

## MODERN HORSEMANSHIP

## Modern Horsemanship


Riding and Training
br means of
Pictures from the Life

AUTHOR OF 'HOW TO RIDE,' 'A SYSTEM OF SCHOOL TRAINING FOR HORSES,' ' THE GALLOP,' ETC. ETC.


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THIS WORK

IS DEDICATED TO

## THOMAS GIBSON BOWLES

BY HIS FRIEND

THE AUTHOR

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## MODERN HORSEMANSHIP.

## PART I.-RIDING.

CHAPTER I.-INTRODUCTORY.
For our purposes, we shall consider as the Forehand of the horse all that part which is in front of the saddle ; that is, the head, the neck, the shoulders, and the fore-legs. The Hind-quarters will be understood to embrace the croup, the haunches, and the hind-legs. In the Middle-piece are the back, the belly, and the sides.

The object of the rider will be to acquire a firm and easy seat, from which he can control the movements of the horse by means of the reins and his heels. For it is not by the reins alone that the rider can demand obedience from the horse; the animal must be taught to answer the application of the heels before it can be placed in the positions from which it is able to give prompt obedience to
the rider. The reins will act to direct the forehand and to restrain the horse, the heels will incite action and govern the movements of the hind-quarters. The hand and heels, acting together, will collect the forces of both extremities, so that they may be under the immediate control of the rider. To have the horse light, easy, and obedient, the forehand and the hind-quarters must work in unison; then the effects of the bit will be felt by the mass, and the action of the heels will influence all the parts. But if the horse be not collected, the forehand would turn at the indication of the bit, while the hindquarters would follow the original direction, until they were forcibly dragged after the forehand; or, in answer to the heels, the hind-quarters might be thrust upon the unprepared forehand, and make that part heavy and constrained in action. Of course at liberty the horse requires neither reins nor heels to direct and control its motions, but when it is mounted, and its impulses are checked and thwarted, the animal obeys those indications of the rider that it understands; so when the forehand is pulled in a certain direction, and the hind-quarters receive no orders, the latter part will not conform its movements to those of the disconnected forehand in a manner that will give light and easy action. Each extremity of the horse must be pre-
pared, by the aid that governs it, for every movement of the other ; and the forces of the forehand and of the hind-quarters must be so collected that they will act together.

These are the general principles of horsemanship, and they must be understood and practised before the rider can expect to manage his horse. In the Second Part of this work the subject of collecting will be explained in all its details; for the present the reader will be called upon to acquire those rules only that are necessary for riding a horse broken in the usual manner.


[^0]CHAPTER II.-TO MOUNT.

TiIE usual method of mounting is for the rider to stand with his left side opposite the near (or left) shoulder of the horse : with the left hand, in which the whip and reins are held, he seizes a lock of the mane ; raising the left leg, he inserts the foot in the stirrup by the aid of the right hand; leaving the ground by a spring from the right foot, assisted by the hold of the mane in the left hand, he rises until the left leg is straightened, having seized the cantel of the saddle with the right hand to steady himself ; withdrawing the right hand he passes the right leg over the back of the horse, and sinks into the seat.

To my mind there are many objections to this mode of mounting, the principal being, that the left hand, entangled in the mane, cannot use the rein for the purpose of checking the horse ; that the rider, standing at the shoulder of the horse, may be overturned by a movement of the animal, and perhaps be dragged by the stirrup, or be thrown under the

iron-shod feet; that the pull upon the cantel may turn the saddle; and that the right arm is taken away, to permit the right leg being passed over the back of the horse, at the moment its support is greatly needed.

For those who mount with the stirrup I suggest the following method, which is free from all of these dangers. ${ }^{1}$

Let the rider stand opposite the girth, facing the near side of the horse : holding the reins in his right hand, he should with that hand take a grasp of the saddle on the pommel or just back of it ; then let him insert the left foot in the stirrup and take a lock of the mane in the left hand; aided by the grasps upon the saddle and the mane he should rise from the right foot and take his weight upon the left leg straightened in the stirrup, then carry the right leg over the back of the horse, and sink into the seat. By following this mode the horse may be readily checked by removing the right hand from the saddle ; the left foot will come out of the stirrup if the horse moves forward before the rider has left the ground from his right foot; the support from the right arm does not require to be withdrawn to pass the right leg over the back of the horse, and there is no danger of pulling the saddle from its place, as the rider may

[^1]mount in this way without girths. To dismount, by the method I recommend, the rider will take the right foot out of its stirrup, seize the mane and pommel as in mounting, take a bearing upon the


The Saddle.-1. The Pommel. 2. The Cantel. 3. The Flap. 4. The Skirt. 5. The Pannel. 6. The Stirrup. .7. The Stirrup-Leather.
left stirrup, carry the right leg over the back of the horse, and, supported by the hands, gradually let himself down until the right foot is planted upon the
ground, when the left foot will be withdrawn from the stirrup, and, after he is assured of his footing, the holds upon the mane and pommel released.

But a rider of ordinary strength and agility should not require the stirrup in mounting or dismounting. To mount without stirrups ${ }^{1}$ the rider should stand facing the near shoulder of the horse : with the left hand he will seize a lock of the mane, half way between the withers and the ears; and with the right hand, in which are held the reins, he will grasp the pommel, the thumb under the bow, the fingers extended toward the ground on the far side; springing from both feet he will take his weight upon the straightened arms, and from this position he will carry his right leg over the back of the horse, and sink gently into the saddle. When the seat is secured, the holds upon mane and pommel will be released. In this manner he may mount the most restless animal, for after he has taken the grasp upon the mane and the pommel the horse cannot prevent him reaching the saddle ; and it is easier to mount the horse, by taking advantage of its motions, when in action than from a halt. In mounting the moving horse in this manner, the rider should be careful not to spring with too much vigour or to throw his body too much over the horse, as the

[^2]movement of the animal aids him in rising, and the more rapidly it goes the less of a spring will be required.

To dismount without stirrups, the rider will take the holds upon the mane and the pommel, as in mounting; then, leaning forward, he will take his weight upon his arms, throw the right leg over the back of the horse, and gently let himself down to the ground, releasing the holds upon mane and pommel when he is assured of his footing. To dismount from the moving horse, he will reach the ground prepared to take a few steps in the direction the horse is going, just as he would leave a tramcar in motion. In dismounting without stirrups, it is necessary to keep the reins in the right hand, so that there may be no danger of being thrown under the feet of the horse in the eftort to stop him, as might happen should the reins be held in the left hand.

The rider should practise mounting and dismounting upon the right or off side of the horse, as well as upon the usual side. Some men who have been accustomed to ride for years would find it difficult to mount upon the off side should occasion require it.


The security of the rider's seat depends upon the perpendicular application of his weight, the grasp of his thighs, and the friction of the parts touching the saddle. He must therefore have a seat that will permit him to bend the upper part of the body with the motions of the horse, that will permit him to have the best use of the muscles of the thighs, and that will give him as many points of contact with the saddle as these other conditions make possible.

A man can have but one seat for all kinds of riding, for any change from that which is above described must be for the worse.

To obtain his seat, the rider will, upon reaching the saddle, take his weight upon his buttocks, keep the body erect, the loins slightly hollowed, the shoulders back, and the chin drawn in ; with the inner or flat surfaces of the thighs, he will take every point of contact possible from the knees up, with such a result that about one-third of his weight will be taken by those parts, the remainder being

[^3]supported by the buttocks. The upper part of the body must be held without stiffness, and should be ready to bend in any direction upon the hips; but the grasp of the thighs is not to be disturbed, and from the hips to the knees there should be no motion or changes. The lower part of the legs, from the knees down, should fall naturally, and should be completely under the control of the rider, in order that the indications of the calf and heel may be given with precision.

From this seat the rider should practise bending the body forward, to either side and backward, without disturbing the grasp of the thighs or moving the feet. Then, with the body erect, he should, keeping the thighs close to the saddle, exercise the lower parts of the legs, until he finds that he can use them without interfering with the seat or disturbing the carriage of the body.

The stirrups must be adapted to the seat, not the seat to the stirrups. The right length of the stirrup-leathers will be found when the toes, placed in the irons no farther than the balls of the feet, are slightly higher than the heels. The object in elevating the toes is not to make rigid the muscles of the legs, but to permit the calves of the legs to be applied to the sides of the horse without giving unintentional scratches with the spur.

## CHAPTER IV.—THE SNAFFLE BRIDLE.

Before one can excel in horsemanship he must become ambidextrous-he must learn to use each hand with precision, force, and effect; otherwise both he and his horse will be but half-trained, and the movements to one side will be made with less clearness than those to the other side.

The beginner should be mounted upon a quiet horse that is light in the mouth, and he should use a simple snaffle bridle. He should hold a rein in each hand, the little finger towards the head of the horse, the thumbs held near together above the pommel, the nails towards the ground. The elbows should be close to the body, for if they are thrust out the rider cannot have that delicate touch upon the mouth of the horse that is so necessary. The hands will be held high or low as the horse holds his head low or high, and the first thing the rider should discover for himself is the height at which his hands should be held to insure his horse moving properly.

If the horse throws up its head, and is awkward in movement, the rider may be assured that he is holding the reins too high. If the horse lowers the head, and leans upon the hand, the reins should be elevated, and the legs closed against the sides of the horse, so that the hind-legs will be carried under the mass and relieve the forehand.

The tension upon both reins should be even, and only strong enough to keep the rider in communication with the mouth of the horse.

To put the horse into a walk, the rider will close in his legs and take a light feeling of both reins, then he will press the calves of his legs against the sides of the horse and at the same time yield the hands sufficiently to let the horse advance at a walk. When the horse moves, the reins will be drawn until the mouth can be felt, and the rider will keep his legs near the sides, to prevent, by their pressure, when necessary, the animal coming to a halt.

Before a change of direction is made, the horse must be prepared for it by the rider collecting the forces of the animal between his hand and heels; the latter first acting to bring up the hind-quarters, the hand meeting the impulse given by the heels, so that, while the rate of speed is not affected, the extremities of the horse are ready to work in unison. These applications of the aids are to be
made gently, and it will be by practice only that the rider will be able to employ them properly.

To turn the horse to the right, the rider will draw the right rein towards his body, and measure its effects by the left rein, so that the turn will not be too short, and that he may keep full control of the movement ; after the forehand answers to the bit, the rider's legs will be closed, the left rather more strongly than the right, so that the hindquarters will follow the forehand, and not be thrown too much to the left. The turn to the left will be effected by the opposite aids in a similar manner.

To bring the horse to a halt, the rider will gently close in both legs, and increase the tension upon the reins, releasing first the pressure of the legs and then the tension of the hands, when the horse has come to a stop.

Before the beginner undertakes to ride the horse in a pace faster than a walk he should be perfectly assured in his management of the reins, and should in the manner above described move the horse in circles and in figures of eight, changing the aids, in the latter exercise, at the points where the changes of direction take place.

During the lessons in the walk, the rider should take pains to confirm himself in the proper seat.

The body should be erect, but easy, and while it is not necessary or desirable that a very firm grasp of the thighs should be maintained, they should be held in the proper position, with the flat parts against the saddle, and the points of the knees turned towards the horse. The feet should bear enough weight in the stirrups only to hold them in place, and if the seat is right the feet will be found parallel to the sides of the horse. In turning to either side, whether at the walk, the trot, or the gallop, the shoulder of that side will be retired, more or less depending upon the speed and the angle of the turn; and in all circles the inner shoulder should be retired and the body inclined towards the centre, depending in extent upon the speed with which the movement is executed and the diameter of the circle. In turning to either side the rider should avoid the fault, that is common with most beginners, of releasing the pressure of the outside knee; and he should also guard himself against leaning forward at any sudden and unexpected movement of the horse. As a rule, the rider should lean forward if the forehand rises, and should lean back when the croup rises. So, when a horse rears, the rider should lean forward, but the body should be carried back when the horse kicks or stumbles. If these instructions are borne in mind, the rider will
in time bend the body with the motions of the horse without being aware of any mental effort, and it is only by such practice that one becomes a skilled rider. I do not mean, by what I have written above, that the rider should keep his body swinging like a metronome. It is only when the motion of the horse is vigorous enough to demand a corresponding motion on the part of the rider, to keep his equilibrium, that the body should be moved; but the rider must be ready at any moment to make the bend of the body, and it is only practice and presence of mind that will bring this faculty to an instinct.

To put the horse into the trot, the rider should first demand the walk. Then he will close his legs against the sides of the horse, and take a light tension upon the reins, in such a manner as not to quicken or retard the pace. This application of the aids will serve to collect the horse, and when this has been effected, as will be perceived by the more vigorous action with which the walk is performed, the horse will be urged to greater exertion by an increased pressure of the legs or by a tap of the whip behind the girths, and the hands will give sufficient freedom for the animal to move forward in the trot.

The rider will endeavour to keep the pace even
and regular, and will avoid all violence in the application of the aids. His aim should be to see with what light touches upon the reins he can control the horse. The more perfectly 'the union' between the forehand and the croup is maintained by the combined action of the hand and heels, the lighter, easier, and more graceful will be the pace.

In the trot, the horse should be ridden in circles and in figures of eight, by the same application of the aids as in the walk. Before a change of direction is made, the horse should be collected between the heels and hands, but without retarding or accelerating the pace.

To bring the horse to a halt from the trot, the rider will first collect the forces; then, by a continued pressure of the heels, followed by an inward tension upon the reins, he will bring the horse to a walk; by the same means it should then be brought to a stop, when the hands will release the tension upon the reins, and the legs be withdrawn from the sides.

During the lessons in the walk and in the trot, the rider should endeavour to obtain a seat that is quite independent of any support from the reins, and until he has accomplished this he should not make use of the double bridle.

## CHAPTER V.-THE DOUBLE BRIDLE.

In the double bridle we have the curb bit and the snaffle. It is with the first of these that the horse should be habitually ridden, as it acts upon the lower jaw of the horse, and gives the rider greater control over the animal. The snaffle is merely an aid to the curb bit, and should be placed well up in the corners of the mouth. The curb bit should be arranged so that it will take a bearing upon the bare bars of the mouth,-say half an inch above the tusks of a horse, or one inch above the corner teeth of a mare. The mouth-piece should have a liberty for the tongue, so that the bit may take effect upon the bars of the mouth. The size of this liberty, or port as it is called, should depend upon the size of the tongue of the horse. If the horse have a thick tongue the port will be made correspondingly high; if the tongue be small, the port should be decreased, but the mouth-piece should not vary greatly from the pattern known as the 'Melton.' If the horse have a clean head, the mouth-piece should be wide enough only to give
the branches free play; but if the lips be thick, as is often the case in coarse-bred animals, the mouthpiece should be roomy, or the branches will pinch the lips against the curb chain.
The curb bit is designed to act as a lever of the second class. The curb chain, passing from the upper-arms under the chin, gives to the upper ends of the bit a fulcrum ; the power is applied through the reins to the lower brenches of the bit, and the weight or effect is felt upon the bars of the horse's jaw. With loosely fitting bearings upon the yielding head of a horse, it is impossible to secure all the power of the lever, or to accurately give the proportions. Generally speaking, the upper-arms of the bit, from the centre of the mouth-piece to the point where the curb chain takes its bearing, should be from one and three-quarters to one and seveneighths inches, depending upon the depth of the jaw. The branches should be long or short, as the rider wishes a mild or a severe bit. If the bit be too mild in its effects, the rider runs the risk of encouraging the animal to bear upon the hand. But, except with a skilled horseman, it is dangerous to have a severe bit upon a light-mouthed horse that is high in the forehand. If the branches be no longer than the upper-arms, the power applied to the mouth of the horse cannot be greater than


The Bit.
I. Upper arm of curb bit.
2. Branches of curb bit.
3. Port.
4. Curb chain hook.

The Cavesson.
r. The ring for the longe-line.
2. The side-lines.


The Bridle.
I. The curb bit.
2. Curb chain.

3 Lip strap.
4. Curb rein.
5. Snaffle rein.
6. Snaffle bit.
7. Throat lash.
the pull upon the reins, and the only advantage such a bit has over a snaffle is that the power will always be applied in the right place. As the branches are lengthened, the power of the bit is increased. But as it should be the intention of the rider to teach the horse to yield to the slightest touches of the hand, he should not depend too much upon the power of his bit. If the branches are four and a half inches long, the bit will be powerful enough to teach the horse to yield the jaw, and yet be not too severe for ordinary riding. But every horse should be ridden in the bit that best suits it, and nothing but trials will show what that bit may be.

The curb chain should lie in the groove under the jaw of the horse, fitting closely, but not so as to pinch the horse before the reins are drawn. The curb chain should not be loosened or tightened to give a mild or a severe effect to the bit: but the branches should be altered to meet the case.

No double bit will supply the place of the curb and snaffle bits; and no martingales should be used, as they prohibit a light hand, and interfere with the action of the bits.

## CHAPTER VI.-HANDS AND LEGS.

## THE WALK-THE TROT-THE GALLOP.

In riding with the double bridle, the reins should be carried in one hand, and the other hand will assist. By custom, derived from military horsemanship, the left is the bridle hand, but the rider must be able to use the right with equal skill. There are various ways prescribed for holding the reins, but I prefer the following. In the left hand : the little finger dividing the curb reins (the left rein undermost), the middle finger dividing the snaffle reins (the left rein undermost), both sets carried up through the hand, clasped by the thumb against the fore-finger, and the loose ends falling over the knuckles. The hand should be held directly in front of the body, the little finger towards the ground, the thumb pointing between the ears of the horse. The right hand should be carried upon the loose ends of the reins, ready to give assistance to the bridle hand.

To shift the reins into the right hand, it will be
placed in front of the left, the little finger will clasp the right curb rein, the third finger will clasp the left curb rein, the middle finger will clasp the right snaffle rein, the fore-finger will clasp the left snaffle rein ; the left hand will then pass the reins into the right, the thumb of which will secure them against the fore-finger, and the reins will be held in the right


The Bridle Hand.
hand in exactly the same manner as they were held by the left. (See Cut of Shifting the Reins.)

