

WAR DEPARTMENT : OFFICE OF THE CHIEF OF STAFF

War College Division, General Staff, No. 20

MANUAL EQUITATION OF THE FRENCH ARMY FOR 1912



WASHINGTON

GOVERNMENT PRINTING OFFICE

1913

Modern Introduction to the Manual of Equitation of the French Army for 1912

August 2009

The United States Government, War Department translated The Manual of Equitation of the French Army for 1912 and published it in 1913 for use in the Mounted Service School.

Although you will not find the forward seat in the Manual of Equitation of the French Army for 1912, neither will you find extreme collection and carriage or the teaching of “high school” riding. Instead you’ll find guidance for instructors, instruction on coordination of the aids, gymnastics and position of the rider, and a system for breaking and training horses. Readers may find it interesting to see early diagrams of the 5 rein effects that we find in current guides on horsemanship.

This manual played a role in the development of horsemanship for the U.S. Cavalry, as well as in the writing of the 3 Volume “Horsemanship and Horsemastership” which was produced by the Fort Riley Cavalry School in 1935.

The Manual of Equitation of the French Army for 1912 is a rare find. In fact my old and brittle copy is stamped with the U.S. Military History Institute and has penciled on the inside “Keep all copies - scarce”. Fortunately for us, someone didn’t heed those words and now I’m able to offer this down loadable version to you.

I’ve not changed any of the information in this manual. I’ve not changed sentence structure or order of information, nor have I added any information of my own, except for this forward. I have reformatted it, given it a little color, a new typeface and tried to re-number the table of contents. I hope this will make the Manual of Equitation of the French Army for 1912 an easier read and a convenient download.

My goal in reproducing The Manual of Equitation of the French Army for 1912 is to make it easily available to students of horsemanship. I hope that as you study it, you’ll gain a deeper understanding of the military seat and tradition that was passed to us through the U.S. Cavalry at Fort Riley.

Kind regards,

Barbara Ellin Fox

WAR DEPARTMENT

Document No. 437

Office of the Chief of Staff

WAR DEPARTMENT,

OFFICE OF THE CHIEF OF STAFF,

Washington, April 28, 1913.

Authority having been obtained for the use of the Manual of Equitation of the French Army for 1912, translated by First Lieut. Adna R. Chaffee, jr., Thirteenth Cavalry, it is herewith published for the information of the Regular Army and Organized Militia.

By order of the Secretary of War:

W. W. WOTHERSPOON,

Major General, Acting Chief of Staff.

FOREWORD

In the absence of a theory based on simple and logical principles, the mounted instruction given to troops lacks unity and, in consequence, force; with no written method young officers are not sufficiently equipped to well accomplish their tasks as instructors.

The **MANUAL OF EQUITATION AND HORSE TRAINING** is intended to fill this gap, so many times observed.

It contains, however, no innovations, but merely sums up the advice of Pluvinel, de la Gueriniere, the Comte d' Aure, Boucher, Generals L' Hotte, Faverot de Kubrech, de Beauchesne and Jules de Benoist and the application to horse training of the known laws of the association of sensations, as well as the traditional principles of the Cavalry School.

The Manual comprises three principal divisions:

- 1st. The Education of the Rider.**
- 2d. The Education of the Horse.**
- 3d. The Use of the Trained Horse.**

The first part treats of the instruction of the rider according to his grade in the military system. The necessity of simplifying the instruction of the recruit to hasten his entry into ranks and the obligation of pushing the training of the horse as far as possible have made it necessary, in order to conciliate these opposite interests, to modify former methods.

The principles remaining always the same, the instructor may henceforth grade his instruction according to the ability and requirements of his pupils—young soldiers, reenlisted men, noncommissioned officers who are to take part in horse training, or the officers charged with the instruction. These divisions are called ***Elementary***, ***Secondary***, and ***Superior*** equitation, according to whom they are addressed.

In order to abridge the manual, it has seemed best not to state again in Chapter I, devoted to ***Elementary Equitation***, the lessons given to recruits which are set forth in Part II of the Drill Regulations. But the Board has tried to indicate those things which should influence the instructor in the course of his daily lessons.

Secondary Equitation treats of the management of the horse (*conduite du cheval*); it permits a detailed study of the natural aids, with a brief naming of the artificial aids.

This chapter has been drawn up following the principles of the School of Versailles, transmitted to the Cavalry School by the Comte d'Aure, whose "cours d'equitation" approved by ministerial decision dated April 9, 1853, sets forth the means which a rider has for overcoming or avoiding the difficulties born of the use of the horse.

The chapter devoted to ***Superior Equitation*** only gives a general view of the purpose and means of action. The genius of the "haute école" is the genius of art and does not lend itself to words.

The second part treats of the education of the horse. It itself is divided into two parts, in which are set forth the best methods for ***acclimating*** and ***breaking*** (debourrer) the young horse, and the rules which govern his training. It studies the mental constitution of the horse, the principles which may serve in the adoption of an equestrian language, indispensable for the accord of rider and mount; it shows the gymnastic exercises which teach the horse to respond to the requirements of man.

A table sets forth the several phases of this education and the work which corresponds to each phase. This table is merely an indication and should be considered only as a type of progressive and rational training.

The third part assumes both man and horse to be trained and lays down the necessary rules for the daily use of the horse out of doors and in combat. The principles here given may serve as a base in the mounted instruction given to noncommissioned officers and to former soldiers (on mobilization).

The Manual does not pretend to solve all the problems; long practice with the horse is alone capable of that. Its object is only to put current ideas in order and to facilitate the tasks of the instructors, to whom it is exclusively addressed.

Officers may draw from it the principles to inculcate in those under their command. But they alone, be it understood, will be responsible for their knowledge and ability to demonstrate these principles.

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MANUAL OF EQUITATION AND HORSE TRAINING.

GENERAL IDEAS.

Object and divisions.—The object of military equitation is to make troopers capable of managing their horses in all circumstances and over any country.

Mounted instruction therefore comprises the practice of the approved methods for teaching the recruits; the study and use of the principles necessary for the riding instruction of old soldiers and noncommissioned officers; also the application of approved rules in the training of young horses.

The mounted instruction includes three divisions: I. The education of the rider. II. The education of the young horse. III. The application of the principles of equitation and horse training to the use of the horse.

PART I. Education of the rider.—The education of the rider supposes his horse to be trained. This part of the instruction comprises all which is especially addressed to the man; it describes the qualities of the instructor and the method to be followed to develop the rider's aptitudes. Morally, it aims to establish his confidence; physically, his muscular suppleness. It teaches the proper seat and the best means for its maintenance, and it establishes the principles for the guiding and use of the horse.

The seeking of these results requires the following of fixed principles and much practice. The instruction, too, can not be the same for all grades of the military service.

