rely upon opinions based on practical knowledge in some matters, for observation and even actual contact with things make various impressions, according to the disposition, experience or education of the person, and indeed frequently gives wrong notions, which, while they tend to puzzle the uninitiated, are nevertheless easily unraveled by men of natural and varied training, who have been set right themselves by the knowledge and judgment of others as well as those of their own. But General Dumas' 180 miles in twenty-four hours, for cavalry, would be seven and one-half miles per hour; that is doubtful, for there is no horse can walk as fast as a man, and few if any could accomplish it on a stony desert.

Nolan was a young man when he wrote his book, and his opinion respecting the ability of the English horse to compete with the horses of all nations in everything, wherever found, changed as he visited other countries and saw for himself the superiority of other breeds of horses for services and feats that he acknowledges the English horse could not accomplish. He might as well tell us that a black-and-tan could as easily get into the rat-hole as the rat, as to say that an English cavalry horse could compete with a mustang in fighting a mad bull, galloping round a wheel-barrow, or in traveling sixty miles a day on prairie grass for feed. Nolan certainly took the bit in his teeth and ran away with his praise of the English horse, as he did with his subsequent denouncement of the same animal. The forte of the English cavalry horse is to go ahead and charge through or over all opposition, but when he is required to compete with the Arab or the mustang in their performances, he must be remodeled and taught subjection to a different bit from the one he yields to now.

We would not have noticed the gallant captain's remarks on the English horse, but for the advantage it gives us in drawing a line between the English breeds of horses and those of other countries, in both their actions and government in their respective and appropriate vocations under the saddle. Other remarks of the captain on this subject show that the Eastern horseman's advantage over the European cavalry soldier is due to his sharp sword and small, active horse, that is perfectly obedient to the bit and performs in proportion to his size. The value of the English horse is from five hundred to one thousand dollars, while that of the mustang (that can beat him) is fifteen dollars. Adieu, captain.

To bring a horse of a thousand pounds to a dead standstill from almost full speed, turn round and charge to the rear as easily as one can a small cat of a mustang or Arab, is sheer nonsense to assert ; and it is in such performances that the English or American horse of the cavalry standard is helpless compared with the small, active horse who has degenerated to four or five hundred pounds weight from its ancestor, the famous Andalusian breed, imported by Cortes and occasionally abandoned in the desert, where his descendents now roam in wild bands and supply the *ranchero* with fresh stock. No large horse could be reined up suddenly without damage to himself or something else in some shape, and it is against cavalry composed of such horses that light cavalry is so effective, and can be so annoying by dashing to and from them as the gad-fly does to the horse himself. Even in single combat the small, light horse has the advantage in being able to attack, rushing up, delivering a blow and then retreating at full speed, and when his pursuer is drawn out at full speed also, he turns short round and lets the large horse, that can't stop suddenly, gallop on to his rear. And where is the small horse by the time his pursuer is turned round ? At his heels.

It is in this kind of performance that the mustang and the small Eastern horse excels the English, which Captain Nolan proposes to improve by the importation of stallions and mares of the Eastern breeds. But this has been done long ago, and long before the captain was born. The experience was favorable, for the Darly Arabian and others were the result of such enterprises. We have ridden hunters by the famous Escape, out of Arabian blood ; also hunters by Sir Francis, who kept the Queen's County challenge cup for five years against all comers, and in all these performances the cross with the Arab horse told. It was this importation of foreign blood—the Norman, Tartar and Arab—that has made the English horse what he is under the saddle as a hunter, racer and steeple chaser, and as which he is king.

The difficulty of stopping anything of great weight is demonstrated in various ways. The projectile of a ton weight will bury itself sixty feet in a mound of sand ; but the hundred-ton gun from which it is fired can, if exposed, be captured and silenced by a charge of light cavalry composed of mustangs, governed by ring bits that enable the riders to manœuvre round the battery and cut down the gunners. Weight is power ; speed is strength. It is on this principle that heavy cavalry is effective, with power, in breaking infantry squares when it is possible. One or the other must give way. Either the cavalry must be shot down and a breastwork of dead and dying men and horses piled up in its front, thus fencing out the charging ranks, or the square must give way and let the troopers in. It is in such an encounter as this that heavy horses are effective, and in which a powerful bit, such as the ring or curb bit, is not much used till the work of breaking the square is done, and the mêlée follows, where the unwieldy horse is at the mercy of the bullet and the bayonet, and whether he stays in or gets out of the square his chances are against him.

Circumstances of climate and a great maritime nation catered to the equine tastes of the people of the British Isles, for, having had intercourse through trading and perpetual wars with foreign nations, they imported superior animals and crossed them with their own, and thus improved the breeds of all kinds of animals to such a degree that not only the formation and size are established, but the very colors of all the varieties give them character and excellence, so that they can be identified as this or that breed by their flesh or color of their hair. The superior excellence of the English horse has come about in this way. The saddle-horse, which is bred exclusively for the purpose of racing, hunting and steeple chasing (in which he excels wherever he goes, and in which we will venture to say he has no superior in any clime), will not be improved as hunters and steeple chasers by a cross with Eastern stock, if deep chests and short legs are to characterize the improvements, or rather the change. Equestrian sports on the British Isles are the consequence of their having the horses to suit the purposes of the wildest ambitions in these respects. As a cavalry horse, to carry heavy weight and endure fatigue on long marches, he might be improved under Eastern treatment, where the horses are out in the open air instead of being housed up in a close stable, standing and lying down in narrow stalls and tied by a short halter so that they cannot lie down and stretch their legs out to rest them after a day's march or hard ride. This alone would shorten any horse's working life. The narrow stall in which a horse is obliged to tuck his legs in under him, is a torture and the curse of the American horses. With short legs and deep brisket the English hunter would deteriorate as a hunter, for he could not take the leaps he does now. The short-legged, thick-set horse is tough, hardy, durable and strong, but the place to set himself off to advantage is not in taking a five-foot wall or five-barred iron gate.

The deep chest and short legs for cavalry marches in India, and taking cross country as it comes in England and Ireland, are very different things. Length and power of limb in proportion to the size of the body are necessary in taking great leaps, and for heavy riding through plowed fields. A long leg is not a sign of weakness, as Nolan has it, if the body is deep in proportion. The difference between the build of men compared with that of women is evidence of this. The man is intended for strength and activity; for this, his body is short, shoulders broad and legs long; while, on the contrary, the woman has a long body, narrow shoulders, wide hips and short legs. The woman sits higher than the man, while the man stands higher than she does. Her body is long and large to facilitate child-bearing and the production of nourishment for her offspring; while the man's body is large and muscular, and placed upon long legs to give him lever power. If, therefore, according to Nolan's idea, long legs are a sign of weakness, the whole structure of men must undergo a transformation to render them stronger and more physically serviceable. But we are satisfied with the English horse as he is, and while he can jump and carry his rider over six feet six inches we will not change his contour. To show how fixed nature is in her laws in this respect, a man, although half a woman, never partakes of her peculiar formation, because, if he did, he would be rendered useless for the purposes for which he was physically intended.

No length or size is a sign of weakness if every other part is in proportion. For certain purposes we must always sacrifice something. If these two horses exchanged places, countries and services, both might be failures. If we can judge of the build of the horses of the ancient Romans by the Roman sculptures and pictures we see copied from paintings on walls, and the numerous hieroglyphics on mettle and stone, the horses were small and

short-legged, for the rider's legs are represented hanging long and limp, and their feet far below the horse's brisket. This is the build of the Eastern horse that the Romans imported and took to England in their numerous invasions. If we can judge by these pictures there were very inferior horses, or very inferior artists, in those days, compared with those of the present time. But, however that may be, the horses are all represented with their heads well bridled in with arched crests and their chins on their necks, which indicates the nature and power of the bit then in use. No doubt that on the frequent invasions of Great Britain by the Romans, during hundreds of years, many disabled horses were left behind, which the Britain, with his natural propensity and peculiar scientific ability was not slow to improve—an advantage which, when combined with good stock to start with, and a genial and favorable climate, contributed to the development of the English horse as he is to-day, and his peculiar abilities have given rise to the national equestrian sports, not equaled in any other land. The English horse is like his countryman—very well while his belly is full, well-shod and cared for, and within convenient distance of feed and water ; but that he can compete with the mustang in lassoing bulls and bears, carrying a man half his weight on his back some twenty leagues a day, without shoes, food or water, fight a mad bull in a bull ring, and run at nearly full speed against a stone wall and stop short without killing himself, we simply deny, without giving any opinion on the subject, for opinions and facts have no connection with each other.

The Eastern bit, therefore, while it is most effective in handling the small, active horses for which it was designed, is powerless to take such action and feats out of our English breed of horses, simply on account of their size and weight, and the equine feats peculiar to the British Isles and the English people. Captain Nolan

redeems himself by contradicting, without seeming to mean it, what he says of the English horse in comparing him with the small Eastern animal ; but both he and Sir George Cox are of the same equestrian school. While one considers the English horse superior to all others in every quality, the other says "it is wrong-headedness to shoe horses at all in any country," and refers to the performances of Xenophon's on the plains of Babylon, and a Massachusetts lunatic, in support of his assertion. So that men of broad and practical knowledge and experience in equestrian matters would consider their opinions worthless on those two subjects.

CHAPTER IX.

THE MULE BIT.