If the change of reins from the left hand to the right be but for a short time, they may be shifted in the following manner. Turn the left hand so that the finger nails are towards the ground : then pass the right hand in front of the left, and drop the
fingers of the right hand through the reins so that the first finger divides the curb reins, the third finger divides the snaffle reins. This is a very rapid method, but it will be seen that the position of the fingers with regard to the reins are changed, and the hand has not nearly so much power. To transfer them back to the left: the left hand is passed in


Shifting the Reins.
front of the right, and the fingers are dropped through the reins, so that they are held in the left hand as at first.

In riding in the double bridle, the two reins of the same side should never have an equal tension. That is, if the curb rein is acting, the snaffle rein should be loose, and vice versâ. If, then, in riding
upon one bit it is desired to have the effect of the other, the bridle hand will yield as the aiding hand takes up the reins of the other bit. The horse will be ridden in the curb bit, and the snaffle bit will be used to elevate the head, and to inaugurate the bends and turns before the horse answers to the indirect curb rein, as will be hereafter explained.

To put the horse into a walk, the rider will draw the curb reins until he can take a feeling upon the mouth of the horse. He will then close his legs against the sides of the horse, and make gentle vibrations with the curb reins, until the animal yields the under jaw and sustains its head without support from the bit. The horse is then in hand, and ready to proceed. ${ }^{1}$ Continuing the pressure of the legs, the hand will yield sufficiently to let the horse proceed at a walk, and as soon as it begins the movement the hand should resume the feeling upon the mouth, while the rider's legs prevent the horse coming to a stop. The tension upon the reins should not be constant, but by a series of little touches the rider should keep control and endeavour to make the horse's jaw pliant, yielding the tension upon the reins, by a slight movement of the hand whenever the horse yields the jaw. If the horse carry

[^4]the head too low, and will not raise it in answer to the curb-reins, the bridle hand will be advanced for a moment, and the right hand pulling the snaffle reins from below upward will induce the animal to elevate the head, when the tension upon the curb reins will be resumed.

To turn to the right, the right hand will bend the head of the horse in the proper direction by the right snaffle rein, and the bridle hand will be carried to the right, so that the left curb rein is borne against the left side of the horse's neck. After the horse enters upon the new direction an even tension will be taken upon the curb reins. To turn to the left, the reins will be shifted into the right hand ; the left hand will bend the head in the new direction by the left snaffle rein, the right hand will be carried over to the left, so that the right curb rein is borne against the right side of the neck of the horse, and after the horse has entered upon the new line the bridle hand will resume an even tension upon both curb reins. In time the horse will learn to obey the indication of the indirect curb rein thus given, and the use of the snaffle will gradually be abandoned, and the horse will be turned to either side by the left or bridle hand, carrying the reins towards the side upon which the turn is to be made. In turning, in the double bridle, the legs will assist
the hands in the manner described in the fourth chapter, that is, both legs will close against the sides of the horse, the outside leg a little more strongly than the inside.

To bring the horse to a halt from the walk, the rider will close his legs against the sides of the horse and draw the reins towards his body, releasing first the tension upon the reins and then the pressure of the legs when the horse has come to a stop.

To put the horse into a trot, the rider will first demand the walk; he will then collect the horse between heels and hand without increasing the pace. The horse is then ready for the trot, which will be produced by increasing the pressure of the legs and giving sufficient liberty from the hand, the tension upon the reins being resumed when the horse begins to trot, while the heels are ready to keep up the action. As the trot is a pace in which the horse goes from one pair of diagonal legs to the other, raising each side to the same height, the tension of the reins should be even. If a disposition is shown to break into a gallop, in which one side is raised higher than the other, the trot may be maintained by holding the reins of even length and drawing them towards the body.

To bring the horse to a halt from a trot, the
rider should close in his legs against the animal's sides and increase the tension upon the reins, until it comes to a walk, when it will be brought to a stop in the same manner. Whenever the horse is brought to a stop from action, the legs of the rider should prevent the halt being made too abruptly.

The turns will be made in the trot exactly in the same manner as in the walk, the horse being collected before the turn is made.

To understand how the horse may be made to gallop it is necessary to know how it performs the pace. The gallop is a series of leaps, in which the horse leaves the ground from one of its fore-feetwith which it is said to lead-and receives its weight upon the hind-foot diagonally disposed; the other hind-foot and its diagonally disposed fore-foot then come to the ground at the same moment, then the first used or leading fore-foot is planted, and from the latter the horse again goes in air. At each stride the fore-foot and the hind-foot of the leading side are planted in front of the fore-foot and the hindfoot, respectively, of the other side.

If the horse take the advanced steps with the fore-leg of one side and the hind-leg of the other side, it is disconnected in its gallop.

If it turn to the right when the left legs are taking the advanced steps, it is false in its gallop.

To be true and connected in the gallop, the fore and hind legs of each side must take corresponding steps, and the turns must be made to the side with which the horse leads.

To make the horse gallop with either side from the halt, the walk, or the trot, the animal must first be collected between heels and hand; by an upward play of the direct rein, or the rein upon the side with which the horse is to lead, the rider will lighten that side, and by a pressure of the opposite heel will stimulate the action and induce the hind-quarters to follow in the proper steps. The result of these applications of the aids will be that the horse will strike off in the gallop with the desired lead.
Whenever, in demanding the gallop, or in any other case, one rein or one heel is employed, its effect must be measured by the other rein or heel, so that the forehand or croup will not be turned or bent more than is required.
When the horse takes the gallop, in answer to the aids employed as I have described, from the halt, the weights are carried back, the forehand is raised, and as it again comes to the ground the fore-leg upon the lightened side is extended, and from it the horse goes into the gallop.

The 'break' from a fast or disconnected trot is a very different performance. In that case the
weights are thrown upon the forehand ; the hindleg, which should come to the ground with a foreleg, is not planted until after the latter receives the weight, and the order of steps are then-from the time the delayed hind-foot comes to the groundthose of the gallop.

To keep the horse united in the gallop the rider should sit quietly, and he must take care not to let the hand interfere with the motion of the animal. He should turn only to the side with which his horse is leading, and, until he has acquired great skill, he should not attempt to make the changes of lead in the gallop. When it is necessary to change the lead, the horse should be brought to a trot and the new lead taken from that pace.

The beginner should not make his horse gallop from the halt or the walk, but after putting the horse into a collected trot he will find no difficulty in demanding the gallop by the means I have described.

To bring the horse to. a trot from the gallop, the rider will first collect the animal, without affecting the rate of speed, and then, by continuing the pressure of his legs, and increasing the even tension upon both reins, reduce the speed and action to the trot. At the application of the rider's legs the horse carries its hind-legs under the mass, and the
hand then brings back the forces of the forehand, and governs the speed and the action.

When, in any pace, the hand gives the horse liberty as the rider's legs are pressed against its sides, the speed will be increased, as the strides will then be made with greater vigour; but the further the legs of the horse are carried under the mass, the greater will be the power of the hand ; so that it will be seen that the legs of the rider must aid the hand in every movement, and that the rider's legs must prepare the horse to answer the hand. 'This was sometime a paradox,' but, until those who dispute it show the same control over horses as those who practise it, we must be permitted to recommend the combined use of the aids.

## CHAPTER VII.-LEAPING.

In order that he may acquire a firm seat, and learn how to bend his body with the motions of the horse, the beginner must practise leaping.

The early lessons in leaping should be made from a halt. The standing leap is more difficult than the flying leap, but the former has fewer dangers and the rules for the seat may be more properly observed.

The beginner should be mounted upon a quiet horse that jumps with willingness, and at first the bar should not be higher than eighteen inches. As the rider acquires skill and confidence the bar should be raised by degrees, until he can keep his seat while the horse leaps the bar at an elevation of three and a half feet, when he may be satisfied that he can ride a horse in the flying leap over any obstacle that is within the powers of the animal. But the beginner must maintain his seat perfectly at each stage before he undertakes to increase the height of the leaps, and whenever he finds that at a certain height. his seat is disturbed he should lower the bar to a point that permits him to keep his seat in every particular.

It is not necessary for the rider to confine himself to the standing leap until he is perfect at the highest limit I have placed, but he certainly should not undertake the flying leap until he can keep his seat at the standing leap over a height of thirty inches; and this leaping from the halt should be practised until he can ride the horse over the bar at a height of three and a half feet, which is quite high enough to test both rider and horse.

In taking the leap from a halt, the beginner should hold a snaffle rein in each hand, leaving the curb reins upon the neck of the horse ; this will teach him to hold both hands in front of the body, and to avoid the habit of raising an arm as the horse rises. The feet should be carried to the rear, so that the seat may not be forced by a direct bearing upon the stirrups. The thighs should close against the body of the horse, and the knees must not be allowed to go back as the horse rises, or to come up as the leap is finished.

As the horse rises for the leap the rider will lean forward, yielding the hand at the same time, so that there shall be no tension upon the reins. As the horse gives the spring from his hind-quarters the rider should drop his hands and lean back, gently resuming the erect position when the hind-feet of the horse have reached the ground. These move-
ments of the rider's body must not affect the grasp and position of the thighs, and the lower parts of the legs must be kept back until the jump is finished.

As the horse alights the rider will resume the tension of the reins, and be ready to give the animal a firm support if it be required. But in taking the 'touch' of the horse's mouth there must be no violence, and in giving support the horse must not be hampered or harassed. As soon as the horse acknowledges the bit by yielding the jaw the hand should make a like concession.

An attendant should, in the first lesson, direct the movements of the horse with a leading rein, so that the beginner may devote his attention to the positions of his body and extremities. After having taken a few leaps with the leading-rein the rider should be left to himself, so that he may learn to collect the horse for the leap. This collecting will be accomplished by gentle vibrations of the reins and such pressures of the rider's heels as are required to make the horse gather itself for the exertion. To ' raise' a horse at a jump is a delicate operation, and the beginner should not attempt it. If the horse be a willing jumper the play of the bit made to collect its forces will be all that is required, and all that a beginner should attempt. But a horse can be raised to a leap, just as it can be raised to perform a
pesade or any of the high airs of the manege. By an unskilful horseman the animal may be pulled into the obstacle ; but that does not prove that the bit has no lifting power.

Until the rider can take a low leap in perfect form, he should not try anything difficult. But when practice and care have made him expert, the bar may be raised two or three inches each day until the limit I have fixed has been reached.
A horse can leap very readily from a collected trot-all the high movements of the manege are made from the passage-and the changes of motion from the trot to the leap and back again to the trot give excellent practice to the rider. The beginner will follow the same rules in riding the horse over obstacles from the trot as from the halt, and he will collect the horse, upon its alighting, to continue in the pace with which it approached the bar.

When the horse takes a leap from the gallop it is not necessary for the rider to lean forward. As the horse springs from the ground he should lean back, more or less, depending upon the drop from the highest point in the leap, to resume the erect position as the hind-legs of the horse reach the ground. Upon a galloping horse the rider should approach a jump sitting down in the saddle, the knees and thighs close, the loins curved without
rigidity, the feet a little in rear of the perpendicular, and the hands held low.

The horse should be 'in hand,' and directed towards the obstacle, but, while the rider will not surrender control over the animal, it must be given liberty to determine where and with what exertion it must take off for the leap; and, after it alights, the hand will offer such support as is required, and collect the horse for the same speed as that with which it approached the leap. In resuming the tension of the reins, the hand should act lightly, so that the horse may not be impeded in its efforts to secure its footing, but if the horse seeks the support of the reins, the rider must be ready to offer it. No attempt to lift the horse should be made in the flying leap, for, apart from the danger of pulling the horse into the obstacle, the animal will soon learn to wait for an indication from the rider when to take off, and in default of this may rise too late to clear the leap.

A horse should never be whipped or spurred as it takes a leap, for such a course will make the exercise distasteful to the most generous animals. Nor should the horse be ridden at a high leap in a disunited form, nor at a rapid rate of speed. As a wide leap requires momentum, the horse may be ridden at water faster than at timber, but the
speed should never be so great that the animal cannot determine where to take off.

If in leaping, or under any other circumstances, the horse falls, the rider should retain his hold upon the reins until he is assured that his feet are free from the stirrups.

As a rule, the snaffle bit only should be used in jumping, for except in the hands of a very skilful horseman the curb bit will induce the horse to leave the ground from and alight upon all four feet ; and in the hands of an inexpert rider the curb bit will by its severity drive the horse to refuse leaping altogether. The safest form in which a horse jumps is where it raises the forehand and leaves the ground from the hind-legs, and alights upon the fore-feet; and the greater the deliberation with which the leap is taken, the more certain the horse will be to jump in this manner. As might be expected, the method so often adopted by the worst horsemen, of confining its head and driving the confused animal at an obstacle, forces the horse to jump in such a way that it cannot be certain of retaining its footing as it alights upon four feet, not one of which is properly under control.

## CHAPTER VIII.-DIFFICULT HORSES.

After the reader has schooled a horse he will not require any advice regarding the prevention of disorderly actions ; for the rider who has been able to make his horse perform the various school movements will understand how to acquire perfect control over the animal.

But it is well to give some general rules for the guidance of the inexperienced pupil who finds himself mounted upon a difficult horse, which has not been properly trained. As the man improves in skill, and the horse advances in its education, these methods may be superseded by others less crude and more in accordance with the system of training laid down in the second part of this work, but which would be hardly expedient for the untrained man and horse.
Irritable Horses.-Among my acquaintances I number some excellent riders, and, while any of them would willingly try to render a vicious horse manageable, I do not know one who professes to enjoy riding a dangerous animal. I have observed
that with increased experience and knowledge of the powers of an enraged horse comes a discretion, very far removed from timidity, that young riders would strongly condemn. While I warn my readers that timidity upon the part of the man is almost certain to result in some disaster, I advise each one to start out with that discretion that comes to most of us through experience.

There is nothing more annoying to the judicious horseman than to find himself upon the back of a badly bitted animal, which is in that state of irritability known in the stables as 'freshness.' In this condition the horse is so unreasonable, if I may use the term, that it is only by making concessions that the man can avoid a battle with the animal ; and the bit and spur, to which under other circumstances the horse might render obedience, must be used with discretion and moderation.

If, after a long rest in the stable, the horse be 'longed' upon the cavesson rein for a short time before it is mounted, the more violent ebullitions of temper may be disposed of before the rider trusts entirely to his skill in the management of the horse. For there is no better way of reducing the nervous and excitable animal to calmness than by means of that powerful but harmless instrument, the cavesson. Nor do I think it any disparagement to the horse-
man's skill or courage, that he will take measures for putting the horse in an obedient frame of mind before he undertakes to control it with bit and spur ; on the contrary, it is a humane and sensible action, in accord with the better methods of training by which everything that would frighten or annoy the horse, from the time the halter is first placed upon its head, is avoided.

Mounting.-It is possible that the first misconduct upon the part of the fresh horse will be an effort to prevent the rider mounting, either by rushing forward, or, what is worse, by running backwards, perhaps to throw itself against a wall. In the first case it would be well for the horse to be held in the cavesson by an attendant until the rider is in the seat. Should the animal evince a disposition to go backwards-and some will do this with a violence that makes it very dangerous to the rider-the horse should be started in a walk, and the man should mount while the horse is going forward. In this way I have seen those excellent horsemen, William and George Burgess of Harrogate, defeat the purposes of a vicious mare that had severely injured several persons who had attempted to mount it. But if the rider can vault into the saddle he will find no difficulty in mounting any animal upon which he can place his hands.

If, after the rider has gained the saddle, the horse gives a few leaps or curvets, without forcing the hand or bearing upon the bit, it is better to take no notice of the action. It certainly should not be caressed, as that might be misconstrued as an encouragement to repeat the misconduct; nor should the whip or spurs be resorted to, unless the rider be desirous of deciding the mastery in battle. If the horse carry the head too low, with the intention perhaps of 'bucking,' some short'; sharp pulls upon the snaffle reins from below upwards will elevate the head. If the nose be thrust out, some light vibrations of the curb reins will bring the head into position. If a rider permits his horse to acquire the habit of starting suddenly whenever a vehicle approaches, he may cure the fault by driving the animal a few times in double harness, and by afterwards riding it in a crowded thoroughfare, where a horse is much less likely to misbehave than upon a lonely road where a noisy cart is occasionally met.

Rearing.-It is very seldom that a horse will rear to a dangerous height, if there be no pressure upon the bit. If the horse rear, the rider should yield the tension upon the reins and lean forward, and as the fore-feet are about to come to the ground, he should administer a sharp blow with the whip upon the hind-quarters, or give a quick pressure with
the spurs to drive the horse along, and prevent it coming to a halt from which it can again rise.

Should the rider find it necessary, when the horse rears, to take some support to retain his seat, he should seize the mane; but he must take care not to pull upon the reins. Should the horse refuse to advance, the rider should bend its head to either side, ${ }^{1}$ which will prevent the horse rising in front; and if the spur of the side to which the head of the horse is bent be applied, the animal may be turned about a few times, when it will most likely be willing to go in any direction the rider pleases.

But should the horse rear, in spite of the efforts of the rider, and the sinking of the croup show that the animal is about to fall backwards, the man should disentangle himself from the stirrups, seize the mane, and drop to ground upon the side opposite to that to which the horse is falling. In riding a horse that is given to this vice, the result of bad training, the reader should bear in mind that the animal cannot rear so long as it is kept moving.

Shouldering.-If the horse try to rub the knee of the rider against a wall, its efforts may be frustrated by the rider pulling the head of the animal towards the wall.

Plunging.-Should the horse plunge, or kick

[^5]violently, the rider should lean back in the saddle, and keep the head of the animal elevated by short, sharp pulls upon the snaffle reins from below upwards.

Shying.-If a horse, without defect in vision, be in regular work, it should shy at nothing. Fresh horses will affect fear or dislike of everything that attracts their attention, and there are some horses which have a trick of shying, and some of bolting away, from objects they know to be harmless. Even in the latter case punishment does no good, and, as I have explained before, the fresh horse must be treated with great discretion.