Elementary equitation is that given to recruits, and its phases are contained in The School of the Trooper, Mounted; it comprises only what is absolutely necessary to the trooper in ranks. Secondary equitation, whose development forms the object of this manual, is entirely reserved for the instructors; they can draw from it the ideas to impart to the noncommissioned officers and selected troopers in perfecting their instruction.

The superior instruction in equitation is more especially reserved for officers who, besides accuracy and the practice of bold riding, should endeavor to acquire all the "finesse" of the art. This is the object of the riding instruction given at the Cavalry School.

These several degrees of instruction differ from each other only in their extent and in the indication of more or less elementary or scientific methods according to the abilities of the riders to whom they are addressed; they rest on the same principles and

tend toward the same object, and insure a harmony of instruction which is indispensable to the proper use and the progress of the Cavalry.

PART II. *The education of the horse* presumes, on the other hand, a trained rider; it comprises the examination of everything which concerns the horse. It considers, morally, his mental constitution, and means for establishing his confidence; physically, his temperament, putting him in condition, then the laws of balance and animal locomotion from which come training properly called.

PART III. *Application of the principle of equitation and horse training to the use of the horse.*—This chapter considers the trained rider mounted on the trained horse and lays down rules for use in the daily work. There is nothing fixed in these divisions; they overlap more or less. Nevertheless, in assigning a certain place to ideas and facts they tend toward the clearness necessary in the extended domain of equitation: they direct the efforts of the instructor or rider according to the location of faults—the ignorance or awkwardness of the man or the weakness or bad will of the horse.

PART I.

EDUCATION OF THE RIDER.

CHAPTER I.—ELEMENTARY EQUITATION

A.

SCHOOL OF THE TROOPER.

(See French Cavalry Drill Regulations, Pt. 1, Art. 2.)

B.

RÔLE OF THE INSTRUCTOR IN THE SCHOOL OF THE TROOPER.

Qualities of the instructor.—The instructor is the prime mover in the riding instruction. He should be a horseman; a man of character and endurance; he should be always an example of correctness, tenacity, and exactness. He establishes a logical progression conforming to the spirit of the Drill Regulations; he assures the regular succession of the steps in the course, and he keeps his pupils awake and keen by the variety of his instruction; each day brings out a new but foreseen element.

The explanations which he gives while mounted are reduced to strict necessity. They are formulated with precision and pronounced in such a manner and place that every rider shall hear them. They are never given during fast gaits. On the other hand, no individual fault having bearing on the position or the management of the horse should be let pass without correction; it is only by incessant criticism of the same errors that a habit may be corrected.

The instructor is guided by the ability of his pupils; he gives them in the beginning only the simpler difficulties to overcome. He conducts his work methodically, increasing his requirements little by little.

He remembers that progress does not come from the movement, but from the manner in which the movement is executed.

These prescriptions, taken together, form the "esprit de methode," the framework of the instruction, but not the soul.

The instructor should, in his ingenuity and his pride in his rôle, find the ideas to introduce and the words to use which will strike the imagination, amuse, persuade, draw out, and communicate to all his zeal, his self-denial, and his faith.

Ends to seek.—The preparatory work described in the regulations very briefly, involves some developments, from the instructor's point of view, without which this work will not produce the expected results.

The successive objects to be attained in this first part of the instruction are: To give confidence to the rider; to give him means for holding on; to lead him to acquire independence in the use of his aids; to give him the proper position of the trooper mounted.

Establishing the confidence of the rider.—The mounted instruction of the recruit is hindered at the beginning by an unreasoning, instinctive revolt of his nervous and muscular systems which leads to contraction. This is combated by vaulting and by having the recruits ride by the side of older men who hold the recruits' horses by the longe, by encouraging them, by establishing their confidence, and by out-of-door work.

The particular contractions which show up from the beginning of individual work will disappear under the use of the suppling exercises prescribed in the School of the Trooper.

In order to miss none of their useful effects one must follow a logical order; commence by the seat, the loins, the shoulders, the arms and head, and not undertake the movements of the thighs and legs until ease in the top of the body is obtained.

The best suppling, however, is good humor, which leads promptly and directly to confidence.

Maintenance of position.—As soon as confidence is obtained, we must fix the rider in his seat in order to push his instruction. The rider is maintained in his saddle by his seat and the stirrups.

(a) **The seat.**—Seat is that quality which permits the rider to remain master of his balance in all circumstances, whatever may be the reactions of the horse.

It is the first quality to be sought, because it is the basis of solidity, and therefore of confidence, and it is the measure of a good hand without which neither management nor training is possible.

It results from a general decontraction, particularly from suppleness of the loin. The road to it is opened by appropriate gymnastics, and it is acquired after a time from trotting and galloping without stirrups and from riding many dif-

ferent horses. These alone put the rider truly with his horse. However, this result requires long practice; and in seeking too much in the beginning, we risk soreness and fatigue—and go contrary to the end in view.

(b) ***The stirrups.***—It is necessary, then, in order to quickly give confidence to recruits, to have recourse to a second means of maintenance—not so good, but sufficient—which will permit them to remain mounted longer and to progress without chafing and without hurting the mouths of their horses—the stirrups.

The trot without stirrups will rarely be used except in the riding hall or for short trips out of doors as a suppling or proof of the decontraction. The time of the trotting will at first be short and frequent, then lengthened little by little, to push down the thighs and place the seat; all of the riding-hall work, including jumping, can then be done without stirrups.

Routine work, long sessions out of doors, marches and maneuvers, in one word—time—accomplishes the end begun without stirrups in the preparatory work, and will give the men as good a seat as they can acquire in their short term of service.

By this means one will gain the time necessary to devote to the second part of the instruction, the management of the horse.

Special gymnastics for the rider.—The management of the horse depends on the independence of the aids—the base of their future accord. This independence is the result of special exercises to which the young rider should be submitted from the beginning of the preparatory work.

The instructor endeavors to obtain:

(1) The independence of the hands with respect to the movements of the body and legs.

To obtain this result he commands the flexions of the trunk, more and more marked forward, backward, right and left, suppling of the shoulders, etc. In all these movements the hand or hands which hold the reins should remain in place without stiffness, in contact with the horse's mouth, but independent of the movements of the trunk. And so too with the legs, the raising and turning of the thighs, and the bending of the knees should produce no counter blow against the horse's mouth.

(2) The independence of hands and legs with respect to each other.

In order to obtain this liberty the instructor will command all suppling exercises tending to isolate and to render independent the movements of a hand or a leg with respect to each other. The most useful movements to obtain the result sought are the rotation of one arm to the rear; fist blows to the front and rear, tapping the horse on the right buttock with the left hand, and vice versa, girthing and loosening the girth, etc. The instructor watches always to see that the movement of one of these parts of the body does not lead to movement of the others. The results of this work are proved by extending the gait, sitting to the trot or trotting without stirrups. If this gymnastic work has been well directed, the joints and members have acquired an

independence such that the reactions of the horse, received by the spinal column, have no deranging effect on the rider's hand, which remains light and steady.