The mule bit for cruelty is a specialty in Mexico, and for its severity the Mexicans or Spanish race is entitled to the palm. It is a ring bit and the arch in the bar, with the tags suspended therefrom, is the same as the Mexican ring bit (fig. 26) illustrated in Chapter VII. Its extra severity consists in having a joint or hinge where the bars join the guards, which are flat. It is used with a single rein and one headstall. About ten inches of chain is fastened to each end of the rein where it joins the bit. The reins are generally made of raw-hide, and are very strong and durable. Some are made of horse hair.

The mule, more than any of the other saddle animals, should be well mouthed and carefully trained to the voice, and taught to submit more to moral influence than to the power of this bit, for to contend with his natural resistance and untutored strength and natural stubbornness is a source of perpetual warfare between him and his rider

if he be spoiled in handling. We have seen some very well mouthed mules in Mexico. Most of them were regular saddle mules belonging to the muleteers who kept pack trains on the roads from the interior to the coasts. These animals were very handsome and well set up in their carriage and style. Prior to the war of 1847 with the United States, mules were driven a great deal to carriages by the wealthy of the "halls of the Montezumas," and having handsome and peculiar harness, made expressly for carriage mules, they were by no means objectionable as part of the equipage—for, with their long ears, well-arched necks and cropped manes, they attracted considerable attention from visitors, as they passed in review around the fountains on the Paseos and beneath the shades of the Alamedas. The wealthy vied with each other in selecting and driving the finest mules they could obtain. The severe mule bit was dispensed with after the teams became docile and familiar with the English carriage bit, under the influence of which the mules made a very handsome appearance.

But things and fashions don't last always, for at the close of the war American cavalry and artillery horses were disposed of and found their way into cities, where they became substitutes for mules as carriage horses. The mules, however, were retained by those who could afford to keep them for theatre-going, and thus spare their horses the chances of taking cold under exposure to the drenching showers that fall during the nocturnal hours in the rainy season, when all is gayety in the Capital, which is often knee-deep in water for the lack of sufficient drainage. The cut in the mountain, although long, deep and wide, is not low enough to draw off the filth and impurities of ages from the city sewers, and hence the condition of things is a disgrace to the nation. We like the Spanish-American people for their good common sense, kind and social dispositions, personal cleanliness, and

genuine civility and courteous politeness of manner, which seem really ingrain and national in all ranks; but from want of domestic convenience and proper drainage, their habits, in general, are simply indelicate and abominable.

THE DONKEY BIT.

The bit used with the Mexican burro (donkey) is small, but of the same pattern and on the same principle as the mule bit. This discouraged beast is sometimes spared the extra torture of the hinge, and the little patient slave, not much larger or stronger than the man on his back, is punched, jerked about and beaten on the rump and head with a club to enforce obedience or to punish him for his inability or refusal to carry his pack or submit to the most cruel class of men on earth to animals. Roasting missionaries is a mere bagatelle compared to the barbarity of these men towards their domestic beasts of burden, for the cannibal has something to gain in the prospect of a good meal, while the burrero* has everything to lose by clubbing the strength and spirit out of the little animal that falls to the rear in his train, being unable to keep up under the burden of his pack, already too heavy for him to bear.

We were once riding up a hill near Cerro Gordo, on the national road from Vera Cruz to Mexico. In advance there was a freight train of one hundred burros winding up the hill. The freight was bar iron, cut about eighteen inches long for convenience in packing on the donkies. One fine jack was loaded out of proportion to his extra strength. The consequence was that he fell back in the train and came under the convenient reach of the burrero's murderous club, which, if hung up in Mr. Bergh's office, would eclipse any of the choice selections exposed there as samples of stable furniture for the accommodation of the

* Ass driver.

equine slave in inspiring him with obedience and ability to do his master's work and will. This Mexican savage in human form, beat and clubbed the little burro first on one side of his croup till he almost fell over; then he beat him on the other side to straighten him up again, every blow of the club weakening him the more till at last he fell down, and, being at the mercy of the savage, was clubbed on the head and neck, which he vainly tried to keep out of the way.

At this point, when patience ceased to control us, and our native blood was at fever heat, and murder seemed a virtue to restraint, in saving this poor little helpless animal from such terrible cruelty and abuse, we drew our sword and charged on the burrero with hostile demonstrations, supplemented by language more effective than elegant, and holding the glittering steel over his head, impatiently demanded instant obedience before the impending execution of our threats were lavished on his miserable pate. Finding himself now in the donkey's place, he tremblingly obeyed our order to unload the animal and let him rise. We made him distribute part of the cargo among the other burros, and reloading the victim he was let go, when he ran in among the other burros in the train and lagged behind no more. To see that he did not, for revenge, repeat the abuse, we rode after the train for a mile or two till the savage cooled down. It is a curious coincidence that one resolute American could beat fifteen of these cowards, while one of them would face a mad bull that would drive twenty Americans out of the arena.

In traveling in Mexico one sees many opportunities for practical outbursts of justifiable homicide. If our very worthy and public spirited citizen, Mr. Henry Bergh, should visit Mexico and the homes of the Aztecs, he would repent of ever having punished a man in his native State for abuse of a horse, and would wish that he had reserved

half the pains and penalties for the Mexican professionals, who excel all competitors in this class of athletic exercise. When the first national exhibition is held in the capital of that fair and productive country, the first premium for the most approved style of cruelty will be justly awarded to one of the gallant and most accomplished abusers of animals in that favored land.

CHAPTER X.

DRIVING BITS.

THE BRIDOOON BIT WITH RINGS.

The cut below illustrates the ordinary bridoon or watering bit used in common with cart, car, truck, wagon,

Fig. 27.—BRIDOOON BIT WITH RINGS.

plow and cavalry regulation bit, and is quite mild and harmless in its general application. It serves as a mere check to hold and guide the horse with in ordinary work. It can be worn with the reins thrown over the hames to gather the truck horse's head, and set him up a little to appear more stylish. The heavy Norman and Clydesdale breeds, now becoming so numerous and popular in this country, are so elegantly proportioned that this simple bit, with single headstall, and rein thrown over the hames, serves the purpose as well as a regular check rein with bit and curb used on the most stylish carriage horse. These handsome animals are so elegantly set up that they

require no restraint to show them off by use of check rein ; nature has saved the trouble, at least in many that we have seen.

Some horses, owing to their natural build and hang-dog appearance and disposition, would be tortured by

Fig. 28.—SADDLE HORSE.

any attempt at such restraint as is possible with even these simple bits, and to try to make them appear what they are not invites pity and criticism. There is nothing they look well in outside of a straw yard, a plow or a farm wagon, for all attempts to brace them up for style is labor lost ; and although high prices are frequently paid for them by men who depend on the seller for judgment and

Fig. 29.—CARRIAGE HORSE.

praise, they are nevertheless low-priced plugs, fit only for common hack or farm use. Central Park abounds with them. If we want our horses to look well and appropriate in harness we must select them already made for the purpose. They must have a natural carriage to begin

with ; then they will look well in any bridle, without its strain or use to set them up.

Figures 28, 29 and 30 represent the saddle, carriage and draft horses, and no amount of mouthing and training would prepare or fit them for each other's place, in appearance or adaptation, excepting the light, high-strung carriage horse that would suit the saddle if naturally adapted in all respects. But to pay a high price for a plug, stuff him with hay to fill the harness out, bang his

Fig. 30.—DRAFT HORSE.

tail to imitate blood, and put on the check rein and curb to make believe carriage horse, is a voluntary piece of self deception of the usual kind, that creates no little amusement among the initiated.

It is with this common bridoon bit that most of our horses are mouthed and broken in, and in the absence of the regular mouthing bit (fig. 1) it is the next best for the purpose. The thicker the bars the better for young horses, for reasons given in the chapter on mouthing.

Fig. 31.—BRIDOON BIT WITH HALF GUARDS.

CHAPTER XI.

THE BRIDOON BIT WITH HALF GUARDS.

The above cut represents the bridoon bit with half guards, which renders it a compromise between the snaffle and the common bridoon with rings only. This bit is in common use with truck, car and cart horses. The excuse given for having the half guards to prevent the bit from being drawn through the mouth is, in our opinion, a very weak one for its adoption. We should be sorry to drive the horse or hire the man who required and practiced such pulling as a means of guidance or control. What could the horse be doing that would require such hauling? Such a driver would be akin to the Mexican burrero, who knows no moral law in the management of a beast of burden.

CHAPTER XII.

THE BRIDDOON BIT WITH DOUBLE JOINT AND HALF GUARDS.

This bit was originally intended for use in the British cavalry. It was proposed by Captain Nolan and recommended by him to be used in connection with the curb bit. Our objection to it for general use is owing to the great quantity of iron that it must necessarily add to that already in the mouth. It is the watering bit over again with the additional objection of double joints. The curb bit is used with it, and while the bridoon itself is a severe

Fig. 32.—BRIDDOON BIT WITH DOUBLE JOINT AND HALF GUARDS.

one and perhaps necessary with some horses, we should be sorry to have it used in cavalry regiments as a regulation bit. It is too much. The double joint stretching alongside of the bar of the curb bit across the mouth, is more by far than most horses require, and treating all horses alike is at variance with good judgment.