It is very easy to teach a horse to shy; it is a difficult thing to cure the animal of the fault. A horse 'shies' when it misses the support of a masterhand, or feels too closely confined in the presence of something that frightens or irritates it. That is, either extreme, of too much liberty or too much constraint, will cause the horse to make an effort to avoid the disagreeable object. Too often the man shies first, and leads the horse to suspect that it is threatened with danger. By careful treatment the horse will acquire so much confidence in its rider that it will be afraid of nothing ; by injudicious treatment the horse may be taught to suspect anything that attracts its attention.

The rider may induce the horse to pass a stationary object by turning its head away from that which causes its terror and 'traversing' by ; if that which has aroused its fears is a moving object, the head of the horse should be turned away from it, and the animal restrained by a light but firm hand.

After the horse has passed or has been passed by anything that has frightened or annoyed it, the rider should encourage and reward the animal with kind words and caresses. By gradually bringing the horse nearer to anything that is likely to terrify it, such as bits of paper, banners, and the like, while it is given carrots or some other delicacy, the animal may soon be taught to face those things which usually prove frightful.

Restlessness.-Some horses become restless and disorderly when, after a short ride, they are turned towards their stables. A horse in this state may become so excited that it will be with difficulty restrained ; and until calmness is restored the pace should not be faster than a slow trot, which is the safest pace to keep whenever a horse shows temper. A horse is less apt to bolt, shy, or commit other bad actions from a slow trot than from any other movement. If the rider find that his hand annoys the horse, he should use the snaffle reins, holding those of the curb in such a manner that he may easily
exert the action of the severer bit if necessary. If the horse makes an effort to break away from the rider, or insists upon going faster than the rider wishes, it may be brought to recognise the power of man by being backed a few paces, and then made to advance slowly. This form of mutinous conduct upon the part of the horse, is the result of want of discipline and work. There is no better method of enforcing discipline than in gently reining back the animal, and this movement is usually followed, for the time at least, by complete obedience.

Bolting is the violent effort a horse makes to break away from the control of the rider. It is the most dangerous of vices, as the horse in his frantic rush will stop at nothing, but will blindly go at a wall or over a precipice, unmindful of the severest bit. I look upon this vice, an intermittent madness, as incurable. But I believe that a horse trained to the poise in action, as I explain hereafter, can, by a determined rider, be prevented from bolting.

A horse may run away without having 'bolted,' or a bolting horse may end in running away. Bolting is the quick, determined movement, usually off the course and often against some obstacle, that a horse makes to break away from restraint. A runaway horse usually keeps along the path it has been following, and will try to avoid injuring itself.

Running away is usually the result of excitement, either from exuberant spirits, from nervousness, or from having overpowered its rider in some way, such as shying; the horse dashes off when it recognises the powerlessness of the bit.

When the horse runs away, the rider should sit down in the saddle, and try to direct the course of the animal; and this can usually be done, for the neck and jaw are not always rigid, as in the bolting horse. If the rider finds that he cannot reduce the speed of the horse in his first efforts, he should not fatigue himself by a steady pull upon the reins; but at intervals he should take a firm hold of the reins, and see if he can get any influence over the horse. When the horse answers the bit by yielding the jaw or by reducing the speed, the rider should give strong pulls upon the reins, with short intervals between each effort, so that their effects may be cumulative, until the horse is brought to a stand. A horse that has once run away will repeat the fault whenever an opportunity occurs, and a weak or timid rider should never be permitted to mount an animal that has so offended.

I wish to repeat that these instructions for the management of difficult horses are intended for animals that have not been properly trained: I should offer no advice on this head to the rider
who can school his own horse, for he will require none; and I feel certain that a horse that has been trained according to the method I advocate will neither bolt nor run away.

Stumbling. - Every rider knows that a horse moving in a slow and languid pace is much more apt to fall after a stumble than when ridden briskly. The low action of the slow movement multiplies the chances of tripping; but the falls will be due to the fact that, in the disunited and slovenly manner in which the horse goes, the other legs have not been carried far enough under the mass to support the centre of gravity after a leading leg has struck against an obstacle.

Some horses are constantly knocking their toes against obstacles, and yet never come down ; whilst a horse that raises his feet like a Clydesdale may carry his certificate of character upon his broken knees. That is, a horse that travels low may carry himself in a safe and collected manner; and the animal that has a high mode of going may really bear himself so disunitedly that if he trip he must come down.

The horse is less secure upon his feet in a walk than in a trot ; more apt to stumble in the trot than

[^6]in the gallop. The gallop becomes less free from danger as it degenerates towards the trot, as in the canter ; and in the so-called 'jog trot,' which has one of the distinctive marks, of the walk (i.e. three feet upon the ground at once, during certain stages, and is therefore no true trot), a horse is as likely to fall as in the most careless walk.

In the walk the horse has never less than two feet upon the ground, and during certain stages he has three feet bearing the weight. In the true trot, the horse, practically, springs from one pair of diagonal legs to the other pair, for the difference of time between the impacts of either leg of each pair is infinitesimal. In the gallop the horse has, at certain stages, but a single leg bearing the weight, and at other times uses two or three legs to carry the mass depending upon the velocity and impulse.

In every case a fall from a stumble is occasioned by the neglect of the succeeding bearer to take its place, in time, under the centre of gravity after one of the legs has been tripped up.

For instance ; when in a walk the horse plants the right fore-foot, the left hind-foot is next advanced and planted (with a greater or less interval in time, according to the united state of the horse), the mass during the movement of these two having been
borne by the left fore-leg and the right hind-leg. If the horse stumbles with the right fore-foot as it is coming to the ground, he will fall if the diagonally disposed hind-foot is not brought up in time to support the centre of gravity which has already passed over the two legs (left fore and right hind) which are sustaining the mass.

What can the rider do to avoid the disaster ?
He may support the falling forehand by leaning back in the saddle and taking a bearing upon the bit, until the diagonal hind-leg is brought up under the centre of gravity, and the animal recovers from the disorder of the stumble. But this support of the bit must be given with care and discretion, for if the horse's head is pulled up and confined too much, the animal will not have freedom of movement sufficient to enable it to make the effort necessary to recover itself.

But it is better to prevent mistakes upon the part of the horse, and this can be done by carefully riding the animal in a collected form. By lightly restraining the forehand with the bit, and demanding action from the hind-quarters with the spurs, each hind-leg may be made to follow its leading (diagonal) fore-leg with little or no interval. In the latter case the pace would be the manege walk -a sort of passage-and would fulfil all the con-
ditions of the true trot except that it is more languid than the latter pace.

Here the horse may trip, but there is little or no likelihood of its falling, unless through weakness or stiffness.

What has been said concerning the walk applies to all the other paces at a moderate speed. If the horse be collected and united, its legs will be carried so well under the mass that it will not be apt to fall from a stumble.

Of course, at a high rate of speed the horse cannot be kept in a collected form, but fortunately a horse is not so liable to trip in a fast trot or a rapid gallop, and the supports follow each other so rapidly that the danger of falling is thereby decreased.

## PART II.-TRAINING.

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## CHAPTER I.-THE RESULTS OF TRAINING.

The advantage of a good method of training over a crude and improper one may be seen by comparing the carriage, action, and temper of a well-schooled horse with an animal that has been 'broken' in the usual manner.

The schooled horse, carrying itself in a light and graceful manner, at easy, regular, and controlled paces, will render immediate obedience to every demand of its rider. The horse that has not been systematically schooled learns, in time, to carry its burden more or less awkwardly, depending upon its natural form and balance, in paces which hardly ever equal in grace and smoothness those in which it moved in liberty. If an animal consents to move along in a shambling walk, a disunited trot, and a lumbering gallop, hanging back from the bit or
bearing upon the hand, it is as far advanced in its education as the majority of horses ever get.

By a course of physical training, such as prepares the athlete for his feats, and a kindly enforced discipline, in which resentment is never aroused and compliance becomes a fixed habit, the horse is rendered ready and willing to give prompt obedience to every demand of its master ; an artificial balance is acquired, so that the horse carries its rider in easy and united paces, and a thorough understanding between the man and the horse is established.

As there is no man that cannot be improved by the exercises of the gymnasium, so there is no horse that cannot be improved by school work. There are few horses so ill-formed that, by suppling and collecting, they cannot be made light and graceful in carriage and action ; there are no horses that will not show striking change for the better. There is no doubt that the old method of schooling, in which the forces of the forehand were thrust back upon the hind-quarters by heavy hands and powerful bits, taught the horse to shun extended strides ; but I do not see why a horse schooled by the mild and easy system I have recommended should refuse to extend itself, although the whole of its education is directed to the point of obtaining united action. I have always been of the opinion that schooling a horse
would improve its speed, because the exercises should strengthen and make pliant the joints and muscles; and I have never found that my horses showed any disinclination to extend themselves, although I have never made any tests that would authorise me to say that they could gallop faster by reason of their training. I am convinced, however, from my experiences, that a horse jumps much more strongly and safely after a course of general schooling. than before it has been suppled.

It is easier to train a horse properly than to train it improperly-if an improper course of handling may be called training. There are no struggles for mastery, no efforts of the frightened animal to break away from a harsh hand, no resentments to be overcome, no suspicions to be allayed. It is all pleasant, easy, and amusing, both to master and to pupil. The time required to school a horse would depend upon the animal and, to a greater degree, upon the man. I think that by any of the recognised systems, a horse should be perfectly suppled, and made obedient to hand and heel, in the time that the 'breaker' would make the same horse 'steady to ride!' The fact that a 'system' was employed in the first instance would account for the greater improvement. And what a difference there would be between horses trained by the two methods!

I have never exhibited a horse publicly, but I once rode a horse that I had trained before some gentlemen who were interested in the subject of schooling, and the incident was noticed, by representatives of those papers, in The Times of June 1, 1883; The Illustrated Sporting and Dramatic News of June 2, 1883; and Vanity Fair of June 9, 1883. I reproduce the article of The Times, as it bears me out-as do the others-in what I have said regarding the results of schooling :-
'What may be done for a horse, not apparently by natural conformation fitted to be used for the saddle, simply by a course of kind, patient, and intelligently-directed schooling, has been exemplified, not a little to the surprise of the few gentlemen who have been invited to see it, by an animal belonging to Mr. Edward L. Anderson, one of our visitors from America, who is known by his works on the habits and management of the horse, to many lovers of this animal. At first sight Alidor is certainly not a promising subject as he stands in the riding-school waiting for his master to mount him. He is low at the shoulder, his head is heavy, the mouth shallow; he stands with hinder limbs well out at an angle, and one is not surprised to learn that the dam was a Norwegian drudge, and that in his youth Alidor had an unenviable power of pulling
a load with his mouth. But the moment the groom has hooked up the light curb chain of the riding bit and the owner has mounted, the whole appearance and expression of the creature changes; he pulls himself together, bringing his feet well under him, arches his neck, yielding his head to the slightest pull of the rein, and obeying the wish of the rider almost, as it seems, before the wish is expressed, by a motion of the heel and the needle prick of the spur, or a gentle touch of the silktipped whip.
'The movements of the animal are as different from those of the farmer's gig-horse, that he would have been had not fate marked him out to receive a higher education, as the movements of one who has passed with profit through the gymnasium, the drill-ground, and the dancing-school are from those of a lumpish country lout. Alidor's neck and limbs are now, as the result of his training, remarkably supple ; the least tightening of the rein will cause him to bring his head round to his shoulder; he will back in circles with a serpentine motion; he will wheel round with any one of his legs for a pivot that the rider chooses; he "traverses" in the passage action and executes demi-voltes and repeats reversed pirouettes with unfailing readiness and ease. Then to show his "form," he will advance with the stately
action of the Spanish march, and again with the same exaggerated motions at the trot.
'Circles and serpentines are repeated at the gallop, and he changes lead ; while, with the application of the spurs, he is brought to a dead halt as he is going at full gallop. A small wooden barred hurdle, thirty inches high, and about as wide as an ordinary cottage garden-gate, is placed in the ride; the rider, taking off his spurs and throwing away his stirrups, walks Alidor up to the jump, and the obedient creature goes over the bars with a lightness one would hardly have suspected, even after witnessing his previous performances. A nother narrow gate, of the same dimensions as the first, is set up little more than the length of the horse away, and he takes the two, in and out, as comfortably and unconcernedly as the one.
' What is most noticeable, perhaps, is the perfect habit of obedience which is the outcome of this system of education. The animal seems to have no idea of refusing to do whatever is required of him ; he went at a gallop straight at the wall, only stopping when the rider brought him up with the spurs just as his nose would have touched the bricks; and throughout the whole hour's ride it was evident that the most perfect accord subsisted between man and
horse. The method by which these results have been attained is chiefly that of Baucher, with some modifications and additions suggested by the owner's experience, acquired in the French and Austrian schools.'

The passage in the above regarding the French and Austrian schools, refers to the systems of those countries, which I practised, under such masters as S. S. Stokes, Joseph Merklen, and others, in America. I may here express my obligations, in general terms, to the writers upon horsemanship, for I have carefully studied the works of most of those who have treated the subject, from Xenophon down to the most recent authority. I have seen many of the best school-riders of our day, and from some of them I have received useful information.

CHAPTER II.-DISCIPLINE AND EXERCISE.

The secret of success in the management of horses lies in a kindly enforced discipline. Through gentleness and firmness, the most irritable animal may be made perfectly quiet and obedient.

It is true that some of the horses that are publicly exhibited have been trained by harsh and violent means, but those horses render a sulky or timorous compliance only when within reach of the lash; and the gay and ready air with which the halfsavage Bronchos, recently seen in England, went through their extraordinary performances, proves the advantages of the mild rule under which they were drilled.

It is important that there should be no breaches of discipline upon the part of the young horse ; for with care its education may be carried on without permitting the idea of resisting the trainer's will to enter the animal's mind. From the time the horse is taken in hand, it should be the object of the trainer to impress the horse with his power. The
animal should not be permitted to move except at the command of its master. If it take a step in any direction without having received orders, it should be quietly made to resume its position. It should be made to keep the pace and action desired by the trainer, and in every possible way the horse should be made to feel that it must recognise a superior will. While it is wise to avoid a battle with a horse, the man should bear in mind that it is through the habit of obedience that he controls the animal, and he should, therefore, in laying the foundations of its education, endeavour to demand nothing that he is not prepared to enforce. But, above all things, the man should avoid challenging the horse to a contest, and then yielding to the angry animal, for, while a horse may forget that it has upon occasion been guilty of misconduct without receiving correction, it will always remember a successful resistance of authority. If the horse shows a determination not to accede to the repeated demands of its trainer, it must be made to obey, or the man's rule is in jeopardy. But this will not be a case for severe punishment; nothing but patience will avail the trainer. The horse should be made to remain in place. Every voluntary movement should be checked, unless it be the one required by the man, when the horse should be rewarded as though it
had not been guilty of mutiny. Regardless of the time passed, or of the annoyance it causes him, the trainer should keep the horse in the same place, until it readily obeys the order it has refused. If the horse becomes violent, it may be hobbled; but it is always better to obtain obedience with the bridle alone, as the horse will learn to look upon it as a potent instrument. The man may not desire to repeat this lesson, but it is seldom that any horse requires a repetition.

The horse should never be punished with whip or spur. Those aids should be looked upon as the means by which the rider conveys his orders, and the animal should not wince or struggle when they are threatened or applied.

The trainer should remember that nearly all the resistances of young horses arise from ignorance of what is required of them, and he should take great care to show the horse what is demanded of it before he thinks of correcting it for a fault.

A horse trained according to the method I have offered, should, and I am convinced will, render immediate obedience to its rider.

The horse in training, as at all times, should be kept in regular exercise. During the suppling lessons, it should be longed upon the cavesson rein. The cavesson is a sovereign remedy for nervous-
ness or restlessness. The reader will see from the print that the cavesson is a head-collar, having a metal nose-band upon the front and each side of which are rings for reins. I do not use a bit in exercising horses upon the longe, but I fasten the side reins to buckles upon each side of the surcingle, and put the longe-line in the ring on the front of the nose-band.
The horse, equipped in the manner indicated, should be taken to some quiet spot, and made to go quietly about the trainer, first to one hand and then to the other. At intervals the animal should be drawn to the trainer to receive caresses and kind words. In this way the horse receives an excellent kind of exercise, in which much of the general suppling is accomplished, and gains a confidence in man that cannot be imparted so rapidly by any other means.

The pulls upon the longe-line should be very light. Waving the line a few times horizontally will usually induce the horse to stop. The greatest power (to be used with discretion) may be obtained by waving the line up and down, and by giving a pull upon the rein as the hand comes down.

It is better not to let the horse go faster than a slow trot in longeing it. In the rapid paces there is great risk of injury, and the horse falls into a care-
less and heavy manner of moving that must be corrected afterwards.

The lessons should be given every day, and the horse should be in the hands of the trainer at least an hour-divided, if possible, into two lessons of thirty minutes each day. When the horse is used under the saddle, the suppling lessons should be given before and after the riding exercise, until the animal understands and answers to every indication of the bits; and whenever, at any time, the horse becomes indifferent to the bits, or dull in movement, as it may through bad or careless riding, it should be put back to the flexions and supplings.

The first objects of the trainer should be to supple the horse and to teach it to collect itself. This suppling is employed not only to overcome the active or intentional resistances of the horse, but to act also upon the defences and resistances which come from malformation in the animal, when the weak parts will be gradually strengthened and supported, and the parts that are rigid will be made pliant : then the forces will be so collected that the animal shall be given the best position from which to obey all the demands of the rider, which will be conveyed by the same indications that the horse has learned in the lessons for suppling and collecting.

The principal resistances of the horse depend upon the rigidity of the muscles of the head and neck. When these have been made to yield to the bit, and when the hind-quarters will answer to the application of the spur, the rider may collect the forces of the extremities and take control of the mass.