From the beginning the riders must be impressed with the importance of these exercises. It is necessary to see, besides, that they neither let the reins flop nor make too much use of their strength. In a word, one should seek to teach them to just feel the horse's mouth. This feeling, in developing little by little, will serve to establish the principle of the stretched reins and of the gentle contact of the hand with the horse's mouth. It must be spoken of, and sought from the beginning.

Position of the rider.—This is defined in the Drill Regulations. By reason of the positions given them, the superior and inferior aids can act with a maximum of promptness, aptness, intensity, and "finesse."

Certain of the suppling exercises facilitate the play of the joints, and permit the correction of physical defects and the overcoming of the resulting contractions.

A general suppleness being acquired, the instructor seeks a new objective, to place the rider and then to fix his position at all gaits, on all horses, and over all terrain.

When the instructor commences to take up position he should utilize the first time at the walk to place each rider individually before starting the section to trot. As soon as the positions are deranged, he must retake the walk, replace the riders, and start off again. Whence comes the necessity, at the beginning, for short and frequent periods at the trot ? Thus, good positions will be acquired.

Fixity on horseback is the absence of all involuntary or useless movement and the reduction to strict necessity of those that are indispensable. It is the opposite of bouncing. It permits the aids to act with precision and exactitude, and in consequence it leads to calmness in the horse and contributes to his lightness.

It must be understood that regularity in the position is subordinate to union with the horse. To be with his horse is the first quality in the rider. To be well placed generally leads to being with the horse; there are, however, some conformations which would only lose by being forced into position.

A good position of the rider depends above all on the manner in which his eyes, hands, buttocks, and knees are placed.

(a) The fact of having his eyes alert and sweeping the horizon will lead to the rider's holding his head up, keeping his chest square, and sitting down in the saddle. Further, from the beginning, the men learn the habit of observing what goes on around them.

(b) If the hands are well placed, separated as they should be, the nails face each other, the elbows come against the body naturally; in consequence, the shoulders fall back, the chest is free, and the head is easily raised. On the other hand, if the nails are down, the elbows fly out, the shoulders come forward, and close on the chest; the head follows the movement of the shoulders, the eyes are lowered, while the buttocks tend to slide to the rear.

(c) The seat results from the position of the buttocks. They should be as far forward as possible without leading to an exaggerated sinking of the spinal column.

(d) If the knees are well turned inward the muscles of the leg are placed under the femur and the flat part of the thigh bears naturally. The position of the knee controls that of the foot, which hangs normally.

Suppling exercises.—It may be seen from the above that the suppling exercises play an important part in the instruction of the rider; but their use demands tact. Used by some instructors, without order or method, they give only mediocre results; by others, however, they very quickly improve even the least gifted riders.

Considered together, the suppling exercises have a triple end, as they serve to obtain: 1. General suppleness; 2. suppression of involuntary movement; 3. regularity of position.

The instructor chooses and groups for these three objects the exercises which to him appear most suitable.

In the first two cases the exercises commanded are addressed to the whole section, since the instructor seeks a general result. In the last case, however, the proper exercises should be selected for the individual rider, since it is a question of overcoming an individual defect: It must be remarked also that some of the exercises oppose each other, and when they are used the object sought must be exactly known. Thus, the elevation of the thighs, particularly favorable in placing the seat, evidently destroys the benefits from the rotation of the thighs, destined to bring the flat surface to bear and to lower the leg.

At the end of several weeks of well-conducted instruction confidence is established; the contractions diminish. The riders commence to find and keep a seat in the saddle, their joints are freer; in consequence their movements are most controlled. The position is established. It is now time to take up the management of the horse and set forth its principles.

CHAPTER II.—SECONDARY EQUITATION.

THE MANAGEMENT OF THE HORSE.

The principles and methods of management necessary for the trooper in ranks are set forth in the Drill Regulations and constitute the elementary equitation. What follows is addressed entirely to the officers and noncommissioned officers (cadre) and constitutes secondary equitation.

The object of the study of the management of the horse is to teach the rider the use of the means at hand to control the horse at all gaits, in all directions, and over all country.

To manage the horse is: To put him in movement; to regulate that movement; to direct that movement.

For which it is necessary: To know the forces that nature, art, and science have put at the disposition of the rider (to study the aids); to harmonize these forces (mastership of the aids); to place the forces (use of the aids).

Par. 1

STUDY OF THE AIDS.

Knowledge of the aids, broadly speaking, requires inquiry into the physical aptitudes and moral qualities of the man, the study of the properly called natural aids, and knowledge of the artificial aids.

Aptitudes.—The rider's weight and size, his firmness or insecurity, his strength or lack of it, his energy or quietness, his intelligence, spirit, and patience—or, on the other hand, his apprehension, fear, or brutality—are factors which have great influence on results in equitation, whatever may be the worth of the instructors or of the methods. One should consider these things carefully in assigning riders to horses, especially to young horses.

Natural aids.—The natural aids are the legs, reins, and weight. The legs and reins serve to put the rider in agreement with his mount; they permit him to judge of the character and temperament of the horse, to transmit to him and impose upon him the will of man.

The movements of the horse vary according to the positions taken by the different parts of the body and the amount of impulsion which he gives.

To make the horse execute any movement whatever one must give him a position which permits, facilitates, or determines that movement, and then produce, maintain, increase, or moderate the impulsion. Rapidity of movement depends on the degree of impulsion.

The aids are the means by which one gives the horse position and impulsion.

Action of the legs.—The legs should be fixed—that is to say, close to and in light contact with the horse. They should be free from all involuntary motion and very steady in their actions. The stirrup is adjusted accordingly. The fault opposed to fixity is swinging, which confuses the horse.

The legs may act, resist, or give way. They act when their pressure increases to determine a movement; they resist when their pressure remains constant and is opposed to a displacement of the haunches; they give way when their pressure diminishes and allows that displacement. In the first two cases they are active, though in different degrees; in the last case they are passive.

(a) When the two legs act together, the effect should be to move the horse forward, if he is halted; to increase the impulsion if he is in march. Their action should be produced a little in rear of the girths, gradually, so that he may not be surprised, energetically and by free attacks with the calves if he hesitates to move forward.

(b) When one leg alone, the right for example, acts in rear of the girths, it should have the result, while provoking the forward movement, of pushing the croup to the left. The horse faces to the right if halted; turns to the right, in increasing the gait, if he is in march. This should be produced by drawing the leg a little to the rear, not too much, and closing it gently so that the horse will not be surprised. If he hesitates to obey act by little taps of the calf, and cease as soon as he obeys.

The spur serves in proper cases, to reinforce the action of the leg, and to render the horse's obedience more prompt. It is to the leg what the curb chain is to the hand. It must be used with discretion, its use must be proportional to the results to be obtained and the degree of sensibility of the horse. A distinction must be made between the energetic attacks which must be employed to push the horse forward, or to punish him when needed, and the scratch of the spur which is one of the niceties of the aids.