This bridoon, when used with its fellow curb bit, is made to slip off and on the bridle by means of hooks on the half guards for the purpose of feeding without taking the headstall off the horse. We decidedly object to leaving the headstall on while feeding, for there is nothing, not even the feed itself, more agreeable or refreshing to the cavalry or any other horse than to strip him of everything and let him roll. The matted mane and forelock on his sweated

head and neck should be exposed to the sun and air and allowed to dry, and the saddle should be taken off and his back, that is scalded by the sweat and heat of the saddle and man on it, rubbed and dried, the blanket opened, dried and folded anew, and then all put on again. This is refreshing, and gives the horse renewed life and vigor.

THE COMMON SNAFFLE BIT.

The common single snaffle bit (see fig. 7, page 31) for single or double buggy harness, is the same as the bridoon with the exception of the guards, and was originally and is still used on the saddle-horse, while the bridoon with plain rings was always used alone or in common with a carriage harness bit, or the curb bit for riding. (See bit-and-bridoon, fig. 17.) For the light buggy horse and harness, and headstall without blinds, it

Fig. 33.—PLAIN SNAFFLE.

is a most desirable piece of stable furniture. Being the king of hunting bits, it can never be dispensed with in the well selected stock and well furnished harness room in which so many men take pride. But from want of practical experience and long use, amateurs don't see "why one bit is not as good as another and a great deal better."

Figure 33 represents the position of the joint of the bars on the tongue. The close observer will examine the

tongue and sides of the mouth to see if the pinching process of the single joint has any bad or irritating effect on the tongue or mouth, and if the horse takes to it cheerfully, after a little use.

Fig. 34.—DOUBLE JOINTED SNAFFLE BIT.

CHAPTER XIII.

THE DOUBLE-JOINTED SNAFFLE BIT.

The double-jointed snaffle bit for hard pullers would be a safe bit to use, but what effect it would have could not be known without a trial. Some horses might like it and go well with it, while it might irritate others and

Fig. 35.—DOUBLE-JOINTED SNAFFLE.

promote a disposition to run away with it—for, while a bit may have certain and unmistakable properties, its effect upon the moral of the horse may be anything but

what we desire, and besides, in action it might not have the effect desired. All we can say in its favor is, as we say of all bits—try it. It is a compromise between the single-jointed snaffle and the bar bit—for, when both reins

Fig. 36.—PANTOGRAPH SNAFFLE. Fig. 37.—PANTOGRAPH IN ACTION.

are equally drawn, the bar link in the centre (which is one-third of the iron in the mouth) is square across the mouth, while the two wings are drawn back on the corners of the mouth with a pressure that may tend to either madden or subdue (fig. 35).

The double-barred snaffle, as shown in figure 36, is a severe one and designed to master a hard puller or a horse disposed to take the bit in his teeth and run away with

Fig. 38.—DOUBLE-BARRED SNAFFLE IN USE.

it. It operates in the mouth on the pantograph principle with double converging action (fig. 37). Its severity can be doubled by crossing the bars, thus having the end of the long under-bar join the left-hand guard below the

short bar, as in figure 39, while in figure 37 both ends of each bar are on the upper or lower side, where they join the guards and when in operation make less bulk in the mouth, and consequently are less severe. Before using either of these bits it should be well considered whether or not the horse needs it.

Figure 38 represents the position of a double-barred snaffle bit in the mouth, with the bar joints across the

Fig. 39.—DOUBLY SEVERE.

tongue. The pinching process of the draw on the bit as it closes to the strain on the reins, is more severe than that of the single-jointed snaffle, for the angles of the bars of the double joint with the line of the back teeth being less, the power to hold or swallow the bit is reduced.

THE WIRE SNAFFLE BIT.

Some of these fancy snaffles are made of twisted wire, which, being thin, sharp and rough, are severe and cut the mouth, rendering it callous and hard; consequently it causes the horse to keep a severe strain on the reins, and whether it be single or double-jointed, and he should swallow it, a few chucks and a saw will make an ordinary puller let go. It is a fancy bit worthy of only a junk-shop. But the objection we have to all extra iron in the mouth, is that double bits of any kind interfere with the horse's wind while at work, either in harness or under

the saddle. It is likely that the inventor of the wire bit had one or two objects in view when he made it, namely, strength and economy, and wire to spare. Strength, in having the greatest power in the smallest possible substance; economy, in his being able to make it himself without forging or costing anything for material—so that, as regards its mercantile value, it could be sold, at a profit, for three cents.

But whatever the material, when well driven with a plain snaffle bit, having double guards and hung to a plain headstall without blinds, the buggy horse is the most fortunate and should be the happiest of harness horses,

Fig. 40.—WIRE SNAFFLE BIT.

for the vehicle he draws is the lightest, his harness the thinnest, his bit (should be) the mildest, and his work the easiest of all. In fact he need not know he is in harness, and if his driver be as considerate toward his favorite absorber of ice-cream, attentions and flowers, as he should be toward his horse, we do not know but that it is the most complete, perfect and agreeable equipage in existence. The feelings between horse and driver being mutual and undivided, the voice is heard and heeded, and is always music and a charm to “the listening ear, the silent tongue and the faithful heart.” And when we consider that “the ox knoweth his owner and the ass his master’s crib,” the horse, though not named in this connection, is not exempt from his due share of the glory

and available instincts accorded him in many passages in the scriptures—for he is spoken of in Holy Writ as being a necessary figure in St. John's description of the glories of another world, while he continues to hold his own in this.

CHAPTER XIV.

THE BAR BIT.

The plain bar bit has a history of its own. In the early days of our trotting record of "2:40," handed down in both prose and song, it was used with strong pullers,

Fig. 41.—BAR BIT.

purposely trained to pull the buggy or the driver out of it by the bit. For this purpose it was preferred for its strength, and according to the disposition of the horse to pull and have his own way, it was rendered all the more severe by having several spiral twists with sharp ridges from end to end of the bar, so that by sawing it the horse should let go. In those days the trotting horse was trained to pull the buggy by the bit more than by the traces—which would not be much of a pull now-a-days, when the weight and size of the buggy, and comfort of sitting in it, have been reduced in proportion. The buggy of the present time is so narrow that, when we see two

men in one, the driver and the driven, sitting side by side, the driven is obliged to hold on to the rail behind the driver with his inside hand to keep from falling out, while the tails of his coat, for which there is no room on the seat, float in the passing air like an "old clo'" sign in a second-hand Jew shop.

No wonder that rotund widows have ceased to enjoy themselves in buggy airings, an exercise that gave their mothers such pleasure in good old times of spacious rooms and ample buggy seats, which had more room for three than the *parvenu papier maché* packing boxes of the present day have for two. The bar bit was used for

Fig. 42.—PACKING BOX BUGGY.

a three-fold purpose—that of holding the horse, steadying him in the trot, and pulling the buggy. The practice has been handed down in a direct line from other generations (patrons of the old *Spirit of the Times* of Porter and Richards' days') to the present time, and is followed up under the influence of a greater variety of bits with more or less success in individual cases. The idea was that a horse was less apt to throw up his head and break under the whip, while the steady draft was on his under-jaw, if he was purposely trained to it.

The loops on the reins to hold on by served as substitutes for traces, and the practice of setting the feet

against the bar, and holding the arms out at full length, as we have it still, is peculiarly American, and owing to common custom has become so general with buggy-horse fanciers and "fasty" women, that the majority of people think it fashionable and just the thing, or at least make it so by adopting it. It is ridiculous to see both men and women leaning back with feet hard pressed against the foot-bar, and both arms stretched out full length, as if they were hauling in a moss-bunker fishing net. However necessary this style may be in trials of speed on the track, it is certainly a very unseemly and useless position for either sex to assume in driving for pleasure and notoriety. The excuse is that "it is our way of driving, as you have yours." Well, if that were the rule in all things, professors in refined arts had better withdraw and allow the clown to have his way. If the "plebe" manifesting itself on the horse, by having the bridle hand stretched out over the withers, be all right because "it is our way" of holding the reins, there is perhaps no reason why the same rule should not hold good behind him.

Equestrian schools turn out their pupils with more knowledge than practice. They know what to do, but don't know how, when or where to do it. The school, therefore, instead of being concealed, is seen in every action, and the efforts to succeed attract more ridicule than the neglect of them. If a woman's arms are weak, she should use a powerful bit and keep her arms down. The notoriety she gains by having them stretched out, is not becoming or agreeable to a woman envious of refined and retiring habits. Were we treating the subject of horsemanship, instead of that of the use of the bit, we might give some valuable hints to ladies who would rather be admired for their ease and skill in handling the reins than of being noticed for their awkwardness and inefficiency in their management of the horse. The ease and style of the horse adds to the grace of the rider, and to

accomplish this we must use and handle him with grace and skill.

We have no doubt but that a hard puller, if pressed to his speed, will drive steadier with a bar bit in a steady hand than with any other under the same circumstances, if trained to it. But with or without rules, it is impossible for a stranger to advise what to do with a spoiled horse without trying him. Experiments with bits of various powers and qualities, by an experienced person, is the only course to pursue. But the mouth that is trained to pull the buggy by the bit, is spoiled for a woman's hand, and should not be entrusted to her skill alone. Sometimes one runaway is enough for a life-time. There is nothing more uncertain than the end of a good runaway, 95 per cent. of which accidents are the result of ignorance or carelessness of the driver; he is not likely to have presence of mind to observe rules, or to know what or how to do in the fright and excitement of a dynamite dash for life. When a horse is before wheels nothing, if possible, should be left to chance. It is bad enough to risk the bit and reins, the strength of which is sometimes the only barrier between a whole family and death. But to risk women and children with a bad or inexperienced driver, or an uncertain or strange horse, or a bit that won't hold him, is placing too much reliance on luck. We were once in a Long Island train of cars, when a horse in a buggy, on a road at right angles with the railroad, ran away, and meeting the locomotive on the track it cut the horse loose from the buggy and the whole train ran between it and the horse, and while the former was broken in pieces, the horse and the girl escaped. She had the wrong bit.