The face of the horse should always be vertical to the plane of movement; but the height at which the head should be carried will depend upon the make of the animal. When we come to describe the various processes for suppling the forehand, it will be seen that some of the exercises are employed to make the horse lower the head, others to induce its elevation. These exercises give to the rider the power of demanding the proper carriage of the head from the mounted horse.

If the horse be high and well developed in the forehand, but weak and deficient in the hindquarters, it will be necessary to have the head carried low enough to permit the forces of the croup to be brought up to the point of balance between them and the forces of the forehand, or the forehand will dominate the croup, so that the action in the latter part will be hampered and constrained.

If the hind-quarters be strong and high, and the forehand low and heavy, or weak, the head of the horse must be elevated sufficiently to carry back the forces of the forehand, and the hind-legs must be carried under the mass to lower the croup, so that the forces of the extremities may be in balance; otherwise the croup will overpower the forehand, and the action of the latter will be dull and cramped.

The form of the animal will suggest to the
trainer the kind of exercises best suited to it ; but when the rider mounts a horse he will at once know what is necessary to bring the forces into equilibrium. If the horse hangs upon the hand, or is heavy in front, the head should be elevated and the forces of the forehand carried back. If the action of the hind-quarters be languid, the forehand should be lowered and the forces of the croup stimulated and carried forward.
But when the face is vertical, the neck rounded, the lower jaw pliant and yielding, and the horse seems to grow, while the action is light, regular, and even, the rider will know that the forces are collected and in the best possible position.

## CHAPTER IV.-IN THE SNAFFLE BIT.

The training given to the horse in the snaffle bit is of the highest importance, and the grace and lightness with which the horse will afterwards move in the double bridle will depend upon the thoroughness with which these elementary lessons have been followed.

The snaffle is an excellent bit for a bad rider, because with it he can do but little harm. Skilfully used by a good horseman it is very effective. But for general use it does not supply the place of the curb bit, and it has a tendency to impair the lightness of the rider's hands, and to induce the horse to hang upon the reins.

To obtain the best results in training, it is absolutely necessary to have the effects of both the curb bit and the snaffle.

At first, however, we should put the horse in the snaffle, to teach the animal the direct indications of the bit; and, as soon as the horse is well grounded in the lessons appointed for that purpose, we should
put on the double-reined bridle before the easy bit has, perhaps, produced bad habits.

The objects we shall have in view in the following exercises, are :-
ist. To make the horse carry its head in the position that will give the rider the greatest control over the mouth. This is with the face vertical to the plane upon which the horse moves.
$2 d$. To teach the horse to elevate or to depress the head, so that the rider may control the forces of the forehand in collecting the horse.

3d. To render the lower jaw pliant, so that the horse will yield to the lightest touches of the bit.

4th. To supple the forehand, so that the head, neck, and shoulders may be under the immediate control of the rider. Nearly all the resistances of the horse, whether wilful or owing to defective formation, come from the forehand, and while there is any rigidity in that part the horse does not perfectly submit.

5th. To supple the hind-quarters, and to make that part obedient to the indications of the heels, so that the hand operating upon the forehand, and the heels upon the hind-quarters, the forces of the two extremities may be brought to a point of union and balance under the rider, by which he can obtain a
ready control over the submissive mass thus put in equilibrium.

The method I have adopted, like all other modern systems of any value, is founded upon that of Baucher. ${ }^{1}$ But I did not think it necessary for our purpose to employ the great variety of 'flexions' devised by the distinguished French authority ; and I am satisfied that the few simple exercises I have recommended will accomplish all that can be desired. At the same time, I think that every one who wishes to excel in horsemanship should study Baucher's work, as the fountainhead of all that is best in the art.

The plan of illustrating my work by means of instantaneous photography was original, and when we recognise the difficulty, if not the impossibility, of presenting, in any other way, to the eye of the reader every motion and pose of man and horse, I think that the importance of this idea will be admitted.

To make the Horse carry its head in position.The rider will mount, and, taking the right rein in the right hand, the left rein in the left hand, will

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lightly feel the mouth of the horse. Then, holding the hands low, he will play with the bit, gently drawing in the reins as the horse drops its nose. (Fig. 8.) When the horse, opening its mouth, yields the lower jaw to the bit, and brings in its head so that the face is vertical to the ground, the rider will release the tension of the reins, and caress the horse for its obedience.

To make the Horse elevate the head.-The rider will induce the horse to elevate its head by holding the reins separated, as described above, and with arms extended forwards take light pulls upon the reins from below upwards. (Fig. 7.) When the horse has obeyed, the rider will lower his hands so that the horse will drop its head, and he will then quietly demand that the face of the animal shall be brought into the vertical position.

To make the Horse lower the head, the rider will draw the reins until he can feel the mouth of the horse, then he will hold the hands steady. When the horse drops its nose in obedience to the pressure of the bit, the rider will release the tension upon the reins and caress the animal. By degrees the horse can be taught to depress the head to any extent.

To bend the head to the right, the rider will hold the reins as previously described, and, drawing the right rein towards his body, he will carry the head
of the horse a little to the right; the left hand will be used to measure the effects of the other, to keep the face of the horse vertical, and to aid in keeping the jaw pliant. The rider should be satisfied with slow progress, but in time the head should be brought round so that the face, with the nose down, shall look to the rear. (Fig. 9.) By this exercise the whole of the head and neck are suppled and made submissive. After the head has been bent to the right, the left hand, supported by the right hand, will carry the head back to a line with the body, and the vertical position of the head will be demanded by a play of both reins. (Fig. 8.) In a similar manner the head will be bent to the left.

These lessons should be given to the horse each day, so long as the snaffle bit is used alone; but the exercises should be varied, so that the horse may not become fatigued or disgusted.


FIG. 9. BENDING HEAD AND SUPPLING NECK


FIG. 11. BRINGING HIND-LEGS UNDER THE BODY.
12. TRANSFERRING THE POWER OF THE WHIP TO THE HEELS.

## CHAPTER V.-IN THE SNAFFLE BIT

 (Continued).The trainer will next proceed to supple the haunches. For this purpose he will dismount, and stand, facing the horse opposite the girth, on the left side. With his left hand, under the chin of the horse, he will take both reins with a slight tension upon the bit. With his right hand he will give some gentle taps of the whip upon the croup until the horse will carry the hind-legs a step or two under the body; the left hand preventing the forehand from moving. (Fig. ir.) As soon as the horse obeys, the whip taps should cease, and the animal should be rewarded with caresses and kind words. The trainer should be satisfied with gradual progress, and the slightest obedience upon the part of the horse should meet with approval. The whip taps must be of the lightest, and if the horse does not obey at once they must not be given with greater severity, but simply repeated until the hind-legs are moved up. If a nervous horse shows a disposition to kick at the touches of the whip, it may be accustomed to
accept them without resentment by being patted, by the hand in which the whip is held, from the shoulder towards the croup : and by being corrected by a harsh word at every attempt to kick.

After the horse has carried the hind-legs under the body to a degree that satisfies the trainer, the bridle-hand will permit the forehand to advance sufficiently to let the horse stand at ease.

To carry the croup about the forehand.-The trainer will stand in the position described for the preceding exercise, and after collecting the horse a little between the restraint of the left hand and the whip taps upon the croup, he will transfer the taps of the whip to the left side of the horse just behind the girth. When the horse takes one step with the hind-quarters to the right, the whip taps should cease and the animal be rewarded. It should then be made to take another step with the hind-legs to the right, the left hand keeping the forehand in place. (Fig. I3.) This movement of the croup and rest of the forehand will bring the horse in such a position that the right fore-foot is slightly in rear of the place it should occupy under the new condition of affairs. The trainer will therefore give a light touch of the whip upon the under side of the right fore-arm and at the same time give a light play of the bit upon the right side, to induce the horse to
move the right fore-foot up to its proper position. But the left fore-foot must not be raised off the ground. As the croup goes about to the right, the right fore-leg will be made to conform to the movement, but the left fore-leg will be an immoveable pivot about which the body revolves. Step by step, the croup will be carried about the forehand, the left fore-foot keeping the ground, the right fore-foot moving only enough to keep its proper place at each change of the body of the horse. This movement is called the reversed pirouette, and we shall shortly see its importance.

In a similar manner, the man standing upon the right side of the horse, with the reins in his right hand and the whip in the left, the horse will be made to carry the croup, about the right fore-leg as a pivot, to the left.

The trainer will then mount, and proceed to transfer the power of the whip, in these exercises, to the heels. To collect the hind-legs under the body of the mounted horse, the rider will hold the reins in his left hand, to prevent a forward movement, and with the whip held behind his back give some light taps upon the croup, and press in his heels to the sides of the horse. (Fig. 12.) When a step has been made by the hind-legs, he will cease the whip taps and the heel pressure, and reward the horse.

By gradually demanding more steps from the hindlegs, the horse may be made to carry them under the body until they nearly approach the stationary fore-feet. In the course of a few lessons the horse will carry its hind-legs under the body at the application of the heels unsupported by the whip.

To teach the horse to carry the croup about the forehand at the demand of the heel, say to the right, the rider will first collect the horse a little by a gentle play of the reins and a slight pressure of the legs. Then holding the reins in his left hand, slightly supporting the right side of the horse's mouth, he will pass his right hand behind his back until the whip is held against the left side of the horse. Upon that side, and just behind the girth, he will apply the whip lightly, at the same time pressing in the left heel. When the horse takes one step with the hind-leg to the right the whip taps and heel pressure will cease, and the horse be encouraged in obedience. It is, of course, intended that the left fore-leg shall be stationary and that the right fore-foot shall only move enough to keep in its proper position with regard to the rest of the body. The right side must therefore be lightened. This may be done by an upward play of the right rein, and a tap of the whip upon the under side of the right fore-arm. But if the horse

is not sufficiently suppled for this, and refuses to move the croup to the right, the head of the horse may, for the first few lessons, be turned to the left, and the right shoulder be lightened in that way. But the latter plan should only be adopted in case there is difficulty in carrying the croup over; as in the reversed pirouette the head of the horse should be slightly turned in the direction from whence the croup comes, that is, in this case, to the right. Step by step, the right heel held close to the side to measure the effect of the opposite heel and to keep the horse from volunteering a movement, the croup will be carried to the right about the left fore-leg as a pivot. In a short time the horse should answer the application of the heel without the support of the whip. In a similar manner the horse should be made to carry the croup, about the right fore-leg, to the left, when the right heel and the whip will demand the movement, and the left heel will support it. After the horse will pass to the right or to the left, the rider should require its head to be bent in the direction of the moving croup, so that the reversed pirouettes shall be complete. That is, when the croup is moving to the right the horse will look to the right, and when the pirouette is made to the left the head will be inclined to the left. (Fig. 14.)

The reversed pirouettes, besides suppling every part of the horse, teach obedience to the forehand as well as to the croup, and they form the foundation for every movement of the horse except the walk and the trot in straight lines.

## CHAPTER VI.-RIDING IN THE SNAFFLE.

the walk-the trot.

The snaffle bit is not of much effect in collecting the horse when in action, but it is necessary that the rider should understand how the hand and heels should work together in bringing about the union between the extremities of the horse, and from the time he begins to ride the animal he should practise the combined effects of the aids.

Even though we should admit that a horse might carry an inert burthen without destroying a naturally balanced carriage, the hand and heels of an inexpert rider would impair the harmony; and the faulty movements of an ill-formed horse would be made worse by a wrong disposition of the weights and forces.

The rider must know how to demand united action of the extremities from his horse, and how to remedy natural defects, so that this action may be produced in animals that are not well balanced. For until union and balance can be obtained be-
tween the forces of the horse the rider will not have complete and immediate control over the animal. The powers of the aids in correcting defects of conformation in the horse are almost unlimited, and there are, as I have said, few animals which cannot be made to move with grace and lightness.

If the horse be high and strong in the forehand, and weak or drooping in the hind-quarters, the forehand must be lowered, and the forces of the croup must be collected and brought forward, otherwise the action of the hind-quarters will be hampered or languid, and there can be no union between the extremities.

If the horse be low or weak in the forehand and strong and high in the hind-quarters, then the forehand must be elevated and the forces of that part collected and drawn back, and the croup lowered, or the stronger hind-quarters will dominate the forehand and render that part heavy and constrained in action. Any position of the horse in which one extremity throws too much weight against the other must be corrected, or the horse will be heavy in the part so burthened. Thus, as is often the case when the rider mounts and takes up the reins, if the hind-legs are thrust out so that they are braced against the forehand, the head and neck cannot be made light until the croup is lowered by the hind-
legs being carried under the mass and the forces of the extremities are brought into equilibrium. These matters will be treated further when we come to the work in the double bridle.

To move the horse forward in the walk the rider will gather the reins until he can feel the mouth of the horse. The legs will then be pressed against the sides of the horse, and the hands will, by a series of gentle vibrations, act against the mouth. When the horse bends the neck, yields the jaw, and sustains its head without support from the bit the animal is 'in hand,' and ready for a forward movement. It is a rule, to be always observed in collecting the horse, that the application of the heels should precede the operation of the hands, otherwise it will be impossible to govern the movement, for the hand can restrain the horse but cannot prevent it falling back. The horse having been placed 'in hand' in the manner above described, the rider will continue the pressure of the heels and yield the hands sufficiently to give the animal liberty to proceed at a walk. No effort will be made to keep the horse closely collected, but the forehand must not be permitted to get heavy, nor will the hind-quarters be allowed to drag. If the horse bears upon the hand it must be made to carry the forehand up by light pulls upon the rein, and the heels will keep the
croup from hanging back. If the horse moves forward freely the hand will take light touches upon the bit, and the heels will be held close enough to be applied when required.

To turn to the right, the right rein will be drawn until the head of the horse is bent in the proper direction, the left hand will measure the effects of the right rein and keep the head from going too far, the heels will be applied to the sides, the left heel pressing more than the other to keep the croup from going too far on the old line. When the turn has been made the horse will be straightened in the new direction, and the rider will proceed as before directed. To bring the horse to a halt, the heels will be quietly applied and the hands will be drawn towards the body of the rider. When the horse comes to a stop the tension upon the reins will be relaxed and the heels be withdrawn from contact with the sides.

Before the horse is put into a faster pace than a walk it should be taught to make the turns well, and to go in circles, first of a great diameter and gradually smaller, and be confirmed in the indications of the aids by moving in figures of eight. The exercise of starting the horse into a walk and of bringing it to a halt cannot be brought to too great perfection, and the facility with which this is accom-
plished will have great effect upon the precision with which all the movements will afterwards be made.

To make the horse trot, it will first be put into the walk, then it should be collected between a light pressure of the heels and a tension upon the reins, but the pace should not be increased or diminished, until the rider feels that the horse is going stronger under him. The tension upon the reins should then be relaxed, and the horse incited by a slight touch of the whip behind the girth if the application of the heels does not accomplish the object. The.pace should not be rapid, and the rider should attempt to keep the horse in a collected form, preventing an increase of speed or a bearing upon the hand by a play of the reins, and keeping up the action by the application of the heels. The turns, circles, and figures of eight should be made in the trot in exactly the same manner as in the walk. To bring the horse to a halt from the trot, the rider will first collect it between hand and heels without decreasing the pace. Then, continuing the heel pressure, he will increase the tension upon the reins until the horse drops into a walk. It should then be brought to a halt by the same means. The hand should not act too strongly, and the heels should prevent the halt being made abruptly.

By gradual steps, the horse should be brought to
bend the head to the right (and to the left) in both the walk and the trot, when the heels will be held close to the sides to keep the horse straight, the heel opposite to the side to which the bend is made being a little further back than the other. (Fig. ıo.)

## CHAPTER VII.-RIDING IN THE SNAFFLE (Continued).

## the head and croup to the wallSHOULDER IN-THE GALLOP.

The head and croup to the wall are the preparatory exercises for traversing; and these side movements, with ' the shoulder-in,' teach the rider's hand and heel to work in unison, make the horse answer every gradation of the aids promptly, and are the groundwork for the gallop and the pirouettes.

First, of the head to the wall. The rider will bring his horse to face the wall, to which the body should be perpendicular. Then, the horse having been collected, the forehand will be held in place, and the croup will be made to take one step to the left, so that the horse will be prepared to pass to the right upon two paths, the forehand upon that which is nearest the wall, the hind-quarters, slightly retired, upon the other. Holding the reins separated, and the whip point down in the left hand, the rider will lead the forehand along its path by the right rein,
and drive the croup, holding the same relative position to the forehand, with the left heel along its path. That is, the horse will be bent to the right to pass in that direction. The left hand will support the effects of the right; and the right leg will be held close to the side to keep the croup from going over too far. The whip will, if necessary, aid the left heel in moving the croup. The head of the horse must be held at its proper elevation, and bent in the direction the horse goes. As the horse passes to the right, the left fore-leg will cross in front of the right fore-leg, the left hind-leg in front of the right hind-leg. When a corner is reached the croup will be restrained by the legs, and the forehand will be made to pass in the circumference of a quarter circle, so that the corner will be filled, and the body of the horse will hold its proper position at every point of the curved path. When the corner has been turned, and in the new direction the forehand is slightly in advance of the croup, both extremities will again move with equal pace.

The horse will be made to pass to the left in the same way by interchanging the right and left aids.

The croup to the wall is performed in exactly the same manner, except that the hind-quarters of the horse are nearest the wall, by the aid of which

TRAVERSING, ETC.
the rider guides the movement. The heels will prevent the horse falling away from the line of march, the hand will restrain a movement beyond it.