Action of the reins.—The reins, through the bits, act on the horse's mouth. For effects to be exact, they must remain adjusted and stretched during work; if they were flapping, the indications of the hand would not reach the horse, or if they did, they would arrive confused, or in the form of brutal and awkward jerks. Contact is that gentle agreement which should exist between the hand of the rider and the mouth of the horse; with certain horses, especially young ones, contact is rather an equal and free support; out of doors at the fast gaits, and principally in the charge, contact may be transformed to a more or less marked bearing. The hands, like the legs, may act, resist, or give way. The reins being adjusted, the hands act when they increase the tension on the reins; they resist when they are fixed in place; they yield when they follow the movement of the neck. It is very important to know when they should act, resist, or yield in a proper case. The actions of the hand should be progressive. The resisting hand has a very powerful effect without irritating the horse as a live force would do. Its effect is produced by reason of its length of action; it should yield when the horse yields.

A hand which acts on the equilibrium or impulsion is called an active hand; a passive hand is one which, while preserving the contact, opposes neither the impulsion nor the displacements of weight.

The diversity and multiplicity of sensations and resistances transmitted by the reins to the rider's hand show how great may be the variety of actions of that hand.

Among the numerous actions of the reins, those whose simple and evident effects suffice to obtain all useful movements in military equitation, must be determined and defined.

(a) The reins regulate the impulsion. The two reins, acting together should have the effect of slowing, stopping, or backing the horse. They are called direct reins. This action should be produced by fixing the hands and closing the fingers on the adjusted reins, the elbows and hands, should move the least possible to the rear.

The half halt is a brief energetic action of the hands which the rider executes with the fingers closed on the reins by twisting the wrist quickly, from below upward and from front to rear, without losing contact with the mouth. It is used to slow up horses that are too ambitious, or to carry to the rear the excess of weight that some badly balanced horses allow to come on the shoulders. It is effected according to need, on one rein, on two together, on the snaffle, or on the curb. The hand should regulate the power of its action by the resistance of weight which it meets.

Vibration is a light playing or shaking given on one rein, sometimes on two at once. It is given, like the half halt, on the snaffle or on the curb; it may last one or several seconds, and is strong or weak according to the resistance met. It is used to destroy the muscular contractions of the jaw which the horse opposes, instinctively or voluntarily, to the action of the bits.

(b) The hands control, also, the position of the forehead. The reins act by the mouth on the head, neck, and shoulders; they permit the displacement of the head with respect to the neck, the neck with respect to the shoulders, the shoulders with respect to the haunches. They may even act indirectly on the haunches by giving the shoulders such a position that the haunches are obliged to change direction; which is called "opposing the shoulders to the haunches."

These different effects depend on the direction given to the tension on the rein, according to whether the hand is carried more or less forward or to the rear, right or left, high or low.

One may group the several actions of the hand into five principal series, but it is merely a purely theoretical division which facilitates the study of the aids in instruction; between the extreme positions forward and to the right, rear and right, forward and left, and rear and left, there are a multitude of positions among which the rider will find the proper one as much more promptly as he will have more knowledge, experience, and tact. (NOTE: These principal actions are those which were taught at the School of Versailles. They were transmitted to the Cavalry School by Cornte d'Aure and made generally known by Gen. J. de Benoist.)

1. (a) In carrying the right hand to the right, the rider displaces the horse's head towards the right; the right rein is then the opening rein. The rider should avoid pulling on the rein from front to rear, or opening the elbow from the body.

(b) If the rider accentuates the movement of the right hand toward the right, the neck follows the head, the shoulders follow the neck, the horse faces to the right while advancing.

2. In giving the right opening rein a tension from front to rear, the rider draws the shoulders of his horse to the rear and right and forces him to throw his haunches to the left. The right rein then takes the name "direct rein of opposition." This action should be produced by fixing the hand, the fingers being closed on one adjusted rein.

3. (a) In carrying the right hand forward and to the left, the rider draws the horse's muzzle to the right and weights the left shoulder by loading it with the greater part of the weight of the neck. The right rein is then called the contrary or bearing rein.

(b) If the rider accentuates the movement of the right hand toward the left, the increase of weight which results should break the equilibrium and turn the horse toward the left. This turn is made while advancing.

In giving to the bearing rein (right) a tension from front to rear, two effects may be produced according as the tension of the rein passes in front or in rear of the withers.

4. If produced in front of the withers—that is, toward the left shoulder—the shoulders are drawn to the rear and left, the horse faces to the left in backing, if he was standing still; he turns to the left while slowing up if he was in march.

5. If the tension of the rein passes in rear of the withers—that is, in the direction of the left haunch—the rein acts on the whole mass of the horse and pushes both forehand and haunches to the left. If the horse is in march, this diagonal action of the right rein, while bending him to the right, pushes him obliquely forward and to the left as much more energetically as the impulsion is more powerful.

These two actions (fourth and fifth effects) of bearing reins, each tending to oppose the shoulders to the haunches, are called bearing reins of opposition.

Accord of the aids.—The accord of the aids is that harmonious action which the rider should obtain in his own legs, hands, and weight, to permit, facilitate, or hasten good execution of the movements which he demands.

1. Accord of the legs acting together and the two reins acting together: The legs give impulsion. The reins regulate the impulsion. The action of both legs together has the effect of producing, maintaining, or accelerating the forward movement.

Tension on both reins together has the effect of limiting the forward movement; that is, of slowing, stopping, or backing.

These two actions, then, are totally opposed and should never be produced at the same time, under pain of destroying the impulsion.

When the legs act to increase speed the hands should give way to allow the increase; then they resist if it is necessary to limit it.

Likewise, when the reins act to slow the gait, the legs give way, then resist when it is necessary to limit the decrease.

Summing up, if it is a question of slowing, stopping, or backing, the legs oversee the movement in order to regulate it if necessary, but they only act when the horse has obeyed and when the impulsion has died down.

If it is a question of moving, of taking the trot, or increasing the gait, the reins should be ready to resist at the proper moment to regulate the gait, but they come into play only after the horse has yielded to the action of the legs.

On the straight line, therefore, the actions of the hands and the legs should never be simultaneous.

It is evident that the more exact and obedient the horse, the more these actions may be approached to each other without confusion. The "greener" the horse, the more the indications given should be distinct and the more need to separate actions whose effects might be confused.

Accord of the two reins.—Before seeking to regulate or reinforce the action of one rein by the other, one must be sure that they do not contradict each other; if the right hand acts, the left must allow the right to produce its whole effect.

For that purpose, the left hand not only should not act, but it should not resist, it should give way. If it acts at the same time as the right hand, if it even resists, far from strengthening the action, it can only oppose it, weaken it, or sometimes even destroy it.