The use of the mouthing bit (fig. 1) is to gradually teach the horse submission to all ordinary bits, without using force, for when we ride or drive out for pleasure, we do not propose to contend with our horse in a trial of

muscular strength ; and in the event of a defeat on our part, run foul of another team, or be dashed against a lamp-post and left dead or seated among the splinters of a wrecked vehicle with broken bones. These are all possibilities, and such catastrophies are not infrequent. They can be traced to one or two causes : The driver, being a stranger, the horse takes fright, and not knowing the voice, or the driver not knowing what to say that the horse understands to be controlled, takes flight ; or, second, the mouth being hard and the bit or the arm powerless to hold him in before he gets under full headway, the horse becomes his own master. A few winters ago an occurrence like this took place in Brooklyn. A lady was in a carriage on her way to the Fulton Ferry. On crossing Myrtle Avenue near the City Hall, the horses took fright and ran down the hill to the East River and plunged into the slip, where the horses, carriage and passenger went to the bottom, the ice closing over them.

The heavy smell of some men is very objectionable to some horses, and they kick at and run away with them without any apparent cause. We should, therefore, have reins and bit fit and ready for any emergency, and not expose lives to the risk of the common expression, "Oh, there's no danger." But as that don't stop runaway horses, repair the broken vehicle, nor restore life or limb, we recommend timely preventives. There's always danger on wheels, either in meeting or following others, and although the best driver cannot always foresee the danger from other horses running away, he can always prevent accidents or control his own in a dash or attempt at a runaway.

A gentleman who has been an owner of horses all his life was kind enough to show us his favorite buggy horse, of which he was very proud, for in temper, disposition and style he was all that a man could expect in one horse, and the only faults we had to find with him (in our mind)

were two—one, his makers, and the other, his feeders. But as it is very difficult to find horses and owners perfect, we are not disposed to find fault. Our friend took the trouble to put on a new style of bit and nose band with crest strap (fig. 43), in which he said his horse went well, and he thought it was an improvement and peculiarly adapted to his horse's mouth and temper. This kind of torture is getting quite fashionable now, even on spans of buggy horses, whether needed or not ; but of course horses must be made to look alike by having the harness uniform in appearance. But the advantage he claimed was contrary to our ideas of biting a buggy horse. His taking to it

Fig. 43.—CREST STRAP BIT.

was the deception. The horse knew and loved his owner, and consequently submitted cheerfully to anything he did. We know what influence we have over every living thing that loves us, and what power and control we have over their wills, actions and destinies ; but, by submitting, it is not always admitting that our influences are right and used to the advantage of the influenced. And in this connection our friend's horse was willing to submit to anything, and he might as well, for the same reason that the culprit submits to the hanging process.

Such mutual knowledge and friendship as exists between a man and his horse should suggest the possibility of diminishing instead of adding instruments of torture

and restraint, especially when the additions are attended with unnecessary complications in the mouth, and the forced position and carriage of his head and neck that are another's, not his. What are ears and eyes given horses for if not to make use of them, and spare them as much as possible the necessity of instrumental management? Why go to the expense or trouble of having a veterinary surgeon's certificate that your intended purchase is sound in sight, wind and limb, if, when you use the horse, you put blinds on him to blind him?—Put him in a narrow stall so that when he lies down, tired after a hard drive and in a cold sweat, he is obliged to bend his

Fig. 44.—CREST STRAP STYLE.

knees and tuck his feet up under his brisket and let his legs cool in a crooked position and thus give him sprung knees?—Tie and curb him up in a position foreign to his formation and then drive him off his wind?—Save oats and fill him up with hay to show off your harness?—Drive him to the stable in a lather of sweat and let him stand there and dry as best he may?—Cut his tail off and then hire a small boy with an impromptu cat-o'-nine-tails to brush the flies off and keep him from running away and save the auctioneer's guarantee?—Stuff him with hay and run him off his wind?—Drive your best girl out and leave your horse in a sweat, tied to a fence till he chills, while you enjoy your hot drinks and favorite's smiles by a good fire, and then complain to the

veterinary that the horse is delicate, that your other horse don't take cold that way?—Put a strange bit in his mouth, that he is not used to, and when he runs away, bang against another team, and takes the wheels off in the most approved style in imitation of the last occurrence, sue the owner of the target shot into, for damages? Before this book goes to press we would like to hear the answers to these questions and give them for what they are worth for the benefit of equine arts and sciences.

In using these new-fangled tortures, that unfortunately don't come under the legal head of cruelty or abuse, the cultivation of the morals of the horse, through the ear, is ignored, yet if an instrument were invented with a similar double action as perfect as that of a horse's ear, a patent would be claimed and, if issued and science advanced, great benefits might follow its adoption. But, like other blessings lavished on us by Dame Nature for our convenience, we become so much accustomed to their use we fail to see their advantages or to adopt a system of education and practice in rendering their utility a benefit to our immediate purposes. We will allow that the voice is used by some men in managing horses, but the practice is so rare that we look on with great interest when we see a horse subservient to the voice of his driver. Were the practice more general and reduced to a custom, there would be nothing more singular in it than there is in driving oxen by the orders that every farm hand knows so well. If the same words were used by everybody who owned or handled horses, so that in changing drivers the horse would understand what was said, there would be no trouble about his management without the constant use of the bridle. If this system be successful in the army, where any military officer can drill any regiment, and any mule driver can drive any mule team, is there any valid reason why the horse, in his peculiar service, could not be managed in the same way with equal facility? If

the voice is familiar to a horse, he readily obeys a partial whisper. It cannot be denied, therefore, that an animal like the horse, so intelligent and ready to serve with the greatest patience, could be relieved of a great deal of unnecessary pulling and hauling, if the sense of the owner were of as high an order as the instincts of his horse, to enable him to take advantage of his hearing faculty.

Before dismissing this subject, we would remind the reader that the hearing of animals of a timid nature, such as the hare, deer, antelope, kangaroo, etc. (that have no offensive or defensive means, and whose only safety is in flight), is very acute. All animals having their ears close together are timid, with acute sense of hearing. The horse is one of this class, and it is surprising to know how he can discern the articulation of a familiar voice at almost the lowest whisper. The loud voice, that can be heard 500 yards off, is unnecessary and confusing to horses, but it is all of a piece with the mistaken idea of bawling at the slightly deaf and to persons speaking another language. The louder the voice the more difficult for some to understand what is said, for the articulation is smothered up in sound. The Indian can hear the grass grow, yet the practice is to bawl at him as if noise was equal to an interpreter. If the uninitiated only knew how low and gentle is their natural colloquial tone, and how low it is in their tribal councils, they would be surprised to find that a whisper would suffice, and this would equally serve the horse. Even to each other, most people speak too loud or pitch the key too high. The Spanish language as spoken by the Mexican Indians is very sweet and agreeable, but that by the Cubans is horrible. The ox is guided, controlled and used entirely by the voice, and it is surprising to see how he understands several different and contrary orders given at the same time, patiently listening for more while he obeys the first.

CHAPTER XV.

BAR BITS, STRAIGHT AND CURVED, WITH LIVERPOOL SLIDE.

These bits, figures 45 and 46, with straight and curved bars, are on the Liverpool slide principle and operate on the jointless Pelham plan, but differ in construction. The advantage claimed for this kind of bar bit, with the slide, is that the bar, where the guards pass through the end of it, plays or slips up and down with a fall of about half an inch, which eases the mouth, when the reins are

Fig. 45.—LIVERPOOL BIT.

Fig. 46.—LIVERPOOL SLIDE.

slackened, by letting the bit slip down from the pressure on the corners of the mouth. This improvement, by way of relief, is reasonable, but the amount of ease it might afford would depend on the horse's style and carriage. If a horse carries a very high head the pull on the reins would be downwards and the bar, instead of being drawn upward, would be drawn downward; and unless there was a check rein used there would be very little strain on the reins in ordinary driving to affect the slide.

The check rein at *A* would draw the bit up on the slide, while the rein at *B* would draw it up or down,

according to the way the horse's neck is set on his shoulders. If he be a poke, the strain is great on the upward tendency of the bar, while, if he carries his head in the air, there is no strain at all upwards, but rather downwards by the reins. The lower the head, therefore, the greater the strain—the higher, the less. The virtue of the slide depends wholly on the horse's style and the character of his action; and to use it indiscriminately, whether suitable or not, because everybody does it, is an evidence of a want of experience and judgment, and a liberty with common sense. We would say, however, that if a crowbar were used as a bit there would be some "patent" contrivance invented to ease the horse's mouth from any possible tortures it inflicted, and we would be decidedly in favor of the contrivance. It is on the principle of attack and defence in gunnery—so far the defence has it; we wish it were so with the poor, submissive horse.