Traversing in this manner at a walk, the horse, after it will perform the movements perfectly by the aid of the wall, should be made to pass in circles, first of a great diameter and gradually reduced in size. In traversing in circles, the hand and the heels must act together to keep the position of the horse true upon each point of the curved paths. If the forehand be upon the outside path and the croup towards the centre, the latter part will be made to proceed more slowly than the forehand. If the head be in towards the centre of the circle the hand will restrain the movement of that part, while the heels will make the croup take the extended steps required to keep its position on the larger circumference. (See Diagram.)
In shoulder-in, the horse passes to the right or to the left upon two paths, but the head is turned away from the direction in which the animal goes, and the body advances with its convex side. The shoulders are still to be in advance of the croup, but the head, as has been said, is turned in the direction whence the horse goes. (Fig. 21.) If the horse is to pass at the shoulder-in to the left, the croup will be
next to the wall, and one step more to the right than the forehand, so that the latter will be slightly in advance in the movement. The rider will, keeping the head of the horse bent to the right, carry his hands to the left to lead the forehand in that direction, and the right heel will drive the croup at an equal pace with the other extremity. The left leg will be held close to the side of the horse to prevent the croup going over too far, and to aid in keeping the horse up to the lines of march. The corners will be made upon the same principles as in the croup to the wall, the proper or concave bend of the horse being observed.

After the horse has been suppled by these movements, it is prepared for the gallop. But if the horse be heavy in the forehand, or be disposed to break away from control in the excitement of a rapid pace, the exercises in the gallop should be deferred until the lessons in the curb bit have rendered the animal light and amenable to discipline. If, however, these objections do not exist, the horse may be taught, in the snaffle bridle, to take the lead in the gallop with either side.

To make the horse gallop with the right legs leading, the rider will take a rein in each hand and hold the whip in the left. As he is about to turn a corner to the right, the horse being in a slow
trot, he will collect the animal between heels and hand. At the turn the rider will make an upward play with the right rein, support it with the left, retire the right shoulder, press in both heels, the left more strongly than the other, and apply the whip to the left side behind the girth.

When the horse takes the gallop in the new direction it will be straightened if the croup is bent too much to the right. To enable the horse to keep the gallop, the rider must sit perfectly quiet, and in retiring his right shoulder at the beginning of the movement must take care that he does not disturb his seat.

The horse will be made to gallop with his left side leading by applying the corresponding aids in the same way.

The horse will be kept in the gallop by the hand demanding lightness and restraining the speed and the legs maintaining the action. Horses low in the forehand are apt to 'gallop upon the shoulders' in the snaffle bit, and care must be taken to prevent this habit. To bring the horse to a halt, the rider will first collect the horse, without decreasing the speed, and then, by a closer pressure of the heels and a greater tension upon the reins, bring the horse into a trot, and afterwards to a walk and a halt.

Nothing more than large circles at a slow pace should be demanded of the horse while in the snaffle bridle; and no attempt should be made to change the lead in action until the horse has been taught the various forms of collection hereinafter described.
CHAPTER VIIT.-THE SPUR.

The horse should at this stage of its education be taught to receive the attack of the spur with calmness. Until the horse will answer the application of the rowel, without disordering its pace and without the slightest hesitation, it is not under the control of the rider, as we are to understand the meaning of control. The most nervous and spirited horses may be taught to take the spur without flinching in the course of a few lessons, but it must be understood that this powerful aid should always be given with discretion, and until the rider has a seat that permits him to measure the pressure with which the spurs are applied he should mount the horse without them.

The lessons in collecting and suppling the croup have prepared the horse for the spur. Towards the close of a day's lesson the rider should put on spurs with rowels of medium size and sharpness. As the horse is marching in a straight line the rider will collect him between the hand and legs,
and at the same time give the side a scratch with one of the spurs. The hand will restrain any increase of speed, and the voice, accompanied by caresses, will pacify the animal. If the horse kick at the spur, a very unusual thing if the first lessons are given as I have directed, the rider will raise the head of the horse, correct it with his voice, and gently apply the spur again. When the horse will answer the spur by increased vigour of action from the hind-quarters without an effort to force the hand or to increase the speed, the rowel will be applied in bringing the horse to a halt from the walk, and to a walk from the trot.

It is not well to use the spurs too freely, and after the horse has been taught to accept the rowel the leg will not require the assistance of the severer form of the aid unless the horse be slow in obedience.

Should the horse endeavour to break away from the rider or endeavour to force the hand at the application of the spur, the rider should bring the animal to a halt and make it back a few steps; then repeat the movement in which the horse exhibited its want of discipline.

The spur must never be given with violence, for such a shock will not only arouse the resentment of the horse but must throw the animal into dis-
order. The rowel is to be applied by carrying the leg against the side of the horse and dropping the toe, so that the spur is pressed in behind the girth.

Repeated attacks are made by retaining the leg against the side of the horse and raising and lowering the toe.

CHAPTER IX.-THE DOUBLE-REINED BRIDLE.

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FLEXIONS OF THE JAW AND NECK-THE
    HEIGHT OF THE HEAD.
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The foundations of its education having been laid in the snaffle bit, the horse will now be exercised in the curb bit, in order that it may be taught a prompt and exact obedience.

The jaw, the head, and the neck of the horse must become so supple and submissive that they will yield to the slightest demand of the reins, and beyond a fugitive touch, when an indication is given, the bit must find no resistance.

The horse having been put in the double-reined bridle, the trainer will, for the first exercise, remove the curb chain. He will then, standing at the head on the near side, pass the snaffle reins over the head of the horse, and grasp them in his left hand, held a few inches in front of the animal's nose. With his right hand under the chin of the horse, he will take the two curb reins at even lengths about three or four inches from the branches. With
the left hand acting upon the upper jaw of the horse, by a light tension from below upwards, the horse will be made to elevate the head. The right hand will then, in the gentlest manner possible, draw the curb reins towards the chest of the horse. (Fig. 15.) At the moment the horse opens its mouth the left hand should yield, and the right hand, having given a slight bearing upon the curb bit, should go towards the chest of the horse as the head of the animal drops into the vertical position, without requiring any further bearing of the bit against the jaw. (Fig. 16.) If, at first, the horse does not drop the nose low enough to place the face perpendicular to the ground, the right hand will act far enough to accomplish this. But it will be the aim of the trainer to have the horse drop the nose at the first downward play of the curb bit, so that when the head comes into its position the lower jaw, not having rigidly opposed the hand, will be pliant, and whenever the bit is not in action the horse will champ upon it, and when it does act it shall find an elastic support that is sufficient only to carry its indications.

In this flexion the horse should be accustomed to observe the height at which the head should be held to obtain the equilibrium of the forces. When the trainer comes to ride the horse he will soon discover


FIG. 15. SUPPLING THE JAW.
16. POSITION OF THE HEAD.
exactly how the head should be carried to keep the horse light and balanced, but in these early lessons the form of the horse will show whether the head should be carried high or low.

If the horse be too high in the forehand, that part should be lowered in proportion to the want of height in the croup. If the forehand be too low, the head and neck will be carried up, so that the centre of gravity will be driven to the rear, or the forces of the croup will dominate those of the forehand and make that part loaded and heavy. In the old manége systems everything was done to throw the weights upon the croup, and all of the movements were founded upon the pesade, where the horse took its weight upon the haunches. The first object in modern training is so to equalise and balance the weights that no part of the horse bears an undue portion of the mass, and in consequence every movement of the horse is made with freedom, lightness, and grace.

The flexions of the jaw and neck, above described, should be practised frequently, both at the beginning and the end of each daily lesson.

The horse should also be made to bend his head to the right and left with the curb bit, in such a manner that the whole of the head and neck shall be suppled and controlled. To bend the head to
the right the trainer will stand at the head of the horse, facing the left side. Taking the right curb rein in the right hand, at a few inches from the branch of the bit, under the jaw, and the left curb rein in the same way in his left hand, he will slowly and gently bend the head of the horse to the right, by advancing the left hand and drawing in the right hand, so that the bit will act on the left upper jaw and the right lower jaw, and control the head and neck in every way. By gradual steps he will accustom the horse to carry the head, at the proper height, so that it will rest against the right shoulder, looking to the rear. The face must be kept perpendicular to the ground, and the jaw pliant, by the gentle touches with which the flexion is made. In a similar manner the head should be bent to the left.

## CHAPTER X.-COLLECTING.

IN HAND (IN PLACE AND IN ACTION)-THE UNION (IN ACTION) -THE POISE (EQUILIBRIUM; THE HALT).

Let the trainer now put on the curb chain, tightly enough to have the full power of the bit but not so close that it presses against the chin before the branches are drawn back. It is a bad plan to govern the power of the bit by the curb chain. Rather let the tension of the curb chain be a fixed factor, and lengthen or shorten the branches of the bit as the power is required.

The curb bit having been arranged satisfactorily, the trainer will mount and proceed to collect the horse. When he has learned, in theory and practice, the various gradations of collecting the horse, there will be very little left for him to know. And the rider who can bring his horse into that state of equilibrium that we shall call the poise, can make the animal perform any movement of which it is physically capable.

I hope that, with the pictures I offer, I can make myself clearly understood ; and if the reader does
seize my meaning there should be no difficulty in carrying out my instructions.

If the rider will hold the curb reins in one hand and the snaffle reins, over them, in the other, he can demand the raising of the head of the horse by the snaffle, and the lowering of the head by a fixed but light tension of the curb bit. Of course, in working to the right, the curb rein should be held in the left hand, those of the snaffle in the right.

Or, all the reins may be held in the left hand, and the right hand may be carried upon the right snaffle rein, when working to the right; and the left hand be carried upon the left snaffle rein, the four reins held in the right hand, when working to the left.

In a short time the rider will find that by raising or depressing the hand which holds the curb reins he will be able to govern the height of the head of the horse, but at first it is well to have the power of the snaffle, especially as it will be used in the early lessons for beginning the changes of direction.
In hand.-Let the rider close his legs against the sides of the horse and press in his heels, and meet the effects of the heels by a light tension upon the reins. When the horse bends its neck, brings the head into the vertical position, and sustains it without support from the hand, and yields the jaw to the

touches of the bit, the animal is 'in hand,' the lowest state of collection consistent with light and easy action. (Fig. i7.)

From the state of collection described as 'in hand' the horse is ready to move, forward or backward, at a walk. To prepare the horse to move forward from a halt at a more rapid pace than a walk, the centre of gravity will be carried further back, so that greater impulse may come from the croup when the hand releases the forehand. For the gallop, from a halt, the centre of gravity will be carried back and the forehand lightened on the side with which the horse is to lead, and the balance of forces will be obtained after the horse is put in motion.

As soon as the horse has come 'into hand' the rider should yield the reins, release the pressure of the legs, and encourage the animal by kind words and caresses.

When the horse is trained it should be habitually ridden 'in hand,' and the occasions when a closer collection is required will be pointed out. But the first lessons should be given by gradual steps, and the horse should not be fatigued or harassed. To endeavour to force the horse to come 'into hand' is the surest method of making the animal heavy and sullen.

The object of the rider in collecting the horse in place is to have the weight of the mass evenly divided between the fore-legs and the hind-legs, and in action to have this balance as closely observed as the motions of the animal in action will admit. A horse naturally well-balanced would stand, at liberty, with the legs almost perpendicular to the horizontal plane upon which the animal is placed-that is, a perpendicular line falling from the upper outside end of the haunch-bone would fall at the heel of the hind-leg, and a similar line would fall from the middle of the socket of the fore-arm to the heel of the foreleg. But how the mounted horse should carry itself can only be determined when the rider finds it light and balanced between his hand and heels. Any malformation of the horse would require an artificial balance to be obtained by elevating or depressing one or other of the extremities, according to the position the horse takes when bearing the weight of its rider.

The Poise.-If, after the horse has been brought 'in hand,' the rider wishes to collect the forces as closely as possible; he will continue the pressure of the legs, and restrain a forward movement or heaviness of the forehand with the bit. When the neck bends, the crest rises, the face is held vertically, the jaw is pliant, the horse grows under the rider, and
the base of support is so small and unstable that a movement must take place in some direction, the forces of the horse are poised. (Fig. 18.) In this state, although the animal is perfectly still, the tension of the nervous and muscular systems of the horse is so great that the pose can be maintained in perfection but for a moment; a movement then takes place, or one or the other extremity loses its lightness. The poise in place is taught to enable the rider to collect the forces in action, but no regular movement is made from this closely collected position.

The effect of the poise, or absolute collection and balance of the horse, is used in action when the course is to be modified or reversed ; in consequence of this equilibrium of the forces no movement can take place in any direction until the forces of one or the other extremity are permitted to yield.

But, as we shall see, the poise should be taught to the horse when it is moving in direct lines at the various paces, and it should be practised until the animal will, in the walk, trot, or gallop, sease and resume the advance without losing its lightness. The poise in action has the same characteristics as the poise at a halt, with regard to the lowering of the neck, the pliancy of the jaw, and the swelling of crest, but is further marked by a higher carriage of
the head and the continued action of the legs; for the pause is of such short duration that the legs, which are flexed at the moment the poise is made, give the impulse for the renewed movement.

The collected halt from action is nothing more than the loss of lightness after the poise in action has been brought about,-that is, the horse having been collected between hand and heel until neither extremity has a controlling influence, the horse comes to a halt and the aids demand no further action.

The horse may be brought to the poise, or state of perfect equilibrium, while in place (Fig. 18), by the pressure of the heels and the restraint of the hand. In collecting a horse high in the forehand, the hind-legs of the animal must not be carried too far under the mass, or the croup will be depressed, but the head and neck should be lowered so that the centre of gravity will not be carried too far back in gathering the forces. But in collecting a horse, the croup of which is high and the forehand low, the head and neck must be elevated and the hind legs carried well under the mass, so that the croup will be lowered and the centre of gravity carried back, to relieve the low forehand. After collecting the horse, the hand should be given, the pressure of the legs withdrawn, and the animal encouraged in its obedience.


When the horse is poised in action, the head and croup are held higher and the back is not so arched, because of the action which continues though the horse remains in place, as when the forces are so closely collected at the halt; but, as in the latter case, the neck bends, the jaw yields, the horse seems to grow under the rider, and the animal is ready for a movement in some direction without any further preparation. (Fig. 19.)

I think it well to say that the horse from which the illustrations for this book were taken, was low in the forehand; consequently the suppling of the two extremities has been shown to a great degree. Without thorough training this horse would be-as it was when I bought it-very hard in the mouth, and with very heavy, awkward action. I selected this animal with a view of showing what could be done for a horse, not naturally well balanced, by a careful system of training.

Between the state of collection which we have called 'in hand,' and the condition of absolute equilibrium or 'the poise,' is 'the union,' which is the closest collection that can be obtained without affecting the rate of speed at which the horse is moving. We shall describe this union in the next chapter.
The head of the horse may be depressed by the
curb bit in the same manner as by the snaffle ; and by putting forward the bridle hand and elevating it, the head of the horse may be raised with the face vertical to the ground. It is excellent practice, with horses low and heavy in the forehand, to elevate the head with the snaffle bit, and then with light touches to bring the nose down, while the jaw remains pliant. (Figs. 7 and 8.) The suppling of the jaw should be continued until there is no opposition to the hand ; and whenever, at any stage of its training, a horse resists the bit, these lessons should be resumed.

The horse should be made to bend its head and neck to either side, by means of the curb bit, in exactly the same manner as with the snaffle, only greater care must be taken, and the lessons should be more gradual. We are about to teach the horse a new indication of the curb bit-that of the opposite rein ; it has, as we shall explain, a different effect from the direct tension, but it is absolutely necessary that a horse should answer the direct rein of both the snaffle and the curb.

## CHAPTER XI.-ON 'THE UNION.'

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THE WALK-THE TROT-TO BACK.
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To put the horse into a walk, from a halt, the rider will bring the animal 'in hand,' and, continuing the pressure of the legs, he will lower the bridle hand sufficiently to give the horse freedom to proceed at a walk. As soon as the horse begins to advance, it will be brought 'in hand,' the rate of speed being maintained, and it should never be permitted to become disunited or heavy.

If the horse be inclined to carry its head too high, the legs of the rider will act gently upon the sides of the horse, and the hand will be held low. If the horse hang upon the hand and be dull in front, the legs of the rider should act vigorously to bring the hind-legs of the animal well under the mass, and the hand should raise the head so that the point of union of the forces will be carried back.

To turn to the right, the rider will take all four reins in the left hand, the snaffle reins held more loosely than those of the curb, and he will carry his
right hand upon the right snaffle rein. When he has arrived at the spot where the change of direction is to be made, he will turn the head of the horse to the right by a direct pull upon the right snaffle rein; as soon as the horse begins to answer that rein he will turn his left hand so that the thumb points to his right shoulder, and carry that hand to the right, in order that the left curb rein may come against the left side of the neck of the horse. Both the right hand, with the right snaffle rein, and the left hand, with the curb reins, will govern the bend of the head of the horse by being borne more or less to the right as the animal is required to turn the head more or less. This action of the bridle hand will (apart from the first effect which is a direct action upon the right side of the mouth of the horse, and the touch of the rein upon the neck which in time becomes potent) cause the bit to operate upon the left side of the horse's mouth in such a manner that the head will be carried to the right. This effect of the opposite rein is very different from that of the same rein drawn back without the intervention of the neck. And there is no difficulty in teaching the horse to recognise at once the distinction between the opposite rein and the direct rein if the rider does not confuse the horse by the way he gives the indications; for, while it is better to teach the horse to regard signals
that the animal would be disposed to obey through involuntary muscular action, it is not difficult to teach a horse to perform the movements by indications that are directly opposed to their first and ordinary effects; and it may be seen that if two effects of a rein are not kept distinctly marked the horse may soon become confused whenever either of these effects is given. In the same manner, the reins being carried in the right hand and the left hand resting upon the left snaffle rein, the horse will be taught to turn to the left.

With the snaffle initiating the turn, and afterwards with the curb reins alone, the horse should be ridden in circles, gradually decreasing in size, and in serpentine lines, so that the animal will obey with promptness, ease, and grace all the indications of the opposite rein, the shoulders conforming to the circumference of the circle, the head a littlè bent in the direction in which the horse is turning, the croup following the path of the shoulders. After the horse has been thoroughly trained to this indication of the curb bit, the reins should be carried in the left hand, and the horse be accustomed to work to either side by the direction of the bridle hand.