On the other hand, if the left hand gives way when the right acts, the latter is left its full effect.

So every time the right rein acts, whether as opening rein, bearing rein, or rein of opposition, the left hand should at first give way to permit the head and neck to take the indicated position, then resist, if necessary, to limit the movement. It then plays the rôle of regulating rein.

An action of the left hand may properly succeed an action of the right hand; for instance, an action of a bearing rein may be substituted for an action of an opening rein, but these actions are successive and the principle of the active rein and the passive rein is still observed.

In riding with one hand, the bearing rein acting alone, the direct rein hangs loose at the moment of action. If the two reins are not in accord, at least they do not contradict each other.

Agreement of the two legs.—When the right leg acts alone the left leg, at first, should give way to allow the action of the right to produce its effect; it resists, if it is necessary to regulate the movement by limiting the displacement of the croup.

Agreement of the legs with each of the effects of the reins.—Pressure of the legs has the effect of carrying the horse forward, of producing the movement which the reins should direct; so also tension on the reins produces effects on the haunches which the legs should aid.

There is then a constant connection between the hands and the legs, which instead of being opposed should be combined, strengthened, and put in accord.

(a) The right opening rein leads the weight of the neck on to the right shoulder without opposing the haunches, which should follow the direction taken by the shoulders. The legs merely maintain the movement by an equal pressure.

(b) The right direct rein of opposition bends the neck in and to the right, carrying its weight on the right shoulder in opposition to the haunches and throws them to the left. The right leg aids to push the haunches to the left.

(c) The right bearing rein leans the head to the left and puts the weight of the neck on the left shoulder without opposing the haunches. The two legs act equally to maintain the forward movement.

(d) The right bearing rein of opposition (in front of the withers) bends the neck in to the right, carries its weight on to the left shoulder and throws the haunches to the right by opposing the shoulders to them. The left leg acts to aid in the movement of the haunches to the right.

(e) The right bearing rein of opposition (in rear of the withers) has the effect of bending the neck in and to the right, carrying its weight on to the left shoulder and haunch and forcing the whole mass forward and to the left when the horse is in motion by the opposition of the head and neck to the shoulders and haunches. The right leg in pushing the haunches toward the left strengthens the action.

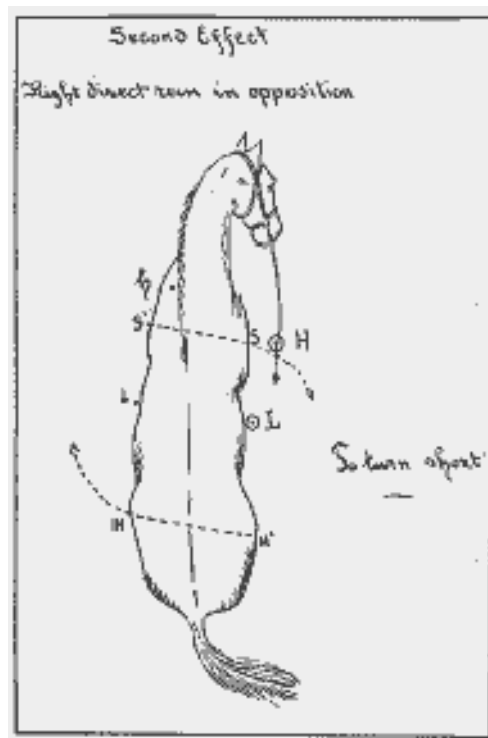
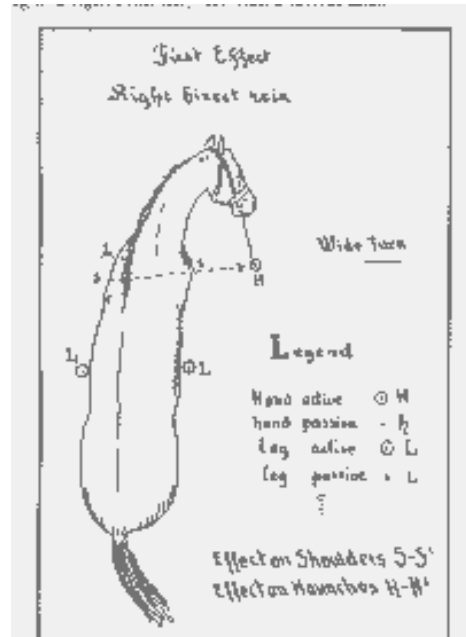
It must be understood that in prescribing the action of one leg the other is not meant to remain inactive; on the contrary, it plays its part in the impulsion and as a regulating aid as was said above in speaking of the agreement of the legs.

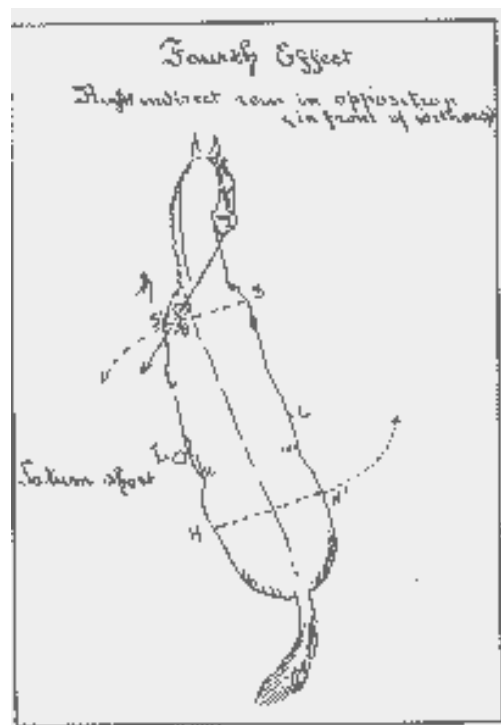
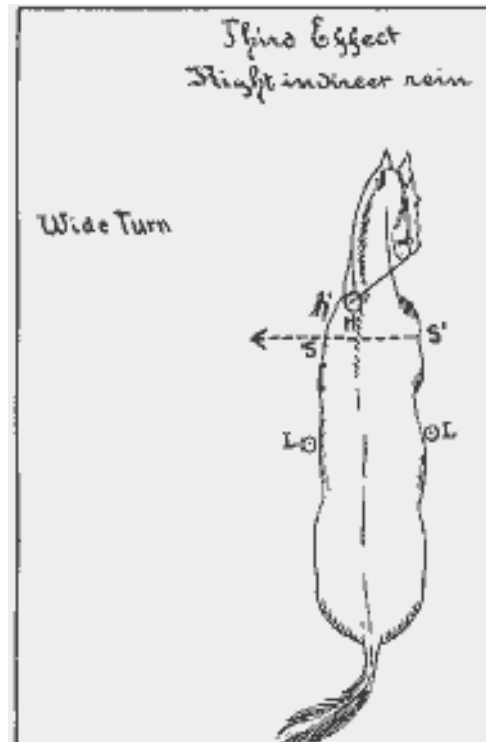
Table showing the five effects of one rein (right rein).—(1) horse moving; (2) horse halted.