For general use this bar bit has no other desirable feature besides the action of the slide for the horse it suits, and pulling the vehicle by it instead of by the traces, which by some horse fanciers is considered an accomplishment. The tendency there is in this age to get up something new to gain financially by novelty what cannot be gained by superiority, is very great, and in the equestrian sphere it is patronized by both the ignorant and uninitiated, who, having no experience of their own, use certain bits because everybody else does. To satisfy the patrons of new inventions it is a pity that horses could not have more heads, so that the owner of only one horse could encourage the inventive genius and patronize the manufacturers as they come out with their novel contrivances. As a new kind of horse cannot be invented beyond the first cross between the mare and the jack, we have contrivances and ignorance enough to make different kinds of dispositions, tempers and mouths. No

doubt we will be denounced by some horse-head-gear inventors or fanciers, but we expect this ; and, caring more for the horse than we do for his persecutors, we shall continue to defend him and take his part by declaring war against so much unnecessary interference with his mouth, till it is made of cast-iron—then we will give up the contest.

When men, dogs, deer, fowls, all animated creation and horses, fly or go out of a walk, they stretch their heads and necks out in proportion to their speed, and as much in a line with each other as possible, to ensure as straight and as direct a passage for air to their lungs as their speed requires—while the horse, from whom so much speed is exacted, is tied and bound up neck and crop to such a degree that to put him on his speed would be impossible without running him off his wind before he went a mile.

The illustrations (fig. 47) from 1 to 6, show the natural positions of the necks, heads and tails under speed. The

Fig. 47.—POSITIONS IN RUNNING.

animals with their heads and tails stretched out at full length have use for both thus held while on the run. The tails act as rudders to guide or steer and steady them, and the faster they go, as in sailing, the less action of the tail or rudder is necessary, and in case of a short turn it is, by some, switched to the right or left with a circular sweep to facilitate the sudden reverse of action of the body to balance under the strain. It will be said that so small a tail as some animals have could not affect any motion of so large an animal, but watch the trifling motion of the tail or fin of the fish that governs the fish's

motion and speed in a direct or circular motion. The greyhound is the most perfect and positive example among our domestic animals of this use of the tail, which with him is long, as in all mammal animals of prey, requiring sudden reverse of action when under speed on a direct course.

The instinct of the hare, whose greatest and most deadly enemy is the greyhound, teaches it when hard pressed to turn suddenly round, while the hound, being heavier and not expecting the sudden change of course, is unable to turn so short or check his speed, and thus

Fig. 48. STRAIT-JACKETS. Fig. 49.

passes on while the hare is making time in another direction. See the fancy head-gear and steering apparatus, as represented in figures 48 and 49; they are little short of an equine strait-jacket that inventors prepare for horses of certain tendencies that certainly have instinctive appreciations of the cruelty of the driver, and a necessity for perfect submission to the inevitable ignorance of what he needs to perform his duties long and well.

The fine bred Norman stallion, for getting carriage horses, represented in figure 50, not being put on any speed faster than a walk would bear all this lacing and binding up to a fancy position while at work, because he needs no extra supply of wind in his lungs while at his

work, but if he were tied up and put on a trot or canter the little he had would soon give out. Figure 49 shows the style of horse that the crest strap is put on and as may be seen in buggy driving, and how it tends to make bad worse. The horse's head is already set on wrong, which characterizes him as a poke, and while his nose is naturally stuck out and thrown upwards as if to sniff the fresh air, his crest, which should be convexed, is concaved, and consequently the head and neck are the very reverse of what they ought to be. But this fancy torture and Tomfoolery will have its day. Is there any sense in putting the crest strap and its accompanying bit on such a horse? One bit pulling his mouth up towards

Fig. 50.—NORMAN STALLION.

his eyes and the other towards points of his shoulders, thus at right angles. The freaks and peculiarities of nature cannot be ignored, and we are bound to heed her suggestions, study and adopt her plans and observe her laws. But the course that some persons take in this direction is as much at variance with reason as is the hobby that they ride.

CONTRADICTIONS.

Driving reins to pull back, check rein to pull up, martingale to pull down, crest and race strap to hold the nose out, curb to hold it in, and all these varieties work-

ing at the same time, tend to create a sympathy for the poor buggy horse that falls under such treatment prior to a term of regular training under the supervision and peculiar instruction of a Philadelphia lawyer.

There are no delicate hints possible to convey to the horse by a bar bit in any form. It is too clumsy, too unyielding, and is fit for nothing but pulling and hauling at a horse that has no mouth or idea of obedience from ordinary training.

But we must consider that the bar bit in its early introduction, for a peculiar use, was preferred by many "horsemen" on the track; it got favor in private stables from mere custom, thus becoming fashionable for all horses alike; and when fashion in the United States takes hold of people, it soon becomes despotic and controls everything, even common sense, setting judgment, prudence and necessity at defiance. This was a signal for manufacturers to rush it into the market, and thus render it common for any purpose in harness. One man who has used the bar bit all his life, could give no reason for its preference, only that "they generally use it now," but did not say that they generally have horses now that require it.

To show how far fashion controls in these days, we may state that it is fashionable to have everything about houses red—house, bricks, blinds, doors and railings. In more hard common sense times, it was customary to have scrapers at the lowest step at a hall door, to scrape the mud off our boots. Now it is fashionable to have none, but to trail the mud up to the door-mat in the vestibule, and there deposit the street dirt, which is horse manure. There is no end to the senseless and growing disposition to follow after and be governed by fashion in its most unreasonable moods and directions, for the sake of having something new. Unfortunately for the comfort of the poor horse, it is the same with the bar and some

other bits sadly on the increase. Every advocate of a new style can give a very plausible reason for using his favorite torture with a horse. He drives his own horse with some newfangled contrivance, and this is held as a sufficient proof of its excellence. The horse learns to submit to it and seems pleased. Why? Because he is a creature of circumstances and is glad it is no worse. His very nature and life is slavery and submission to his driver's will and caprice; and, as from friendly familiarity he knows and likes him, he submits tamely to anything and everything he requires him to do and endure. It is this abiding love for and faith in some men that blind and self-willed girls entertain, as they find to their sorrow when too late; but the horse has no alternative but to submit to physical if not to moral force.

If the horse has gone well with one bit, another is sometimes added, and when he learns to go gently with that, it is praised up as having peculiar virtues, that no doubt are in the horse, not in it. But innovations, changes and alterations, under the title of "modern improvements," are not always improvements, though they are now all the go, and the actual benefit to the horse and the pleasure and convenience of the driver are often sacrificed to this national rage after something new in fashion and change, not unfrequently for the worse. It is this that tends to spoil horses, for whose management all the neighbors have an infallible remedy. As the experienced Scotchman once said: "Everybody con minage a baud weefe but the mon's goot er." The best cure for a spoiled horse is to ask a reasonable price, and for "the baud weefe" a divorce seems to be the most effective.

CHAPTER XVI.

CARRIAGE BAR BIT WITH CURB AND BEARING REIN.

This bit with the plain bar, as represented in figure 51, is generally used on the carriage, cab and coupé horse indiscriminately. But if used with a check rein, buckled on at *A*, and the rein at *B*, *C*, *D* or *E*, while the curb and cheek strap are fast at *F* and *G*, there are more confusing guides and restraints than a fine mouth should be subjected to—for there is a contrary action here that con-

Fig. 51.—CARRIAGE BAR BIT.

fuses any horse of ordinary intelligence, and instead of replying to delicate touches, that the rein alone should convey, he throws himself aimlessly on the mercy of the driver and waits to be pulled about by strength of hands rather than by magic touches or appeals to his intelligence. If the check rein be used on a bit with the Liverpool slide, the slide cannot act, for the check is supposed to be always on the strain, and this would keep the bit always tight up against the corners of the mouth. The check, therefore, should never be used on this bit, *i. e.*, if the slide is intended to operate.

The curb at *F*, the check at *A*, and the rein at *B*, *C*, *D* or *E*, neutralize each other's action in proportion to the way the horse carries his head, and the slot the rein is in ; consequently a hard pull, instead of a mere hint, is necessary and to which the horse should not be trained. Two reins pulling together at the same time and from different directions on the same bit is not only at variance with all rules of equestrian skill and equine management, but is a violation of principle in either moral or physical guidance, and, in the government of men or families, mutiny is the consequence. There is only one helm necessary to steer the ship, and, indeed, less force than is used in holding some horses. Almost every man we see behind from one to four horses uses both hands with the reins. This, with a single horse, causes an imperceptible sawing or unsteady action of the bit in the mouth, occasioned by the motion of the body as the vehicle jolts, which, although perhaps not known to the driver, nevertheless exists, and is so keenly felt by the sensitive mouth that it keeps the horse on the watch all the time to know what it means and what he is to do next. It may be argued that a horse should not have such a sensitive mouth ; this as you please—you can take your choice.

If the reins are on *C*, *D* or *E*, they work the curb, so that there are three different operations of the bit going on at the same time on the mouth—namely, the curb, the check rein and the driving rein. We will allow that to get up style in the horse these three are necessary, and if so, the horse should be trained to the most delicate hint from either one. The constant strain of the check rein at the rings that the rein is fast to, operates like a twitch on some horses not well set up for harness ; it dissipates the sensitiveness of the mouth, and a delicate touch of the reins is not so keenly felt, and a check or hard pull follows. These errors in driving are on the same prin-

ciple of using both curb and bridoon at the same time with the saddle-horse, and this by men of intelligence in other respects. Most, and, indeed, all men are fools in something, and the fools in this respect at the present time can be counted by the score. It would be interesting to know what ideas such riders and drivers have of the separate uses of such bits, and the moral effects of their operations on the horse, either separately or together.