These things are not to be accomplished at once, but the reader should know the highest ends of the
system he follows, and should always keep them in view.

Before a horse is put in a new direction, or is changed from one pace to another, or is made to change the lead in the gallop, or is brought to a halt, it should be put in that state of collection that we have styled the union. That is, the forces of the two extremities must be united as closely as is consistent with the maintenance of the pace, in order that the horse, by reason of this balanced condition, may obey the demands of the rider at once.

To unite the horse at a walk, the rider will press his legs against the sides of the animal, and, carrying back the forces of the forehand, prevent an increase of the speed by a corresponding operation of the hand. When the neck is rounded, the crest swollen, the jaw pliant, and the horse seems to raise itself and increase in size, while the action is light, even, and regular, the horse is united, and is prepared to change, without awkwardness or hesitation, the direction or the pace.
The horse should be frequently brought to the union in the walk, without permitting the speed to be increased or slackened ; and it should also, while in the walk, be brought to a momentary halt, by the rider collecting the forces for the poise in action,
and resuming the forward movement before the lightness is lost.
Whenever the horse is brought to a halt, it should first be united, then poised, and, the movement having been stopped, the hand should release the forehand, the heels be withdrawn from the sides, and the animal will stop in such a form that it can readily be put in motion.

The poise in action, it will be remembered, is simply a higher state of collection than the union, wherein the forces are brought to a point of union and balance so that the movement ceases, but is resumed or modified by the impulsion of the legs which were flexed at the moment the poise was effected; and the poise becomes the halt when the aids demand no further action of the horse at the time the forces have been brought into equilibrium.

To put the horse into the trot, the animal will first be made to walk, then the union will be demanded at that pace, and, the horse being light, it will require but a small increased pressure from the heels and a slight yielding of the hand to start the horse into a trot. The pace should be slow and regular, and the horse must not be permitted to fall out of hand. As in the walk, the horse should be frequently brought to the union in the trot, without increasing
or decreasing the pace, and the action then should be very light, graceful, and steady. The evidences of the union are the same in the trot as in the walk.

The poise should also be demanded, and the trot be again resumed before the horse becomes heavy. The poise in action is produced to put an end to the movement with a view of repeating it, or of obtaining another movement before the horse becomes disunited, and it should never be of such a duration that all of the feet come firmly to the ground at one time, but the forces being balanced in some stride of a pace, the action should be resumed so rapidly that the flexed legs shall take steps in the new movement. The poise is sometimes called the half halt, and may be likened to the state of a pendulum that, having swung to its limit in one direction, is about to swing back. In the poise in action three, even all, the feet may touch the ground, but not more than two of the legs should have become so rigid that they cannot give an impulse without being raised again. For in the poise there is no momentum to carry the mass over the centre of gravity. In the poise from a halt the horse should be ready for a movement; in the poise in action the horse should be put into some action by the same aids that have produced the poise or balance of forces. (Fig. 19.) The
halt from the trot will be produced by bringing the horse to the union, then to the walk, and then, as before directed, to a stop. But, after the horse learns to obey the aids with promptitude, it will be brought to an instantaneous halt by means of the poise, when the aids will not demand a movement from the horse, and the animal will come to a stop, with its forces so disposed that another movement can be procured without delay, but not in the instantaneous manner that was possible from the poise.

The reader must bear in mind that in all paces the union must be demanded before a change of direction is made or an alteration in the pace demanded, and that the union and the poise should precede the finished halt.

At the walk, and at the trot, the horse should be made to pass in circles, figures of eight, and serpentines, the forehand keeping truly to the lines, the croup following the forehand. The trainer should be satisfied with moderate progress, and the horse must be perfected in each stage.

With a little care the horse may now be taught to back with ease and lightness. The rider must avoid everything resembling violence, and the movement should be free from struggles and resistances.

To make the horse back, the rider will first place the animal, standing in place, in hand. The pressure of the legs will be continued until the mass is thrown slightly forward, and a hind-foot is detached from the ground. The pressure of the legs will then be eased, and the hand will be brought in so that the raised hind-leg is carried to the rear. (Fig. 20.) The hand and legs should then cease acting, and the horse rewarded for its obedience. Two steps backward may next be demanded, the legs closing lightly against the sides of the horse, as each hind-leg is brought back, and the hand acting at the moment each hind-leg is raised. By slow degrees the horse may be brought to go backwards any distance without losing its lightness. After the second or third lesson the horse should be made to advance after it has made the last required step to the rear, without coming to a halt or becoming heavy, by the hand being carried forward, and the legs acting with sufficient vigour against the sides. As each hind-foot is brought to the ground, the legs of the rider will receive the impulse to prevent the movement becoming too rapid, and as each hind-leg is raised, the hand will gently bring back the forces of the forehand to produce the movement. Both the hand and the legs must
be employed to keep the horse upon the line of the movement.

By turning the croup with the opposite heel, and slightly increasing the tension of the rein of the same side, the horse may be made to back in any direction.

CHAPTER XII.-LOW PIROUETTES—TRAVERSING AT THE WALK-DEMI-VOLTES.

THE rider will make the horse perform a low pirouette to the right (that is, a movement of the forehand about the right hind-leg as a pivot), by placing the animal with its left side nearest a wall, and bringing it 'in hand.' Then, increasing the pressure of the legs until the horse is about to move forward, he will lead the forehand to the right by means of the direct rein of the snaffle bit, and, with the bridle hand carried to the right, aid the right hand by the pressure of the left curb rein against the opposite or left side of the neck of the horse. Both reins will work together to measure the movement of the forehand to the right, by being carried more or less to the right as the forehand moves too little or too much; and, when necessary, the tension to the rear to fix the croup should be made by both the indirect curb and direct snaffle reins, so that the horse will come to answer all the indications of the curb reins when they are employed without the snaffle.


The first object will be to make the forehand take one step to the right, while the right hind-leg remains immoveable. By gradually advanced lessons the horse will be made to move the forehand about the right hind-leg as a pivot, until the horse is brought to face the direction opposite to that from which it began the movement. The left leg of the rider will be held close to the side of the horse, to keep the croup from going over, and to bring the left hind-leg up to its place as the body wheels on the right hind-leg as the pivot. The head of the horse should be kept slightly bent in the direction the forehand follows. (Fig. 23.) The right hand, acting with the right snaffle rein, will inaugurate, govern, and maintain the movement of the forehand, but the left hand, bearing the reins to the right, should support the snaffle by the action of the left or opposite curb rein, so that the horse may learn to obey the indications of the latter. The force of the snaffle will be gradually lessened, until the horse carries the forehand about the right hind-leg as a pivot by means of the left, or opposite, curb rein alone, as it is pressed against the left side of the neck of the horse.

The horse may then be made to perform the movement away from the wall, and to carry the forehand in a complete circle about the croup,
when the movement will be the finished low pirouette. (Fig. 23.)

In the pirouette proper, of which we shall treat hereafter, the horse takes its weight upon the haunches, and, raising the forehand in air, turns upon the inner hind-leg as a pivot. The fewer times that the fore-feet come to the ground in the course of the wheel, the better the pirouette is performed.

The reversed pirouette is made from a halt by bringing the horse 'in hand' and carrying the croup about the forehand by means of the opposite heel, while the direct snaffle rein, seconded by the outside curb rein, holds the forehand in place, and bends the head towards the advancing croup. That is, to make the reversed pirouette to the right, the rider will bend the head of the horse to the right by the direct action of the right snaffle rein, and by carrying the left hand to the right, so that the opposite or left curb rein supports the effect of the snaffle. Then, by a pressure of the left leg against the side of the horse, the croup will be urged about the left fore-leg as a pivot. As the hind-legs step about to the right, the right fore-leg must be brought up to occupy its place in reference to the changes of position of the rest of the mass, but the left fore-leg must not be raised from the ground. The use of

the right snaffle rein will be gradually discarded, and the curb reins will govern the forehand in the movement. (Fig. 14.)

The pirouettes to the left will be made in the same manner by means of the corresponding aids.

Traversing is the movement in which the horse passes to either side (at the walk, trot, passage, terve-à-terre, or gallop) upon two paths, the forehand following one, the hind-quarters, slightly retired, the other. (Fig. 22.) The lessons in head and croup to the wall have prepared the horse for the traverse, but before the animal is required to perform it at a pace faster than a walk it will be necessary to confirm it in the indications of the curb bit. It must be understood that in traversing, the head of the horse must be slightly bent in the direction in which it moves, and that the forehand is a step in advance of the croup, so that the body of the horse is out of the perpendicular with regard to the line of march. The head to the wall will first be demanded in traversing. (See Diagram.) The rider will place the horse facing the wall and straight from it. The croup will then be made to take a step to the left, and the horse will be in a position to traverse to the right. Bringing the horse in hand, the rider will lead the forehand off to the right, by the direct snaffle rein, seconded by
the opposite curb rein, placed against the left side of the neck by holding the bridle hand to the right; with the left heel he will press the croup to the right so that it will move in unison with the forehand. The head of the horse, as has been explained, will be carried a little to the right. When a corner is reached, the turn will be.made exactly in the manner as described for head to the wall, except that the outside curb rein will second the effects of the snaffle bit, and that both the direct snaffle rein, and the opposite curb rein will retard as well as demand the movement of the forehand when necessary, by being carried less to the right if the forehand goes too fast.

In all the movements to the side upon two paths -traversing, demi-voltes, or pirouettes, in walk, trot, or gallop-the body of the rider should be made to conform to the changes of the horse ; the inside shoulder (or that of the side to which the horse is moving), being advanced or retired as the forehand is to be restrained or brought over. The face of the rider should be so turned as to see the ground upon which he is directing the movement.

When the horse will traverse evenly and smoothly with the head to the wall, the rider should attempt a demi-volte, in order that the horse may be confirmed in its obedience to the aids without the
assistance of the wall. To make a demi-volte to the right, the horse will be placed with its left side near the wall. The horse will then be collected, and the forehand, led and governed by the right snaffle rein (supported by the opposite curb rein, carried against the outside of the neck by the bridle hand held to the right), should move upon the greater circumference of a half-circle, while the croup passes along an inner circumference, until the rider brings the horse back to the wall at the distance, from the place he started from, of the diameter of the circle. (See Diagram.)

During this demi-volte, the horse must be at the proper angle to each point of the circumference, the forehand slightly in advance of the croup, the head bent to the right. The demi-volte should first be upon circles of a large diameter, and as the horse improves in its knowledge of the aids, the demivoltes may be reduced in size.

In the same manner, the aids being changed, the horse may be made to traverse in lines and demivoltes to the left, by means of the direct snaffle, supported by the opposite curb. When the horse will traverse to the right and to the left at the indications of the two bits, the snaffle may be gradually dispensed with, and the horse ridden in the same movements in the curb bit. The bridle hand will
now govern the forehand, being carried to the right, more or less, as the horse is to be led in that direction; and if the forehand moves too rapidly, the hand will be brought back somewhat. To lead the horse to the left, the bridle hand will be carried in that direction. Whenever the bridle hand is carried to the right, the wrist should first be turned so that the thumb point to the rider's right shoulder. Whenever it is to be carried to the left, the wrist will be turned so that the thumb will point to the ground, over the left shoulder of the horse. This will give the indications with most certainty. When the horse will perform the movements above described, at the walk, it may be made to traverse and do the demi-volte in the united trot, without having the wall as a guide.

For the purpose of making the matter perfectly clear to the reader, I will repeat the instructions for the use of both sets of reins in teaching the horse to obey the indication of the opposite curb rein. To turn, to pirouette, or to traverse in either direction, the snaffle rein of that side will first be employed, and, as soon as the horse begins to obey it, the bridle hand ${ }^{1}$ will be carried to that side, so that the opposite curb rein comes against the neck of the

[^8]horse, and sustains the action of the direct snaffle rein. If the forehand bends too much, both the bridle hand and the hand acting upon the snaffle rein will be carried back from the direction in which the horse is to turn. The object of these lessons is to teach the horse to give immediate obedience to the opposite curb rein when it is brought against the neck. When the horse answers to the opposite curb rein, the bridle hand should govern the movements of the horse by means of the curb reins, without assistance from the other hand, or support from the other bit. It is only when the bridle hand is carried so far to the right that the left rein presses against the neck of the horse, that the left curb rein has the effect of turning the horse to the right ; and the direct action of the curb reins should always be true unless the neck intervenes to give a contrary indication.

CHAPTER XIII.-INDICATIONS OF CURB BIT.
TRAVERSING AT THE UNITED TROT. reversed pirouettes.

The low pirouettes and traversing at a walk will accustom the horse to obey the combined aids with precision and readiness ; and the effects of the curb bit, all of which are in accordance with the natural impulses of the animal, ${ }^{1}$ are made clear to the horse. It is a mistake to suppose that the opposite rein is incompatible with the direct rein, or that the use and practice of one is likely to confuse the horse. Owing to the intervention of the neck the indirect rein has the same mechanical effect that the direct rein has, to turn the head in the direction that the hand is carried. This can be proved by mounting a quiet horse, that has not been suppled, and riding it with a single halter-strap fastened to the headcollar. It will be found that, as every groom knows, or should know, the horse will turn to the side upon which the halter-strap is drawn; and that when the

[^9]hand is carried to either side so that the strap takes a bearing against the neck, the horse will be turned in the direction the hand is borne, exactly as by the opposite rein.

As the education of the horse progresses, the distance that the hand must traverse to give the various effects of the curb bit will be decreased, and in time the horse will promptly obey the almost imperceptible motions of the hand.

The rider will not be long in discovering, if he follow the method that I lay down, that each curb rein has a wide range of effects, aside from the power of elevating and depressing the forehand. First, the direct tension will lead or turn the horse to the same side ; then, as the rein is carried nearer to the point where it takes a bearing upon the neck (to give an effect contrary to the first named) it restrains the croup on the same side ; ${ }^{1}$ after the rein is carried over so that a bearing is taken upon the neck of the horse, it bends the head of the horse in the direction the rein is carried, and restrains the hind-leg of that side.

As I have said, the horse, by careful training, becomes so sensitive to the touches of the bit that the most delicate shades of the bit's action are re-

[^10]sponded to at once ; and a horse may be so 'highly trained' that no one but a rider of the firmest seat and lightest hand can manage it.

If the rider will hold the curb reins as I have suggested-in the left hand, divided by the little finger, the hand in front of the body, the thumb pointing towards the ears of the horse-the indications of the reins may be given to a well-bitted horse with precision and promptness. A direct tension upon the right rein is effected by turning the hand so that the thumb points towards the rider's right shoulder; an indirect token, which seconds and enforces the same bend or turn of the head of the horse, is made by carrying the hand to the right. A direct tension upon the left rein is effected by turning the wrist so that the thumb points towards the ground over the left shoulder of the horse ; an indirect token, which seconds and enforces the same bend or turn of the head, is made by carrying the reins to the left, until the right rein is pressed against the right side of the horse's neck.

We shall now turn our attention to the traverse in the collected trot. When the horse is united in the trot the animal bears its weight at each stride upon a fore-leg and the hind-leg diagonally disposed ; from these it springs into air and alights upon the other pair of diagonally disposed legs. As the
horse goes out of hand and becomes disunited the synchronal action of each pair of legs is lost and the pace becomes heavy, rough, and inelegant. But it will readily be understood that the united trot is admirably adapted to the traverse, when the forehand and the croup follow parallel paths, as the extremities step together and maintain a regular, even, and easy action.

If it be intended to traverse to the right, the horse will be put 'in hand' at the trot, and then collected to the union, which must be observed while the movement continues. At the point where the side movement is to begin, the forehand will be retarded until the croup is carried up into the proper position; unless the horse approaches the point where the traversing is to begin with the forehand and the croup holding their proper places with regard to the line of march-that is, with the forehand one step in advance of the croup.

At a slow trot, in the highest union, the horse will be made to pass on two paths to the right. The bridle hand will, with the curb reins, direct the forehand and bend the head in the direction the horse goes. The left leg of the rider will press the croup ${ }^{1}$ along in steps similar in length to those taken

[^11]by the forehand, while the right leg of the rider will be kept close to the side to prevent the horse falling back or the croup going over too far. When a corner is reached the hand will restrain the forehand or the inside heel the croup, depending upon whether the croup or the forehand is working in the outer circumference of the bend. In the same way the horse should be made to traverse to the left in a collected trot, by means of the corresponding aids; and demi-voltes should be made, and serpentines, on zigzag paths, in this light and easy pace.

When the horse is traversing to the right (or left), and it be desired to traverse to the left (or right), the animal will be brought to a poise, the forehand held in place, the croup carried over in the beats of the trot, and the head turned for the new direction, so that the change is made before the horse becomes heavy.

If a horse be passing in a straight line upon a single path, the croup following the forehand, and it be desired to move in the opposite direction, the reversed pirouette may be made in the following manner. The horse will be united in the trot, and when the point is reached where the change is to be made, say by turning to the right, the animal will be brought to the poise, the bridle hand will carry the head to the right, and fix the forehand, while
the left heel will carry the croup about the forehand in the beat of the trot; when the change has been made, and the horse faces in the new direction, the forehand will be lightened and the horse will move off in the united trot before the animal has been permitted to become heavy. (Fig. 14.)

It should be understood that in neither of the pirouettes in action is the horse absolutely balanced, for the centre of gravity is carried forward or back just sufficiently to fix the pivoting extremity; but the action which is maintained by the other extremity permits the equilibrium or poise to be re-established at once, and the horse can then be moved in any direction in any state of collection before it has really been heavy and uncontrolled. The poise, being a state in which the forces of the two extremities are in equilibrium, admits of no movement in any direction (or of any motion beyond the dancing step of the piaffer, where the horse balances from one pair of diagonal legs to the other), and it is a very simple thing to fix either extremity for the moment and then recover the equilibrium, if the horse answer at once to the aids.
CHAPTER XIV.-THE GALLOP.