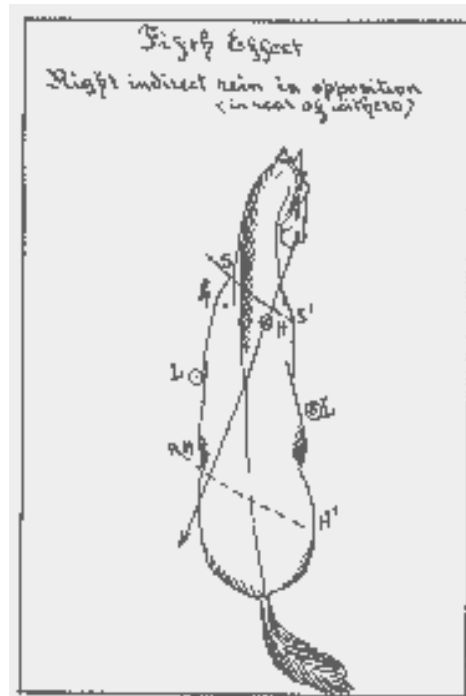
Name.	Right rein (active). Direction of the traction.	Left rein (passive). Position of the hand.	Effects on—					Result.	Reason.
			The muzzle.	The head.	The neck.	The shoulders.	The haunches.		
I. Opening rein...	To the right and forward.	More or less forward and low to yield the left rein as much as desired to allow and regulate the action of the right rein. .....do.....	Slightly to the right.	Slightly to the right.	Bend to the right.	Right shoulder lightly weighted.	No effects...	(1) The horse turns to the right. (2) The horse remains still.	(1) The forehead is led to the side on which equilibrium is broken by the excess of weight on right shoulder. (2) Bending of neck too feeble to break equilibrium.
II. Direct rein of opposition.	To the right and low.	.....do.....	To the right then to the rear.	To the right then to the rear.	Curved in and to the right.	Right shoulder heavily charged.	Thrown to the left.	(1) The horse turns sharply to the right. (2) He turns in place to the right.	(1) The shoulders fall to the right and the haunches go to the left. (2) The shoulders fall to the right; spinal column can not remain bent.
III. Bearing rein.	To the left and forward.	.....do.....	Slightly to the right.	The poll leans to the left.	Is bent slightly to the right.	Left shoulder slightly weighted.	No effects...	(1) The horse turns to left. (2) The horse remains still.	(1) The body and croup follow shoulders which go to side whose balance is broken. (2) Bending and weighting are too weak to provoke movement.
IV. Bearing rein of opposition in front of the withers.	To the left and rear, but in front of the shoulders.	.....do.....	To the right, then to the rear.	To the right, then to the rear.	Curved in, and to the right.	Left shoulder heavily charged.	Thrown to the right by opposition to the shoulder.	(1) Horse turns to left. (2) He turns to left in place.	(1) Shoulders go to left, haunches to right. (2) For the same reason.
V. Bearing rein of opposition in rear of withers.	To the left and rear, but in rear of the shoulders.	.....do.....	.....do.....	.....do.....	Curved in and to the right.	Left shoulder very heavily charged.	Pushed to the left.	(1) Horse "two-tracks" to the left. (2) He takes several steps in "two-tracks" to the left.	(1) The rein passing by the center of gravity draws the whole mass to the left. (2) Same reason.

It is understood that the action of the rein does not include the action of the legs.

FIVE EFFECTS OF REIN







LATERAL AND DIAGONAL AIDS – LATERAL AND DIAGONAL EFFECTS.

In instruction, to shorten explanations, the aids are considered, first, from the viewpoint of the various combinations which may result from the association of the two hands and the two legs; second, from the viewpoint of the direction of their action, that of the effects produced.

When the determining aids are placed on the same side of the horse, right leg and right rein, they are called lateral aids.

When they are, on the contrary, one on the right, the other on the left of the horse, for example, left leg, right hand, they are diagonal aids.

Taking the viewpoint of the direction in which the reins act, the lateral effect includes all action of the hand—for instance, the right—on the right part of the horse, direct rein, opening rein; direct rein of opposition.

Diagonal effect includes all action of the right hand, for example, acting from front to rear and from right to left (actions of the bearing reins of opposition).

Following these definitions, if one two tracks toward the right, the rider uses his left leg and left rein, employing lateral aids; but the left hand acting from the front to rear and from left to right produces a diagonal effect.

If in the same movement, the rider uses the left leg and right rein, he employs diagonal aids; but the right rein in leading the head may produce in the direction of march a lateral effect.

These remarks will show how much more apparent than real are the distinctions established by some authors between lateral and diagonal equitation.

True equitation is nothing but the combination of all the lateral and diagonal effects of which we have just been speaking. The rider has two hands and two legs which may act singly or together, laterally or diagonally, and produce varied effects. It is "up to the rider" to use, according to the horse he is riding and the purpose in view, the aid or the aids which should produce the desired effect.

The weight.—In studying the actions of the reins it has been seen that under their influence the balance of the horse can be modified even so as to lead him to turn to the right or left according as the weight of the neck is carried on one shoulder or the other. The shoulders being unequally weighted move toward the side which has the excess of weight.

The equal or unequal partition of the mass of the horse on the members which support it evidently has a primary influence on the direction of movement taken by the whole machine.

When the horse is ridden, the mass which the members support does not consist of the horse's weight alone; to that must be added the weight of the rider—between 150 and 200 pounds, on the average. The top of the body, which alone amounts to about 100 pounds, may in moving contribute powerfully to the modifications in the balance of the horse which are brought about by the aids. The rider, then, must be warned not to hinder the movements of the horse by a bad division of his weight, but, on the contrary, to favor them by acting always in the direction sought.

In moving, stopping, turning, and on two tracks the rider in carrying his weight on the buttocks or thighs in the direction of movement may facilitate and hasten the obedience of the horse. Quite clearly marked in the breaking of a young horse these displacements of the weight become more and more discreet as training is perfected.

In superior equitation they are reduced to a mere weighting of the stirrups.

Artificial aids – the artificial aids are the means of domination created by the industry and ingenuity of man to prolong, strengthen, or take place of his natural aids. They vary with the nature of the horse and the use made of the latter.

Those which have a current use are, first, the riding whip, much used at the beginning of training to teach a young horse to yield the haunches to the action of the heel, and in ordinary riding with mares and sensitive horses who kick at the boot; then the driving whip, martingales, nosebands, Barnum reins, rigid reins, pulley or running reins, etc. Included are the various kinds of spurs, as well as the innumerable types of curbs, gag snaffles, rearing bits, etc.

These different means may be valuable to make use of a horse on first sight, to regain rapidly a lost authority and to give certain difficult subjects the work necessary to their training. But it must not be forgotten that most of these instruments, excellent in certain hands, become dangerous with less experienced riders.