The man who used to play a half dozen different kinds of musical instruments together at the same time is dead, but the men who use three or four different kinds of steering gear on a horse at the same time are not, and many such riders have broken their own or their horses' necks since Brown broke his on the Beacon course some forty years ago, when the horse, mistaking the action of the bit for what it didn't mean, stopped short at the first hurdle, and threw Brown headlong over his head and hurdle, too, and broke his neck. We have plenty of Browns. The bad management of the bits is a most fruitful source of this kind of accident to novices in the art of riding who would be horsemen.

CHAPTER XVII.

THE CARRIAGE BIT-AND-BRIDOON.

There are several styles of the carriage bit, but all tend to operate in the same way for the same purpose with more or less effect. Each bit (as illustrated in fig. 52) is made with different degrees of power in itself while operating together. By having the reins buckled on the

Fig. 52.—CARRIAGE BIT-AND-BRIDOON.

upper or lower slot in the guards the severity of the curb is regulated to suit the mouth. The arch in the bar is more for the play of the tongue than for action on the palate, as shown in the cavalry bit. But the tendency now is to use this bit on the carriage horse with a plain bar without the arch or lever, which, being so slight, has no power. When the bridoon is used with this bit the check rein is put on the bridoon, and thus the bit is relieved of so many contrary actions, as represented in the carriage bit on the Pelham plan. This bridoon bit is used on the carriage horse with a check rein only, and is not used in any way in guiding the horse.

OPERATION OF THE BRIDOON.

The operation of the bridoon with its reins is to bridle the horse up and give him a stylish carriage and handsome appearance in keeping with the carriage and harness and the intention of the owner, who may have spent from \$1,000 to \$6,000 on the turnout.

STYLE VS. BRIDOON AND CHECK REIN ABANDONED.

Some chicken-hearted men have abandoned the use of the bridoon and check rein on the ground of sparing the horse the restraint it puts on him while in harness. But the horse that it is put on is generally a carriage horse used for pleasure, and that, perhaps, during only two or three hours daily. As he is not driven at a speed faster than a jog-trot in the streets and parks, where style is as necessary as the airing itself, and the entire equipage is supposed to be as ornamental as useful, the carriage horse can as well submit to a little restraint, for that short time, as can the coachman who drives him and is squeezed into a pair of skin-tight buckskin breeches, English cattle dealer's "tops," a stand-up collar, white choker, and stiffened into a straight up-and-down position—as if seated in a garrote—all of which indicate a certain degree of stiffness and shoddy uneasiness that is check enough for that part of the equipment, and certainly to us unenviable, but strange to say does not excite any degree of philanthropy in his favor.

OCCUPANT OF THE CARRIAGE.

When we take into consideration the adopted position and feelings, if not airs, of the madame who may be a novice in the art of lounging in a carriage for display, she may be under like restraint with the horses and driver, and perhaps of the three—the horses, the driver

and the driven—all having their respective parts to play, the horses suffer least.

PASSING IN REVIEW.

In fact all three must be educated and trained from early youth to perform their respective parts with that natural ease peculiar to those whose familiarity with their stations, habits and parts, renders their positions and their movements easy, and makes them admired alike for their embellishments and their grace, so that in passing in review before those whose admiration, if not wonder, they would challenge or desire to excite, they may do so with the consciousness of the ease and dignity of those whose sphere in life they desire to represent.

JEWELRY OF THE TURNOUT.

But the master part of this gorgeous turnout and passing show is the style, carriage and management of the bits, and their adaptability to the horses and the occasion. The bit and its appendages are the jewelry of the day on exhibition, and this cannot be done to perfection without the horses to match.

BREEDING FOR THE CARRIAGE.

Peculiar breeding for the carriage is as necessary as for the track, field or race course, and those who discard the bearing rein on account of its severity had better select horses to suit their purpose without it; and if they are not judges, let them find some person who is, and if the horses are naturally well set up with a good forehead they may wear, but not use, the bearing rein, thus sparing their owner's feelings.

MATED, NOT MATCHED HORSES.

Horses that are put together as a team because they are the same height and color or look alike, and have

been driven with different and various bits yet don't go well together, are numerous and ought to be divorced. This may be because, although they are mates they are not matches, and while one is worth \$500 the mate is not worth \$50. If horses are not well matched in every respect, especially in the mouthing, they must be driven with different bits, and the length of the inner or outer rein regulated according to the disposition of one or the other of the team to pull with or against each other, and thus fall into "lugging."

SELLING ILL-MATCHED TEAMS.

Selling the better horse first, at auction, to get a big price to start with, so as to regulate the price of the mate, is a common trick, and it frequently "takes," for which the purchasers pay dearly.

SMALL PER CENT. OF CARRIAGE HORSES.

Only about five per cent. of the horses we see before carriages in the parks are born carriage horses ; and as for the rest, give us the carriage and harness and we will say nothing about the horses for that purpose.

HORSES, CARRIAGES AND HARNESS.

The carriages and harness are a credit to the respective artisans, but the horses reflect discredit on the owners. In fact the supply is not equal to the demand ; and it seems to us unaccountable that, notwithstanding the high prices that men are willing to pay, horses are not properly bred for the carriage, so that the objectionable severity of the bearing rein might be reduced to a minimum and the desired style ensured. Truck and cart horses have the bearing rein thrown loosely on the hames—not for style, but merely to keep the horse from reaching down to nibble at things. Some of the Norman and Clydesdale

breeds, now becoming so numerous in our cities, have a fine carriage, and, like a well-proportioned man, don't require any artificial means to set them up.

STOCK TO BREED FROM.

These are the animals to breed carriage horses from by proper crossings, and as men take pride in selecting handsome harness and showy bits they must depend on fine horses to set them off, and these are the breeds to draw from. The carriage horse should have his nose above the line of his back, and if well proportioned and well set up mares of these breeds were crossed with such

Fig. 53.—FLYING CHILDERS.

horses as Flying Childers, the first generation would have a style that would direct the breeder in his selection of the sire for the next crossing.

A carriage horse must have size to set off handsome harness to advantage. Everything must be in proportion. To cover up a small horse with large harness and heavy bits and headstall is as bad taste as that of a little man or woman wearing a big hat to make up for deficiency in the size or height of the body. Such a person looks like a decayed ass—his head is the biggest part of him.

BREEDING THE WRONG WAY.

We are breeding the wrong way—downward and backward instead of upward and forward—for the carriage.

NO STYLE OR GRACE IN SHORT-LEGGED HORSES.

There is no style or easy action in the fat, big-bellied, short-legged, bob-tailed cob for harness, and when we stroll through a first-class harness establishment and see the handsome English and home-made outfits for both riding and driving, we regret not knowing where to find horses worthy of their gorgeous perfections. No doubt there are fine carriage horses, but they are few and far between. Instead of breeding for them, they come more by chance in breeding other stock than by design, as is evident in the various points of their formation. Thousands drift into the cities that should never leave the farm or the "dirt" roads of a back country. From the stock we have we could breed to suit any service, and the carriage could be suited as well as the plow. The hunter that carries 225 pounds is bred for the purpose, and he brings his price.

The necessary points in a carriage horse can be bred for and produced as well as for the extra size of the most desirable roasting pieces of mutton or beef, but perhaps it requires the foresight, the patience, science and perseverance of an Englishman to accomplish this. The English have brought breeding of all domestic animals to a state of perfection. Every shape, point and size that they have developed designedly have their unmistakable uses and values. And as the English for hundreds of years had been groping in the dark, bringing all sorts of domestic animals from various parts of the world as means to certain ends, in which they have most certainly succeeded beyond the wildest expectations of their enterprising progenitors, we should not boast of success, considering that we are working in the light and on the material that they gave us.

Englishmen of the present day have grown out of the ignorance, manners and habits of a barbarous race, clad in skins of wild animals, fighting their way through

more powerful and more civilized nations with bows and arrows and the primitive weapons of the dark ages to establish a government and a nation with laws worthy of civilized man, while we in America have grown out of the highest state of cultivated civilization that came over and was landed on our shores by every vessel from the first voyage of the "May Flower" to the last of the "Oregon." There is a vast difference, therefore, between the difficulties and the progress of the last two thousand years and the last two hundred. We have nothing to do but improve upon and sail the boat that England and other nations built, and as we have all the material necessary for every enterprise, and imported artizans to do the work, we have nothing to do but to take their hints and improve on our mother's precepts, example and skill. Let this principle be adopted in the breeding regions of the West, and eight or ten years hence our carriages will be as admirably adorned with suitable horse-flesh as our tracks are now.

THE CARRIAGE HORSE.

The carriage horse, as represented in figure 29, can be so formed and set up by judicious breeding that there would be no necessity for restraint from the bearing rein, for his head is now where the bearing rein would have it in its most exacting requirements; and thus a horse can be made to order to suit the harness instead of the reverse. The harness is all right, but the horses are not. It awaits the advent of a worthy wearer. It is the "lunk-head" with dull eye, big belly full of hay to fill out the harness, banged tail to make believe thoroughbred, check rein drawn to excess to deceive the uninitiated and affect carriage horse airs, and his tongue hanging out at the side of his mouth, that is entitled to our sympathy—for, instead of being in front of a plow or farm wagon, he is the wrong horse in the wrong place, and

quite as remarkable to us as the sun-burned farm hand in his cow-hide boots is in a fashionable city thoroughfare. Surely, breeders who understand how to select the stock would find it a profitable business to breed a dozen span of carriage horses yearly that would bring from one thousand to three thousand dollars a span when trained, and cost no more to get and keep than so many "lunk-heads?"