## CHANGES OF LEAD-DEMI-VOLTES—PIROUETTES.

The gallop is a pace of three beats and a leap at each stride. The first beat is that of one of the hind-feet, then the other hind-foot and its diagonally disposed fore-foot come to the ground together, and the remaining fore-foot, of the side opposite to the hind-foot which began the stride, makes the third beat, and from the last-named foot the horse goes into air, to receive the weight upon the hind-foot that began the preceding stride. The horse is said to lead with the fore-leg from which it goes into air, as that leg is the more advanced at the end of each stride, and has the appearance of taking a more extended step than the fore-leg of the other side. If the horse turn to the right when the left fore-leg is leading, or to the left when the right foreleg is leading, it is false in the gallop. If the right (or left) fore-leg be leading, and the left (or right) hind-leg does not take a corresponding step, that is, in advance of the other hind-leg at each stride, the

horse is disconnected, and the pace is rough and awkward. To be true and connected in the gallop the fore and hind leg of each side must correspond in action, and the turns must be made to the side with which the horse is leading.

From a halt, a walk, or a poised trot, the horse takes the gallop by raising the forehand, and then planting in advance the fore-foot with which it means to lead (Fig. 25); the impetus is given from the croup, and the horse begins the gallop with the fore-leg that has been advanced in the first instance. ${ }^{1}$

To teach the horse to take the gallop, in the curb bit, with either side leading, the rider will put the animal in a slow united trot. To make the horse lead with the right side, he will retire his right shoulder, lighten the forehand by the direct rein, and close in both legs to the sides of the horse, the left leg with more vigour than the other. The horse should then take the gallop with the right side leading. But if it do not take the desired lead, the rider may again bring the horse into a united trot, and, withdrawing the right leg, apply the left heel sufficiently to bend the croup over to the right, when

[^12]the right rein has prepared the forehand. But it is desirable that the horse should be taught to gallop as straight as possible ; and, when it can be avoided, no wrong method should be employed, in any movement, to be afterwards exchanged for a better one.

By employing the corresponding aids in the same manner, the horse will be taught to gallop with the left fore-leg leading.

To enable the horse to keep the pace evenly and smoothly, the rider should sit quite still, and the hand and heels should maintain a light and regular gallop. By degrees the horse should be taught to gallop in the highest union possible for the pace in which it is put, and it should be made to gallop at different rates of speed, but required to keep the degree of speed demanded by the rider. The horse will be galloped in circles, turning to the leading side, and the diameters of these circles should be gradually reduced as the horse learns to answer the aids in the action.

In the early lessons the horse should be brought to a halt from the gallop by the rider pressing in the heels and restraining the forehand by an even tension upon both reins, but with such moderation that the horse will take a trot, then a walk, and finally come to a stop; each stage being made according to the
rules before laid down for reducing the speed by a closer collection of the forces. But as the horse is taught to gallop in a united form and at a very slow pace, it will be made to come to a halt by being collected to the poise without falling into the trot or the walk. The rider will also practise bringing the horse to a poise, and resuming the gallop without coming to a finished halt.

The steps by which the horse is to be taught to change the lead in action should be made very cautiously, or the animal will acquire an awkward and struggling manner of changing lead.

The horse will be taught to take the gallop with either side leading from the trot, the walk, and the halt. It will then be ridden in a straight line, leading with either leg in the gallop, brought into a trot, and then put into the gallop with the other side leading. The rider should give the indications of the aids with care and without violence. Each time that the horse is brought into the trot the forces should be united, before the gallop is again demanded. Gradually the number of steps in the trot will be reduced to but two or three. The rider will then make a change of lead, without permitting the horse to fall into the trot, by collecting the animal, from a very slow gallop, to the poise, and then by applying the proper aids for the change
of lead before the horse gets heavy. That is, the horse, having been in the united gallop with the right side leading, will be collected for the momentary stop by means of the poise of the forces; at that moment the bridle hand will support the forehand with the left curb rein, the left shoulder of the rider will be retired, and the right heel will give an accentuated pressure against the side of the horse, so that the animal shall resume the gallop with the left side leading.

After the horse will make the change from the poise, or momentary rest, without struggles or resistances, it should be taught to change the lead in the beat of the gallop.

To accomplish this the aids must be employed with precision but without force, and the ear should not be able to detect the step in which the change has been made.

If the horse be galloping with the right side leading, it will be closely united at a very slow pace. When the horse is about to take the weight upon the left hind-leg, after having been in air, the rider will retire the left shoulder, turn the wrist of the bridle hand so as to support the left side of the forehand with the direct rein, and accentuate the pressure of the right heel. The horse should change the lead of the fore-legs at the moment the
forehand feels the bit, and the order of the hindlegs should be changed as the horse goes into air from the left fore-leg.

The step-by-step changes are made by the same means, except that the forces of the forehand are brought so far back that the pace becomes one of four beats as the second hind-leg comes to the ground before its diagonal fore-leg. When the weight is borne by the two hind-legs, the fore-legs make the change of lead, and when the foremost fore-leg takes the weight the hind-legs make the corresponding change in their order of movement.
The step-by-step changes are exceedingly difficult for the horse and the rider, and the movement has no other object than to exhibit the state of training of the former and the skill of the latter.

The traverse at the gallop is demanded in the same manner as at the trot, the horse leading with the side to which it goes. When the horse is traversing in one direction, and it is desired to traverse back upon the same lines, the animal will be collected to the poise, and in the momentary pause the forehand will be carried over so that the horse will be placed across the path in the proper position to pass to the other hand, the lead of the fore-legs being changed as the forehand is carried over, the lead of the hind-legs being changed by the
proper aid at the first stride they make in the new direction.

If the horse be in the gallop on a direct line, the croup following the forehand, and the rider wishes to make a demi-volte to the right, he will arrest the forward movement by effecting the poise, carry the forehand to the right far enough to put the horse in the proper position across the lines he intends to take, and, pressing in the left heel, continue the gallop thus momentarily interrupted, on two paths, the croup upon the circumference of a circle of smaller diameter than that upon which the forehand passes. (Fig. 24.) As the demi-voltes decrease in size, the hind-legs of the horse travel over less space, and when the inside hind-leg becomes a turning pivot the movement is a demi-pirouette. ${ }^{1}$ The demi-pirouette to the right is perfectly performed when the centre of gravity is carried back so far that the forehand rises from the ground, and, the rider turning his body to the right as he carries the bridle hand over in that direction, the horse wheels upon the right hind-leg and brings the fore-feet to the ground after it has made an 'about face.' A play of the left rein and a pressure of the right heel

[^13]should then induce the horse to resume the gallop with the left side leading. Of course the pirouette can be demanded from the gallop only after the poise has been effected, and to the side that has been leading in the gallop. The demi-volte and demi-pirouette are made to the left in the same manner by the use of the corresponding aids.

CHAPTER XV.-DESCENT OF THE HAND.

These lessons should never be carried so far as to fatigue the horse, for by such a course the trainer would defeat his object in obtaining light and easy action. But the trainer should endeavour to reach the highest standard, and the horse should be ridden, in all the paces, to the union until that state of collection becomes a habit. To confirm the horse in this carriage, and to prevent a disorder in the pace at any changes of the aid, the horse should be taught to bear itself collected in the union without the support of either the hand or legs of the rider. The trainer will find that in the vigorous action of the united trot the horse will best carry itself without support, and in that pace he will first drop the hand but aid the horse with the pressure of the legs. The horse being in a united trot, the rider will use both aids to bring it to the highest point consistent with the pace, and will then release the tension of the hands for a few steps, increasing
the pressure of the legs as the tension upon the reins is resumed, to prevent the horse yielding too much to the bit. In time, when the horse will continue the united trot without the aid of the reins, the support of the legs will be withdrawn, for a few steps, after the hand has been lowered. Before the horse becomes disunited, the legs will resume their support, and the hand will take the necessary feeling upon the mouth. By gradual stages, the horse will be brought to bear itself in the united form without the support of the aids for considerable distances, sufficient to confirm it in the habit. In the same manner the horse will be practised in keeping the united form at the walk, and afterwards at the gallop.

## CHAPTER XVI.-LEAPING.

It is no very difficult thing to teach a horse to leap with calmness; but if the rider uses whip and spur whenever the horse is about to leap, the most docile animal may become flighty, the most generous a refuser.

If a horse be given some of its usual lessons near the leaping bar, until it is accustomed to the sight, and is then led over it by the trainer preceding it at the full extent of the reins without turning his head to see if the horse follows him, the animal will be ready to pass over it when being longed. The bar may then be put up to the height of a foot or a foot and a half, and the horse induced to leap it in the longeing circles. After the horse will leap the bar freely upon the longe, the trainer will correct any faults in its jumping by holding the horse by the snaffle reins as it leaps, and touching it with the whip, lightly, below the knees, if it does not gather the fore-legs closely, below the hocks if it does not
gather the hind-legs well under the body, as those limbs are bending for the jump.

The horse may then be ridden from a walk over the bar, the rider collecting it as it approaches the leap, so that it will have control of all its powers. As the horse rises the rider will press his legs against its sides, and as it alights he will give it a light support with the snaffle bit. The horse should not be aided by the hand to rise to the leap, as that will induce the bad habit of depending upon the rider for the hint where to take off, and in a flying leap might bring about a serious disaster. But the horse should be brought to the leap well collected, and it should then need no aid from the hand. After the horse will jump, freely but quietly, from the walk, it may in the same way be made to take the leap from the trot and the gallop, and finally from the halt. The animal should not be discouraged by demanding too much from it, either in the number or height of the jumps, and the lesson should always end with a perfectly performed leap, which should be rewarded. Whenever the horse grows careless it should be put back to the lessons in hand. Neither whip nor spur should be used in leaping, beyond a light tap of the former if the horse fails to gather the hind-legs well under the body. In leaping the horse should rise well, taking the weight
upon the bent hind-legs, and the fore-feet should first receive the weight after the leap. To insure this the snaffle bit should be used in jumping, unless the rider have the firmest of seats and the lightest of hands, for the curb bit is apt to teach the horse to 'buck over,' so that all four feet receive the weight, and sometimes to alight in such a manner that the hind-feet first reach the ground.

After the horse alights, and has taken such support as it requires, the legs and hands should collect it for the speed and pace with which it approached the leap; for after all such exertions, in which the centre of gravity is violently shifted, the union is lost, and must be restored by the action of the aids.

CHAPTER XVII.—THE HIGH SCHOOL.

The movements of the school are employed for the double purpose of teaching the horse a prompt and exact obedience to every indication of the aids, and for exhibiting in the managed animal some of the more brilliant actions of the horse at liberty. It can readily be understood that a horse which has been disciplined by school training will be under perfect control, but it is not generally recognised, that the Spanish trot, the piaffer, and the curvet are motions and actions that are common to horses of a gay and lively temper when at liberty, and that some of the other school airs are often volunteered by restless animals in their resistances.

The Spanish Trot is an exaggerated action in which, at each stride, a fore-leg is thrust boldly to the front, and there is a poise or half halt as the horse is in air, procured by the support of the rein and the heel opposite to the raised fore-leg. The legs are moved exactly as in the united trot,-that is, the horse goes from one pair of diagonal legs to the other
pair ; and it only differs from the trot in the extent of action which makes the pause in each stride that also characterises it. This movement is taught by the trainer walking near the shoulder of the animal, holding the reins, under the chin of the horse, in one hand, to restrain the forward movement, while with the whip held in the other hand he touches the horse under the fore-arm as each fore-leg is being raised. After a few short lessons the horse will strike out with the fore-leg at the tap of the whip, and the led horse will move in the Spanish march. The trainer will then mount the horse, and transfer the power of the whip to the heels in the following manner : collecting the horse, at the halt, the rider will take a slightly increased tension of the left rein and press in the left heel, at the same time tapping the horse under the right fore-arm with the whip. When the horse raises the right fore-leg the hand will yield so that the animal will advance, and, with right rein feeling the mouth and the right heel pressing against the side, the whip will be carried over the withers of the horse and applied to the left fore-leg as it is being raised, when the hand will again yield, so that the horse may take a step forward. In this manner the horse will be made to take several steps in the Spanish march, when it will be stopped and rewarded for its obedience. By short, but frequent lessons,


FIG. 27. SPANISH TROT.
28. PIAFFER.
the horse will be taught to take the exaggerated step at the application of the opposite heel, supported by the reins of the same side, without the indication of the whip, as the fore-leg is raised in each step. That is, the left rein and the left heel will act as the right fore-leg is being raised; the right rein and right heel as the left fore-leg is being raised. The Spanish march should be practised at a very slow walk, and the horse well supported by the hand, so that the fore-leg may be raised high and the pause be observed as the climax is reached in each step.

To make the horse take the pose so greatly admired by sculptors of ancient and modern times, let the rider press in the spur opposite to the foreleg to be raised, and with the rein of that side, drawn across to the rear, support the forehand and fix the diagonal hind-leg, so that the weight will be borne on three feet. (Fig 26.)

The horse having been made perfect in the Spanish march, it is very easy to produce the Spanish trot. (Fig. 27.) The horse will first be moved forward in the march, and, having been closely collected, the animal will be forced to make increased exertions: as the horse is about to raise the right fore-leg, the rider will press in the left heel and sustain the forehand with the left rein; as the animal is about to raise the left fore-leg, the rider
will press in the right heel and support the forehand with the right rein. After the horse has made two or three strides in the Spanish trot it should be brought to a halt, and rewarded for its obedience.

In the Spanish trot the horse should leave the ground in a series of bold springs from each pair of diagonal legs, striking out high and to its full extent with the fore-leg that is to be next planted. The action of the hind-legs should also be vigorous, and the movement should be even and regular, the pause at each stride well defined. By gradually increasing the number of steps the horse will soon be able to continue this trot to any reasonable extent; but it is very fatiguing, and if it be carried too far the horse will become careless and heavy. Whenever the horse becomes negligent in this trot, it should be put back to the lessons on foot and in the march.

The Passage is a low Spanish trot, in which the pause in each stride is not so strongly marked ; that is, it is a slow brilliant trot, in which the horse brings each pair of diagonal legs to the ground at exactly the same moment. The passage is usually employed in traversing, as it is peculiarly fitted for the movements to either side in safety. The horse in this movement must be very light and well balanced, and the action should be even and regular. The
knees of the fore-legs are more bent than in the Spanish trot, for the fore-legs are not so extended as in that movement, and it is without doubt the most graceful motion of which the horse is capable. The passage is usually taught by permitting the action of the Spanish trot to become languid; but the better method is to bring the horse up to it from the ordinary trot by demanding a close union and forcing the action with the opposite spurs, as in the Spanish trot.

The Piaffer is the passage in place, and is performed by the horse in a state of perfect equilibrium, the forces of the forehand and of the croup being so balanced that no movement is made in any direction. In the piaffer the horse should move the diagonal legs together and in perfect unison. It should only be attempted after the horse has been taught the passage, and may then be procured by restraining the forward movement of the horse and maintaining the action by means of the spurs, as in the passage. The horse is put in the piaffer when changes of direction in the traverse are to be made, so that the lightness will not be lost; as if, for instance, the horse be traversing in the passage to the right, and the rider wishes to go back over the same lines to the left; upon arriving at the spot where the change is to be made, the horse would be brought
to a poise in action, when the passage would become the piaffer; the forehand would then be kept in place in the piaffer step while the croup would be carried over to the right, so that the body of the horse would hold the proper position in reference to the paths to traverse to the left : the traverse would then be resumed in the passage in the new direction. A very slow passage to the front, side, or rear is often called the piaffer ; but if there is any movement out of position it is not the piaffer, which is the passage in place in perfect equilibrium ; and, strictly speaking, the changes of direction in traversing are made in the passage, for the extremity of the horse, which is stationary, has only the piaffer step, while the other part has the passage step.

The School Gallop is a pace of four beats, and is procured from the ordinary gallop by demanding a close union, and by sustaining the forehand with the reins, so that the second hind-foot is planted before the first fore-foot comes to the ground in each stride. It is a languid pace, and can only be performed at a low rate of speed. The school gallop is employed in traversing, and for voltes and pirouettes. The horse may be made to traverse and to do the voltes in the ordinary gallop; but, as the high pirouette is a movement in which
the horse takes the weight upon the hind-legs and turns to either side, the stride in which this is performed is always in the school gallop; so the strides in which the step-by-step changes of lead are made have the characteristics of the school gallop: for in both the pirouette and in the step-by-step changes of lead the forces are carried back so that the two hind-feet receive the weight before a fore-foot is brought to the ground.

The Terre- $\grave{\alpha}$-terre is the school gallop upon two paths to either hand (traversing).

As the gallop is a series of leaps from one of the fore-legs, it will be seen that it cannot be performed in place or to the rear, but there are certain movements which are called The Gallop in Place and The Gallop Backwards. These may be procured either from the pesade or from a slow gallop. To teach the gallop in place from the ordinary gallop, the horse will be ridden at a very slow rate of speed in close union, and in time be brought to raise the forehand once or twice without advancing, the gallop being resumed before the horse becomes disunited and heavy. These steps in place will be gradually increased in number until the horse understands and willingly obeys the demands of the rider. In this movement the forehand rises and the weight is taken upon the hind-legs, and as the
forehand is about to drop the hind-leg furthest advanced is slightly flexed. The Gallop to the Rear requires great skill upon the part of the rider, and complete submission on the part of the horse. As the forehand rises in the gallop in place, the hand carries back the forces, so that the hind-leg furthest advanced takes a step to the rear, and as the forehand drops to the ground the second hind-leg is moved backwards.

The Pesade is a movement which is important, because it is the foundation of all the high airs of the manege. In the pesade the weight of the horse is taken upon the slightly bent hind-legs, while the forehand is in air with the fore-arms closely bent. The hand sustains the horse in this position for a few moments when the forehand drops gently to the ground, and the horse stands in place. It is usual to teach the pesade in 'the pillars,' but it may be taught by the rider collecting the forces, and then inviting the horse to rise by the play of the reins, an assistant standing by to tap the horse upon the fore-legs with a whip as the forehand goes into air, to give that peculiar bending of the knees which the critics demand in the true pesade.