Besides, the results obtained, even though rapidly, by aid of these means are generally only superficial. They can not really further the true education of the horse, which resides as much in his moral submission as in his physical obedience.

Mastership of the aids.—However precise theoretically may be the effects of the legs and reins they can only have practical utility if the aids which produce them are perfectly disciplined and submissive to the will of the rider. It is not sufficient to know the forces, it is necessary to be master of them.

If the horse does not submit to the requirements of the rider, most of the time it is not due to the ignorance of the man or the bad will of the horse; it is because the weak, incoherent aids do not impose the expected movement.

The true balance and the independence of the aids are obtained by controlling the reflexes. For instance, if young riders are commanded to act with the left leg alone, one nearly always sees the right leg fly out an equal amount. This one example gives an idea of the work to be followed to control the muscles and never to have them put in play except for a useful purpose and in a given direction.

Without insisting on the causes of what is commonly called "maladresse" it is seen that the part of the instructor consists in bringing about and multiplying the occasions which the young rider has for using his aids in an exact and precise manner, first employing them singly, then in combinations.

(A) The pupil holding the reins separated in the two hands is commanded to utilize in simple movements such as the passage of corners, moving by the flank, and volts, first, the opening effects, then the bearing effects and, finally, the effects of opposition, abandoning completely the rein which does not determine the movement.

EXAMPLE: "By the right opening rein, by the right flank;" "By the right bearing rein, volt to the left;" "By the left direct rein of opposition, half turn to the left."

(B) He is then taught by composite movements to substitute for the effect of the opening rein the effects of opposition, or for the bearing effects, the opening effects, etc.

EXAMPLE.—FIG. 1.: The section marching to the left hand, the instructor will command: "Half turn in reverse, leave the track by the bearing rein."

"Right rein of opposition, on two tracks on the diagonal."

"Turn to the right, by the right opening rein." »,

FIG. 2: Or again, the section marching to the right hand: "By the right opening rein, half turn."

"By the left bearing rein of opposition, on two tracks on the diagonal."

FIG. 3: Then, later, "By the right bearing rein, by the left flank, etc."

The pupil will have been shown in the first example that the right rein has been able to produce three effects following the different directions given it; in the second, he will have learned to change rapidly from the action of the right hand to that of the left and back to the former.

(C.) When this practice of one hand alone is well understood and executed, it is necessary to learn, on the same movements, and with the same progression, to act with both reins, but having them in accord, the hands acting, resisting, or giving away, according to circumstances.

(D.) In the end the movements must be complicated, as the broken line, serpentine, pursuit, and hurried, to give the pupil decision and agility.

In the midst of these increasing difficulties the instructor should make sure that the riders use properly the prescribed actions of hands and legs and that they take note of the effects obtained. He indicates to them the positions of the head and neck to be sought, the dangers to avoid, and by incessant intervention he corrects every fault committed.

The student will thus come to discern the muscles which should act in the execution of the prescribed movements, and to isolate their response in power and rapidity. By experience, then, he will only have to acquire the habit of true and timely action to be fully in possession of his powers as a rider and to overcome all difficulties.

Use of the aids.—When the rider knows the aids and is master of them, it remains for him to use them with tact.

The placing of the aids alone decides, regulates, and directs a movement in a given purpose. It is brought about by practice, a feeling of the horse, and equestrian tact. The feeling of the horse permits the rider to judge of the degree of submission or resistance of his mount.

Equestrian tact leads to economy of the rider's strength. It leads him to determine on the effect to produce, the intensity of that effect, and the exact moment to conquer resistances, at least to foresee them.

The agents of this tact are the legs and hands.

Tact of the legs.—The legs can scarcely act but in one direction. In their use, then, there is only a question of intensity, which the aid of the spur renders still more energetic. Nevertheless, without entering into a study of the mechanism of the gaits, which is

not in the domain of secondary equitation, the rider can, by his seat have a certain feeling of the changing movements which constitute the raising, suspension, and planting of the feet, he can profit by this to hasten or retard their play, destroying, in consequence, the combinations, and by that correcting or modifying the gaits.

Tact of the hand.—Study of the action of the reins has determined their theoretical effects, but these effects may produce very different results following the quality or faults of the hand which provokes them.

The qualities of a good hand are steadiness, lightness, softness, firmness.

To have a steady hand does not mean that the hand shall remain immovable; it should, on the contrary, move up, down, to the right, and left, according to need, but in the execution of this, it should be free from all involuntary or useless motion.

This quality is the first to be sought, and the most important of all; without it, the others will scarcely be present. The unsteady hand can have neither lightness, softness, nor firmness; its indications are uncertain and the most attentive horse cannot obey its incoherent actions.

A light hand maintains the merest contact with the horse's mouth.

A soft hand gives a support.

A firm hand gives a frank, decided bearing.

The hand should know how to resist authoritatively when necessary, but should give way as soon as the resistance disappears and should return to the softness which is always the union between lightness and firmness. It is in this sense that a good hand has been defined as "a force in the fingers equal to the resistance of the horse, but never greater." (De Lancosme-Breves.)

Actions of the hand vary in extent and intensity with the degree of training of the horse. Wide and extended with young horses, to clearly express the rider's intentions, they should be reduced almost to invisibility as training progresses.

If, at the beginning, the forearm, wrist, and hand participate in the action, with a trained horse, on the contrary, it is only by a more or less complete relaxing of the fingers that the rider transmits his will. Effects of traction, pulling, even of force, are succeeded by effects of indication, then of education

Equestrian tact consists, on the whole, in carefully choosing the determining and regulating aids, in assigning to each its part of action, resistance, or passivity, and then having the effect fall on the point selected, taking count of the seats of resistance which are the mouth, shoulders, and haunches, and at the moment selected, thus taking full benefit of the laws of balance and locomotion.

The part of the instructor is here much restricted because, not riding the horse himself, many resistances escape his knowledge. The pupil must, therefore, double his ef-

forts. If he does not judge his own actions properly he will make no progress. Practice, resting on good principles, should be the true teacher.

CHAPTER III.—SUPERIOR EQUITATION.

(Education of the Officer.)

Superior equitation is only the normal development and exact application to the use of the horse of the principles which serve as a basis in the instruction of troopers and noncommissioned officers. It is taught especially at the Cavalry School and is addressed always to a selected personnel. Its object is to develop the enterprising spirit of officers and to make them clever instructors, well versed in the various requirements of their calling.

From the theoretical point of view this instruction includes a knowledge of the principal methods of equitation as well as the several means of training. It also comprises a thorough study of all subjects of which a true horseman should have knowledge.

In practice, besides the most bold riding, it involves riding based on rational principles as well as the application of the laws and methods having the training of the horse as its object.