Before this book goes to press there will be sold at auction some eight hundred New York stage horses from which could be selected remarkably fine and desirable mares for breeding purposes. These mares have stood the batter (wear and tear) of stage work for years, and besides their beautiful and symmetrical proportions, they have proved their thorough soundness and capacity for endurance on time and stones, in their having come out of the ordeal of the most severe work that horses can be put to. There they are; they need no guarantee. The first and second cross between such mares and a Norman, and secondly a thoroughbred, well-selected racer, would be an animal calculated to encourage the bit and harness-makers in producing the most elaborate specimens of their respective arts, and the numerous bits that we now prize so highly would each be suited in a style of carriage horse that does not adorn the park equipage of the present time to any very great extent.

The lolling beauty of the gay and opulent home, whose owner needs equine judgment, perhaps, more than financial means to indulge his wife or daughter in the command of a handsome equipage, is well deserving, as a right, to such a favor. Her position and surroundings in society cannot be set off to appropriate advantage, her home embellished and her person adorned to a suitable degree of perfection in conjunction with her social position, without the opportunities that such an indulgence generally supplies. The costly dress, gorgeous jewelry and elegant furniture

of a brilliant and costly home are well enough in an indoor, narrow sphere, but in passing in review before the outer world she must be mistress of a carriage drawn by handsome horses, chosen and kept in a style and condition commensurate with her character and rank. To cater to this demand is, therefore, the duty of the breeder. The equestrian sports, pleasures, necessities and fancies peculiar to every nation have developed horses to suit their respective demands. In England and Ireland hunting developed the breeds of horses that have supplied this country, the Continent and the colonies with the best saddle-horses the world can produce. And although the Tartar and the Arab can justly claim a share in the production of the great steeple-chaser, they furnished only a minimum of the ingredients while other nations contributed their respective shares; but the Britain put them together, and the steeple-chaser is the production of this master-hand in the science of breeding from rough materials to the highest degree of perfection.

CHAPTER XVIII.

THE USE OF BLINDS ON HORSES.

The custom of putting blinds on horses indiscriminately is a great error. Carriage horses look well in showy head-gear, and handsome blinds are a great improvement to the style and general appearance of real, well set up carriage horses. But for buggy, cart, car, stage, wagon, truck and general travel they are wholly unnecessary, and as regards safety they are a detriment rather than an advantage. What do surface car horses want with blinds? Horses, like ourselves, want to see where they are going, and the horse that shies proves that

he wants to keep out of danger by the very fact of his shying.

We must consider that a horse leading an artificial life, like ourselves walking in the dark in a strange place, don't see what is around him if he has blinds on and is, therefore, naturally timid and careful. If a horse is too careful and takes too wide a circuit in shying, it is with the best intentions from his instincts. But because he does it a little too much, and more than his driver sees necessary, he should not be abused but spoken to softly and kindly, and thus encouraged, for he means no wrong. The stupid "lunk-head" will go so close to a hole that one wheel will fall into it, while the horse of intelligence will keep well away from it, but not having studied geometry he does not know the exact length of the axles and the distance necessary to keep from the danger. Man, himself, don't keep away from danger at all times, though he has the advantage of sense and reason supplied him.

The "lunk-head" is called "a family horse" that don't care where he goes and depends on his driver to look out for danger, or he expects to be pulled and hauled about and guided by the reins which supply him with all the sense he wants, while the intelligent horse that wants to see for himself is called a "shyer" that does care, and while he often over-does it he as often gets cursed at and whipped. When horses stop with some drivers they are petted and coaxed till they start; then they are whipped, chucked and beaten as if (to them) for going on. If they are to be petted for what they should not do, and whipped for what they should do, how are horses to understand it?

A shying horse and a sulky, balky horse are different. Shying is not a vice; it is more a habit than a fault, knowing that he does not mean it. There are times when a shying horse would save life if he'd only shy at

the right time and place. Our course is to chastise or correct a horse, if necessary, for doing wrong, and encourage him for doing right. If he be whipped for stopping, the whipping should cease when he goes on, and not till then.

To give a horse the advantage of seeing around him we would use a headstall without blinds. But we would make an exception of the carriage horse, for we want him for style, park show and excusable vanity, and to indulge this very harmless ambition we will admit that the carriage and coupé horse, for this reason, should have on blinds and let the the driver look out for danger.

CHAPTER XIX.

FEEDING.

As the pleasure of riding or driving depends upon the willing response to a gentle touch of the reins; if properly held—in one hand—and the effective touch of the reins depends upon the life and spirit of the horse, which should be light and airy to render him all the lighter in hand, feeding in both time, quantity and quality is a very important consideration, for on this depends the degree and extent of his usefulness, as he can thereby be rendered high-spirited or lubberly, light or heavy in hand, willing or unwilling to move on or to reply to the bit, whip, word or spur. We deem it, therefore, necessary in connection with the use of the bit, to say a few words to the reader on this subject before we part.

The mistaken ideas that some persons have about feeding themselves or others, or their horses, is the excuse we

offer for introducing a subject at the close that may seem foreign to the title of this book. But in the use and management of horses these two subjects interlace, and we cannot touch upon one without involving the sympathy of the other. Aside from the physical handling of the horse there is the vital subject of feeding, and the proper course to pursue to put the most life and strength into him and obtain the greatest amount of work or speed out of him with the least possible wear and tear. This is a subject that involves the attention and skill of marine engineers in the building and running of steamships. It is a subject which only a small percentage of livers understand in their own cases. The commonest sanitary rules are violated at every meal. There is too much reliance placed upon theory and fancy taste, and too little on judgment or reason in the daily necessity of eating. The mother allows her infant to nurse until the overloaded stomach rebels and throws up the surplus. Like the boiling caldron it must either boil over or burst, and because nature comes to the relief of the child we are told that she tells the mother what to do. But while thousands of tiny and untimely graves bear evidence of the truth of this theory, the mothers of one generation after another are willing to test the virus of this cause of death and consequent grief.

We dwell upon this subject in the interest of the horse because we see the evidence on every hand of the gross errors committed in the family home as well as in the stable, and the comparison that can be drawn between two horses that are differently fed should be known best to the person interested in their use. The carefully fed Irish hunter, that takes the country as it comes from morning till night, is fed on three-year-old potato-oats and three-year-old hay to harden him and give him wind, and if he be a steeple-chaser the ownership of the challenge cup depends upon his wind as much as on his

superiority in other respects. These horses are so full of life and spirit that they become vicious in their stalls ; no stranger would venture up beside one of them without asking the groom, "Does this horse kick?" But this comes from the temper, spirit and high-strung dispositions and force that such hard and invigorating food creates, and which are necessary for these horses to enable them to perform such wonderful feats in the course of the severe and peculiar work they have to perform.

The objection to the Norman and Clydesdale breeds is in their disposition to fatten, and the evil that follows their importation to this country is the ambition of their owners to feed them to excess, as if for beef and not for work was the object in keeping them. If fattening these horses to such a degree strengthened their feet in proportion to the extra flesh they carry, there would be some reasonable excuse. But, on the contrary, it weakens the feet, and besides wearing them out in advance of the natural wear and tear of the rest of the horse, it is a loss to the owner—for the fat horse, being lazy, is consequently slower than the properly well-fed, slim and lively animal, that is ambitious to get over the ground. One load more or less per day makes a difference in the truckman's financial receipts ; but to look well, as he considers it, rather than do well is the error and where the leak comes in.

As regards the appearance of small, short-legged Clydesdales, we admire them as wonderful on account of their extraordinary roundness and weight of flesh, and their apparent unconsciousness that the only difference between one of them and a Berkshire is that one is a horse and the other is a pig. As work horses, the greatest advantage we see in some of them is that they keep on little and live out in a straw yard all winter without suffering. Notwithstanding, we value them as a mere ingredient necessary in crossing to produce a

better and a more useful sort of horse with more lever power. For this purpose they are invaluable.

When the prize fighter is trained and prepared for a contest in which the greatest activity, strength and endurance are necessary, he is stripped of all surplus bile and fat ; but these men pursue a different course and sacrifice their interest to gratify their fancy. We never trusted another with the feeding of our horses without our personal supervision. A being akin to the man who starves himself all day, and thus loses his appetite for his dinner at night and takes dinner pills to create an artificial one, is not to be trusted with the feeding of other men's horses. Animals in their natural state go to sleep after meals. The wolf eats enough to last him two or three days, and during the hours of repose he is drowsy and stupid—not because he had his meal, but because he ate too much at once. Over-feeding horses has the same effect, and a horse in that state, whether he be saddle or truck horse, does everything reluctantly except go to sleep.

We know how fashionable women dread the approach of obesity, and with what trouble and sacrifices they try to get rid of it. But the Dutchman who puts more in his horse's manger than he can eat don't look at obesity in that light. We once rode beside a novice in the art of hunting, and at noon, when his horse gave out, he said he "could not understand why he should tire so soon for the groom said he got loose in the stable and had his head in the oat-bin all night."