I have never employed, and do not recommend, 'the pillars,' but as they are still used on the Continent, even in some of the military schools, I may
describe them. Two stout upright posts are firmly fixed in the ground, so that they will stand six feet high and be five feet apart. On the inner side of each pillar and near the top, a ring is let into the wood through which the long reins are to be passed. The horse, in a snaffle bridle and with a cavesson on, is placed between the pillars, and the cavesson lines are fastened about the posts so that the horse cannot pass his croup beyond the pillars. Long reins, fastened to the snaffle bit, are passed through the rings in the pillars and held in the hand of the trainer, who stands at a safe distance in rear and slightly to one side of the horse. With whip and voice, the first used with great discretion, the trainer induces the horse to carry its hind-legs under its body, so that the forehand will be lightened, rewarding the animal by a rest and caress whenever it shows any sign of obedience.

By means of the reins and the stimulation of the whip, the trainer unites the horse closely, proceeding gently, and taking care neither to harass nor to fatigue the animal. In this manner the horse is taught the pesade and the airs derived from it, the whip demanding the necessary exertions, while the side-lines of the cavesson prevent the animal from going forward and from bearing upon the reins. The horse is very readily made to perform, under
its rider, the airs it has been taught in the pillars, but it does not usually have the same freedom and grace of movement that the animal which has never been so treated exhibits.

The Curvet is a leap, in which the horse leaves the ground from the hind legs to receive the weight upon the fore-feet. To perform the curvet, the forces are closely collected, and the hind-legs are carried well under the body, so that they are bent when they take the weight, as the hand induces the forehand to rise. The forehand does not rise so high as in the pesade, but the fore-arms are doubled under as in that movement. When the horse is poised upon its hind-legs, the hand gives the animal liberty, and the horse makes a bound in air to alight upon the fore-feet.

The Croupade is a high curvet, in which the hindlegs are brought up under the belly of the horse as it makes the leap from them. It is produced in the same manner as the preceding air, and the more vigorous leap and the action of the hind-legs are caused by a stroke of the whip behind the girths as the horse is about to leave the ground.

The two remaining airs of the manége are now seldom practised, and they are best taught in the pillars. The first of these is the Bolotade, which is a leap similar to the croupade, except that instead
of bringing the hind-legs under the belly, they are thrust out behind, so that the two shoes would be seen by one standing in rear of the horse. The Capriole, the most vigorous of all the school movements, is like a high bolotade with the kick, from both hind-legs, delivered with full force. The kick, which characterises the bolotade and the capriole, is taught, in the pillars, by strokes of the whip upon the hind-quarters as the horse makes the leap, and in riding is demanded by a blow of the whip upon the rump.

The earliest work upon horsemanship, of which we know anything, was written by Simo, a Greek, 500 years or more before our era. Xenophon, the soldier-historian, compiled a treatise upon the subject, with Simo's work as a basis. It is probable that Pliny the Elder was also, as is reported, the author of a book on riding, but no copy of it is in existence, nor have we remaining to us any work upon the subject between Xenophon and Grison of Naples, who issued a work upon the manege in 1552 . This last-mentioned date is given by all the modern writers as the revival of horsemanship, when Grison, Pignatelli, and their immediate followers, were handed down to fame by the newly invented process of multiplying books by printing. Horsemanship had never been neglected, and there was a
revival only in the sense that printing spread a knowledge of an art which grows by degrees. The Greeks improved upon the barbarians, the Romans upon the Greeks, the Italians upon the Romans, the French upon the Italians, and the general rules of the manége are more perfect and more generally known to-day than ever before. We know that the Greeks understood the principles of bitting, and practised their horses in leaping, in the career (short courses at a rapid pace, with sharp turns at each end), and even in the demi-pesade ; that the Romans had places (hippodromes) in which they exercised their horses and taught them various movements, now known as the amble, the piaffer, and the Spanish march; that when Grison wrote, in 1552, the finished airs of the curvet and capriole were known, for all that he invented was a method of teaching the pirouette, then called the Ciametta.

When we consider that at so early a period as the middle of the sixteenth century the most finished air of the high school (the capriole) was practised, and that the wars and rude sports of the Romans and their successors, as well as the tournaments which had flourished for several hundred years, demanded thorough horsemanship, it is diffcult to point out any time during which the art was neglected.

Undoubtedly Pignatelli, who was either a contemporary of Grison, at Naples, or came just after him, did much towards forming the method of training that was employed in Europe until Baucher, in the first half of the present century, gave to the world his admirable system. Pignatelli was the inventor of the single pillar used for suppling the horse. His pupil, Pluvinel, a Frenchman, devised the two pillars, and was, I think, the first to use the covered manege, for Grison and Pignatelli worked their horses in the open air, the single pillar of the latter having been a tree standing in a field. The method of Pignatelli was introduced into France by his pupils La Brone and Pluvinel, both of whom wrote works upon the subject; and the manege was brought into England by two pupils of Grison, natives of Italy, who were invited into his kingdom by Henry viri. It is to be regretted that Pignatelli never wrote concerning the art; but his theories have been preserved by La Brone.

The first book upon horsemanship to appear in England was a translation (1580), by Thomas Blundevill, of Grison's treatise. From this we learn that before the Italian's method was made public the English understood 'managing' a horse to be 'galloping and turning to and fro in one self
path ' (Chap. xx., Book Second, The Art of Riding, ed. 1597). The question, so often asked, even in this day, whether it be possible for one to train a horse by the precepts laid down in a book, has had an answer ready for it any time during the past 300 years; for in the preface to his translation, above referred to, Thomas Blundevill says of 'My dear friend, Master John Ashlie, Master of the Queen's Majestie's Jewell House,' ' for by the daily practising of the rules of Grison his book, I saw him, without the aid of any other teacher, bring two of his horses, and specallie that which he calleth his Balle, unto such perfection, as I believe few Gentlemen in this Realme have the like.'

After Grison's little book a great number of works upon the subject of horsemanship appeared, in Italy, in France, and in England; but they were all rendered useless when the Duke of Newcastle published his Nouvelle Methode, at Antwerp, in the latter part of the seventeenth century. This treatise gave the Duke, justly, the reputation of being the foremost horseman in Europe. The next advance in the art was marked by M. de la Guerinière, who invented the movement known as 'shoulder-in' (l'epaule en dedans); and from that time (1733), until Baucher introduced the system of suppling by
means of the bits without the use of the pillars, no great changes were made. Baucher's system is now the foundation for all the best methods of horsemanship, and the best modern works upon the subject are by French authors.

CHAPTER XVIII.-THE PACES OF THE HORSE.

## THE WALK-THE TROT-THE GALLOP.

Should it be asked why I have undertaken to write upon a subject that has been so carefully treated by Dr. Stillman in The Horse in Motion, and explained with such confidence by Professor Marey, I shall answer that, by the first, there was no notice taken of the ordinary gallop of three beats; that, by the second, the walk was not properly represented, and that, moreover, I have some original observations to offer.

The Walk is a pace of four flat beats, each foot being planted in regular order. If we are looking at the walking horse at the moment the right forefoot comes to the ground, we shall find that the left hind-foot is next planted, then the left fore-foot is brought to the ground, and finally the right hindfoot, when the right fore-foot will lead again in a new stride.

During this movement, the horse has taken the weight, first, upon three feet (the two fore-feet and
the right hind-foot), then upon two feet (the right fore-foot and the right hind-foot), then upon three feet (the two hind-feet and the right fore-foot), then upon two feet (the left fore-foot and the right hindfoot), and the same order is repeated while the animal moves in the same pace.

A horse stumbles if one of the fore-feet strikes an object as it is being advanced; but the danger of a fall is most imminent at the moment the foot is being planted, for at that instant the weight is borne by a pair of diagonal legs over which the centre of gravity has passed ; and, unless the hind-leg opposite to the obstructed fore-leg is moved up under the body to support the mass, and raise the forehand, the animal must come down.

Of course, a horse may trip with one of the hindfeet, but a moment's reflection will show us that there is but little danger of a fall, for the centre of gravity being thrown to the rear checks the momentum of the mass, and gives the animal an opportunity of recovering from the disorder before the centre of gravity has passed over the bearers, an effort in which the outward turned hock-joint of the planted hind-leg gives its assistance.

The horse has less stability in the true walk than in any other pace, but if the mounted horse be collected between the hand and heels of its rider,
the movement that results is the safest of all others for rough or slippery ground; for in the united action thus brought about the fore-feet are well raised and firmly planted, and the hind-feet follow their diagonally disposed fore-feet with but short intervals, while the momentum is not strong enough to greatly increase the dangers of a mistake.

A horse may start in the walk with any one of the legs; but a perfectly balanced horse, in a state of nature, would begin to walk with one of the hindlegs, the fore-leg of the same side giving way for it. A mounted horse will usually lead off with the fore-leg opposite to the side against which the heel of the rider gives the indication for the movement. Under any circumstances, if the horse be standing with one of the hind-legs advanced under the body; the animal will begin the walk with the fore-leg of the same side.

It will be seen that in the walk the horse has never less than two, never more than three feet bearing the weight at the same time.

The Trot.-When the horse moves with springy steps, and the foot-falls mark two sharp beats, the pace is the trot.

In the trot, the horse springs from one pair of diagonally disposed legs to the other pair, and is free from the ground between each step.

The horse breaks from the walk into the trot either because of the increased vigour and the union of action, or because of this vigour and union and momentum.

We have seen that in the walk each hind-leg is one beat behind its diagonally disposed fore-leg, but when each hind-leg is moved in unison with its diagonal fore-leg, the horse must go into air from the other pair of legs to permit the first-named pair to be planted; otherwise the fore-foot of the pair that remained upon the ground would be in the way of the hind-leg of the pair about to reach the ground, or if the steps were too short for that inconvenience to arise, there would be produced an unknown and awkward movement, in which all four feet took the weight at certain stages.

If the trot depends simply upon this united action of a fore-leg and its diagonal hind-leg, the pace may be very slow.

But if the speed be so great that the stride is too long for the fore-feet to remain upon the ground together; and for the hind-feet to remain upon the ground together, the true trot must result, and the horse must go into air from each pair of diagonal bearers. It is for this reason that awkward or impeded horses, that do not perform the trot properly at a slow rate of speed, move in the true
action of the trot when going rapidly. If the balanced and diagonal movement of the trot be maintained, the vigorous efforts of the hind-legs, as they rapidly propel the mass, insure that unity of action with their corresponding fore-legs that marks the pace.

In the true trot, therefore, the horse has never more than two feet upon the ground at the same time, and goes into air at every spring from the diagonally disposed bearers.

But horses that are carelessly ridden, or that draw heavy loads, do not take the true trot when they are urged, at low rates of speed, from the walk. This hybrid pace we may call the jog-trot. It has something of the springy step of the trot, but there are stages in which, as in the walk, three feet touch the ground at the same time, and the animal is never quite free from the ground. The jog-trot results when the hind-legs are not moved synchronously with their diagonally disposed fore-legs, but follow their leaders with more or less of an interval, depending upon the want of vigour with which they are moved. In the instantaneous photographs, the horse in the jog-trot can only be distinguished from the walking horse by the very light bearing on the third foot in the two stages where, in the walk, three feet are firmly planted.

In the jog-trot the horse is in almost as much danger of falling as in the walk, for the momentum of the increased speed detracts from the stability that might be expected from the more rapid movements of the hind-legs, as they are carried under the centre of gravity.

There are motions other than those I have discussed and the one we are now about giving our attention to, such as the amble, the rack, the running walk, etc., in which the horse may move, but, although the first is natural to some horses, I do not think it necessary to analyse them.

The Gallop.-There are two forms of the pace known as the gallop, and although I think that they should be recognised as distinct paces, I shall treat them here under the same head, only explaining the points wherein they differ.

The first we shall call the hand gallop, which is a pace of three beats ; the hind-foot, which receives the weight after the horse has been in air, marking the first; the other hind-foot and its diagonally disposed fore-foot, coming to the ground together, marking the second; the fore-foot of the side opposite to the hind-foot which first received the weight, marking the third beat ; and from this last-named foot the horse goes into air in a new stride.

When the speed is so great that the horse cannot
maintain the collected form that permits a hind-foot and its diagonal fore-foot to come to the ground together, we have an extended pace of four beats, which we shall call the full gallop. In the full gallop the horse goes into air from a fore-foot, receives the weight upon the diagonal hind-foot, then plants the other hind-foot, then, taking the weight upon the latter, extends itself and plants the diagonal fore-foot, takes the weight upon the latter, and then plants the other fore-foot, which then alone sustains the weight until the centre of gravity passes over it, when the horse again goes into air to alight upon the diagonal hind-foot planted in front of the spot just vacated by the last-mentioned fore-foot. Thus we have the mass, driven by the hind-legs, and carried on by its momentum, passing over four crutches in each stride ; the impulse from the hind-legs (aided perhaps to some extent by the muscular action of the fore-legs) renewing the momentum, so that a tolerably even rate of high speed is maintained.

That the fore-legs have very little, if any, propulsive force, may be seen in the hand gallop; for here, where the momentum is not sufficient to overcome the gravitation of the mass, the impulse (as the photographs in my book on The Gallop show) that enables the horse to go into air from the leading
fore-leg is given by the hind-leg of that side after the other fore-leg has been raised from the ground. Of course, as the speed is increased, the necessity for a delayed impulse from the second hind-leg in each stride would be avoided, until, as in the rapid pace of the race-horse, the momentum would be so great that the second hind-leg in each stride could leave the ground before the leading fore-leg (from which the horse goes into air) is planted.

The horse may take the gallop under many different circumstances, but it is always because the vigorous action from the hind-quarters shifts the weights, and forbids the balance necessary for the performance of the other paces.

It may be that speed demands the gallop, as the gallop, for reasons that I shall show, is the most rapid of the paces of the horse. It may be that the rider throws back the weights by the action of the bridle hand, and demands vigorous action from the hind-quarters with the spur. It may be that a pull upon the collar of a harnessed horse has checked the forehand, so that the hind-legs have been carried under the mass and the weights have been thrown upon the hind-quarters, and those parts have responded with renewed energy. It may be the fancy of a mettled horse at liberty. But, whatever the circumstances may have been, the gallop has
resulted from the vigorous action of the stronger hind-quarters preventing the weaker forehand from maintaining the balanced action of the walk, the trot, the amble, or the rack.

I have said that the gallop is the pace in which the horse can move with the greatest rapidity, and I shall prove it by showing how and why the horse 'breaks' when pushed beyond its speed in the trot.

We have seen that in the trot the horse springs from one pair of diagonal legs to the other pair; and it is when these diagonally disposed legs work exactly together that the pace is perfect. If, when the horse be trotting, a faster rate be demanded, the impulse will come from the hind-quarters.

Should this impulse be so great that the weights are thrown forward and fix the forehand, the animal will fall, if the hind-leg that is being moved with the fore-leg which receives the increased impulse be not carried beyond the spot it should take in the trot, under the centre of gravity. The weights are then thrown back, the forehand rises, the second hind-leg is planted as the horse gravitates to the ground, and, at the same time, or after this second hind-leg is planted (depending upon the extended state of the horse) the fore-leg that has not been hampered by the shifting of the weights comes to the ground, and then is planted the fore-leg which
was at first overpowered by the increased impulse, and which has had the time taken by the movement of the three other legs to recover from its disorder. But the pace is no longer the trot ; the balance has been lost, and the regularity of the diagonal movement cannot at once be restored; and as the momentum carries the horse over the last-planted fore-leg the mass goes into the air, and the diagonal hind-leg, that was carried under the centre of gravity at the time the forehand was overpowered, is ready to receive the weight, and the horse is in the gallop.

The horse may keep the trot as long as the forelegs are able to move with the hind-legs. But the latter are the more vigorous, and, if speed or any other circumstance demands it, there is a point when the hind-quarters throw the weight so strongly upon the forehand, that the balance between the extremities is lost, and the forehand is fixed; then the hindleg that is acting with the fore-leg which has received the weight is carried under the centre of gravity and planted, and from that moment the horse is in the gallop. As long as this increased vigour from the hind-quarters is continued the pace must be the gallop ; for then the fore-legs are not called upon to act with the stronger hind-legs, but after them ; so that the leading fore-leg is given the time from
which it goes into air until all of the other three legs have been planted before it is again called into use ; and the other fore-leg is given the time that it takes the fore-foot and one hind-foot, or the fore-foot and both hind-feet (depending upon whether the pace becomes the hand gallop or the full gallop) before it is again called into use.

We may see therefore, that the trot can never be the most rapid pace as long as the hind-quarters of the horse are stronger than the forehand; for the gallop is the only pace in which the feet are moved in such order that the fore-legs have time to recover from the too vigorous impulses of the stronger hindlegs.

While the rate of speed continues to be too great for the fore-legs to work in unison with their corresponding (diagonal) hind-legs, the pace will remain the gallop; and until the balance between the extremities is restored, whatever the rate of speed may be, the trot cannot be resumed. In other words, so long as the point of balance is shifted at each stride, so that each fore-leg cannot move with its diagonal hind-leg, or before it, the horse must be in some form of the galloping pace.

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[^2]:    ${ }^{1}$ See the two figures of Mounting without Stirrups.

[^3]:    ${ }^{1}$ See Figure 4.

[^4]:    ${ }^{1}$ See Figure 17.

[^5]:    ${ }^{1}$ See Fig. 9.

[^6]:    ${ }^{1}$ I contributed this paper to the Illustrated Sporting and Dramatic Nerws, and, through the courtesy of its editor, I am permitted to use it here.

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[^13]:    ${ }^{1}$ In the demi-volte, represented in Figure 24, the hind-feet of the horse moved upon a circle of only a few inches in diameter: had the inner hindleg remained in place and taken the weight, the movement would have been a demi-pirouette.

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