CHAPTER XX.

NOW A WORD TO THE CAVALRY MAN.

The cavalry student can learn by the light of his oil lamp in a garret-room the theory of marching, manœuvring and fighting a cavalry regiment without ever having seen a horse, but it requires the skill and knowledge of a practical man of long experience to keep cavalry effective in the field. This is one of the great problems in war. To manœuvre and fight cavalry we must have it, and it requires the vigilant eye of an experienced superintending official familiar with the various dispositions, tempers, conditions and constitutions of horses, to properly care for them and to see that his orders are obeyed by the men.

Caring for and feeding all horses alike is a vital error, especially when massed in a cavalry camp exposed to every change of weather, and where the orderly sergeant has the authority to detail a man on raid duty while the horse is not fit to go out. Cavalry thus dwindles away. Horses, like ourselves, have appetites for light and heavy feeds at particular hours—one at dawn and another at noon—and properly kept horses are fed accordingly. Thus two horses requiring different hours for feeding, if not different food, are not fit to go together as a span. They are mates but not matches, in constitution at least. If they don't replenish their strength together, they should not be made to exhaust it together.

In the absence of a commissioned veterinary surgeon to a regiment, with higher authority than the captains and commander over the care of the horses, thousands died, were shot or left behind on raids in our late war. We did not see that West Point officers knew more or cared more about the individual care of cavalry horses than the men who rode them. Their orders were more in the way of military positions, regulations and discipline, than

such sanitary necessities and rules in the care of the horses as would keep them sound in the camp and effective in the field. Causes of the dwindling away of cavalry in war can be counted by the score, and for one cause on the battle-field there are five in camp and on the march, and where there is no surgeon with authority the waste goes on.

On Hunter's raid in June, 1864, from Martinsburgh to Lynchburgh, and on his retreat through the mountains to the Ohio river, the best horses were ridden till exhausted and then ordered shot by the rear guard. The necessity for those orders might have been avoided. There was no provision made to save the cavalry, but there was ample to destroy it. Hunter commanded. In camp or on detached service the colonel of a regiment is responsible. In an army on a campaign, the general or officer in command is responsible.

It was very short-sighted economy to appoint a chaplain to a regiment and ignore a veterinary surgeon—the most necessary man next to the quartermaster. Occasionally grooms who could bleed, wash a horse's feet or give him a ball, were employed at \$75 per month, but these men had no standing, commission or authority over the orders of the orderly sergeant to "turn out." On going on a raid of three or four days, grain was issued, and it was a common practice or order to feed sparingly at every meal so as to have something left for the last day. Thus the horse was hard-worked, stinted in his food the while, and made to carry food on his back that ought to be in his belly. Horses will do more and keep better if fully fed during the three days and go without any food on the fourth, than to be stinted, reduced and weakened by degrees during the entire four days' march. No horse will lose flesh on one day's fasting, but he will on four days stinting of food while hard-worked. Work and stint your horse and you become the raven's quartermaster.

CHAPTER XXI.

SOME UNNECESSARY TORTURES.

Many of the bits illustrated in this volume are ingenious contrivances, while they are certainly rendered unnecessary tortures by spoiling the mouth in the primary stages of the training. Some of them are calculated to break the colt's spirit, owing to their effect being through brute force, thus crushing and subduing the spirit of the pupil instead of taming it with his consent. The subdued horse, for instance, is tied fast by his halter and cannot get away, but if loosed he gallops off and is mentally and physically free; while the tamed horse is left untied and to gallop and sport about the field with his head and tail in the air, he is physically but not mentally free, for when his keeper whistles or calls him he as cheerfully comes back as he went. This is taming vs. subduing.

An exhibition of physical vs. moral power over the horse is simply evidence of the difference between art and science in his management. We prefer the latter; for the time taken to effect the former depends upon the extent of the power that the law will allow to be applied. The expert in any art or science is manifest in the ease and apparent unconcern with which he performs or accomplishes his object; and this is seen in taming, riding or driving the horse, as in everything else. But in subduing a horse with such means as are adopted now-a-days is certainly outside of justice if inside the law. In all our familiarity with the horse we never saw any that required them or could be better managed with them than with instruments of less complications and severity. Of course

horses will, if they must, go with them or any kind in a sort of way ; but they don't make the mouth, and what sense there is in making some of them, or what could make a mouth to require them, would be developed only in the horse's history. We give them, however, as samples (and could multiply them by the score) to show what it is possible to get up, and the difference between what can and

Fig. 54.—NEW STYLE OF MOUTHING BIT.

what should be used in reason—from the regular mouth-ing bit for the colt to the bit necessary for the spoiled horse or one of riper years.

Before firing our parting shot we will have a few words with the reader, as we take our stirrup-cup, about the samples of bits illustrated herewith. Figures 54 and 55 look very pretty. They are substitutes for the regular

Fig. 55.—NEW STYLE OF MOUTHING BIT FOR A COLT.

mouth-ing bit (fig. 1), and were invented and pushed into the trade as “modern improvements.” The men who heard of but never saw a proper mouth-ing bit are apt to use them. They tend to show to what extent people will go to run or ruin a good thing that may be useful and

effective to a certain extent in proportion to its capacity—neither more nor less than it should be.

The harmony in the effect of all we put on or do, in training a young horse, should be in proportion—as are the peculiar colors in a painting that make it effective and pleasing to the eye. The weight, strength and power of each part in a machine must harmonize to be effective and durable. To please a man's feelings, as well as his fancy, the tailor must make his whole suit to fit easy; and his hat and boots must be in character with the work he does or dress-clothes he wears. To please and manage the horse effectively everything on him must fit easy and with uniform pressure—for a hole less or more on a buckle, or the position of the saddle one inch more or less (thus shifting the weight where he feels it is uncomfortable), makes a great difference in the ease with which he does his work, all day.

We know how hard, if not impossible, it is to have our hat put on by another person to suit us. Yet the horse has his headstall put on with his forelock and mane all tangled up, as if anything, in any way, was good enough for a horse. He is quite as difficult to suit in the fit of his headstall and harness as we are in our clothes, and the capacity of his bit must be taken into consideration and suited to his disposition. But the tendency is to overdo a good thing. In fashion and dress it is run to excess, and certainly often to the detriment of the wearer, who, for fashion's sake, changes the whole character and grace of the person. The bustle of the present time is enlarged beyond the license and to a degree amounting to indelicacy, thus designedly drawing attention to a part of the person that neither the observer nor observed would like to name by any term by which the medical faculty knows or conceals it. We know how desirable and pleasing a little dash of scarlet or red is in a picture. On this overdone principle we see brick houses, already all red,

with blinds, railings, sashes and doors all indiscriminately painted red, thus destroying the effect that a little red would have with green ; but this would be utilizing a color that the red was intended to supplant, and thus fashion takes its despotic course and is carried even into the horse's mouth.

This is on the principle of the Scotchman's plan to create an appetite. He heard that eating a pigeon before dinner would give him one ; so, to make sure, he ate twelve, and when his hostess (who gave a large entertainment in his behalf) saw he did not enjoy his dinner and asked if he was ill, he told her the means he had used to create an appetite for the occasion on the supposition that if one pigeon would give him an appetite twelve would give him a better one. It is the same with fashions. They run into nearly everything. The extreme either way is the rule, and these inventors who, thinking that, if three tags suspended from the plate on the mouthing bit is an advantage in tickling the tongue, nine and ten, as above represented, would be better still. But the inventor has, perhaps, forgotten that figure 55 is made to use with a curb, and that a colt should not have a curb put on him under any circumstances, for it is at least from one to two years in advance of its time.

Figures 54 and 55 represent samples of some of the choice mouthing bits of the present time in the United States. Notwithstanding the universal and long standing success in training horses for the most severe and critical performances in the past, it is strange that the objectionable features of the old mouthing bit were not discovered long ago, before it was found that fashion and folly called earnestly for new things, and that any shape or contrivance with cut, color, character, shape or style would sell at a profit if well advertised. We recommend them to the hardware trade or any dupe interested in horse-flesh who has a colt to spoil.

Figure 56 has a shifting motion across the mouth from side to side, as one or the other rein is drawn, and, acting like a gag, is very annoying to the horse. Figure 57, the expansion snaffle, has only one action, as both reins

Fig. 56.—SHIFTING BIT.

are drawn—that of opening in the centre of the bar ; and, when one rein is drawn, its effect in the mouth is so tormenting as to make a horse mad enough to do anything.

Figure 58 is of a piece with others. Its power depends on which ring the reins are buckled on. The lower down the ring is that is used, the greater the power over the

Fig. 57.—EXPANSION SNAFFLE.

horse—for the whole bit being inflexible, the strain on the lowest ring throws the arched bar hard against the palate and thus forces the mouth open. Figure 59 represents the best made and handsomest bit of its class we ever

saw. It is a credit to the manufacturer, and as a cavalry bit, so far as its power goes, it has no superior for the horse and hand it would suit.

Fig. 58.—FORGET-ME-NOT.

If, by anything we have said in this volume denunciatory of the use of any bit, we may injure its manufacture or sale, we have done so in the interest of the horse and

Fig. 59.—A FINE CAVALRY BIT.

his owner, and not in our own, nor to the intentional prejudice of any individual.

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