Superior equitation also teaches the man to preserve in the midst of the greatest difficulties, a perfect seat, great firmness, and an exactness and "finesse" in the aids joined to absolute knowledge of their use; finally the ease and correctness of position which prove the control of the rider over himself and the freedom from all thought of himself.

It seeks in the horse absolute calmness and obedience, constant impulsion in the forward movement, an absolutely straight position and lightness in all movements.

Without including the teachings of the "high school" it nevertheless borrows certain of the airs of higher equitation, such as two tracks and the change of lead, whose practice marks a further degree of submission, in the horse, to the aids, while developing in the rider, to a higher point, tact and the feeling of the horse.

In imposing upon both horse and rider exactness of movement, perfection of position and gracefulness, the superior equitation follows the traditions which are the strength of the French School. The qualities which it develops are a powerful element of discipline because they increase the prestige of the officer and strengthen his authority by proving his superiority in the daily work of his command.

PART II.

Chapter 1 – EDUCATION OF THE HORSE

The Saddle Horse

Qualities of the saddle horse.—The military saddle horse should carry a considerable weight, march quickly and long, have endurance, hardiness, and handiness. These aptitudes are given by the natural balance, gaits, form, and quality.

Natural balance allows the horse to remain constantly master of his strength, to be able to use it under the rider's weight, to easily pass from a slow to a fast gait, and inversely, to have suppleness of action; in a word, aside from character, to be easy to ride from the beginning.

Usage alone proves the value of a horse; experience, however, allows the establishment of general rules which guide in determining the good points to seek in the colt and in fore-judging his quality.

If the back slopes upward, with withers well shaped and a little higher than the croup, and if the chest is well let down and can thus keep the girths away from the elbows, the saddle will remain in place. The rider and pack, situated between the two pans of the scale, as it were, will not operate to break the equilibrium and bruise the shoulders. This conformation, joined to a good direction of the hocks, makes the horse naturally manageable and facilitates his direction in combat. In the daily work the strain is divided over all the springs of the machine, so that none is worn out prematurely.

The gaits should allow him to cover the maximum of ground with the minimum effort. This condition excludes high action and puts value on the flowing extended strides which are least fatiguing for horse and rider.

If the trot is more especially the marching gait, the gait of combat is the gallop. More than ever the present necessities of war require a rapid gait sustained a long time. The troop horse should be, before all else, a galloper.

An ischium relatively long is a characteristic of the galloper. (See fig. 1)

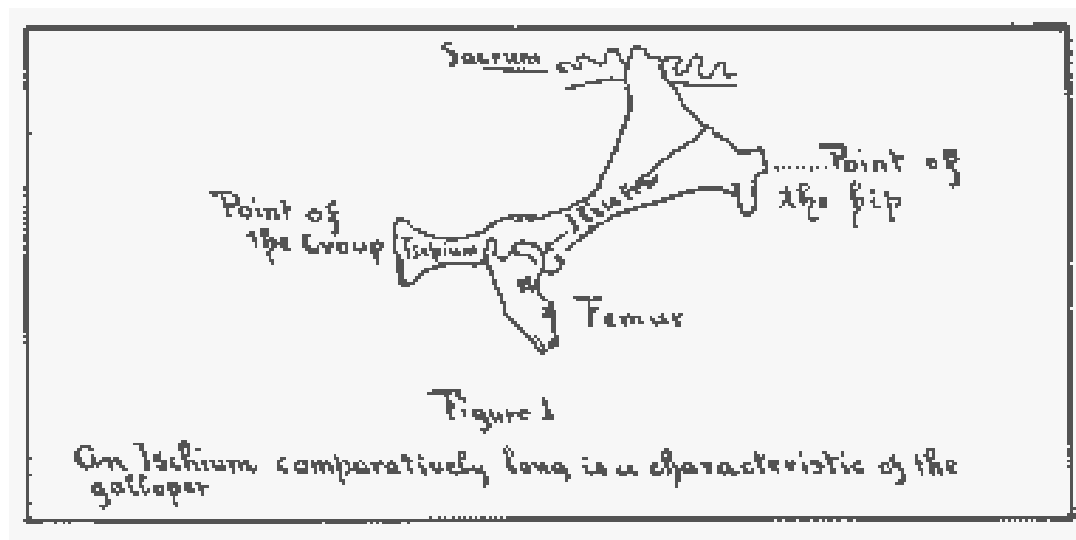
Agility is indispensable for a cross-country horse. It is acquired as much more promptly and completely as the horse possesses the elements thereof, a wide angle between the humerus and scapulum and power in the hind quarters.

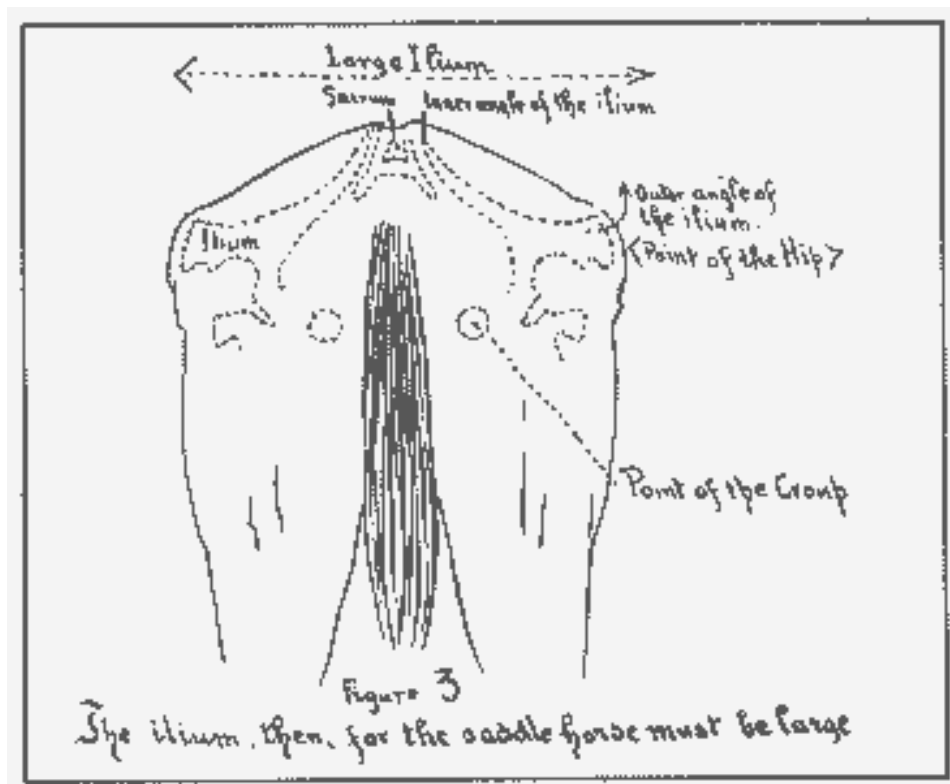
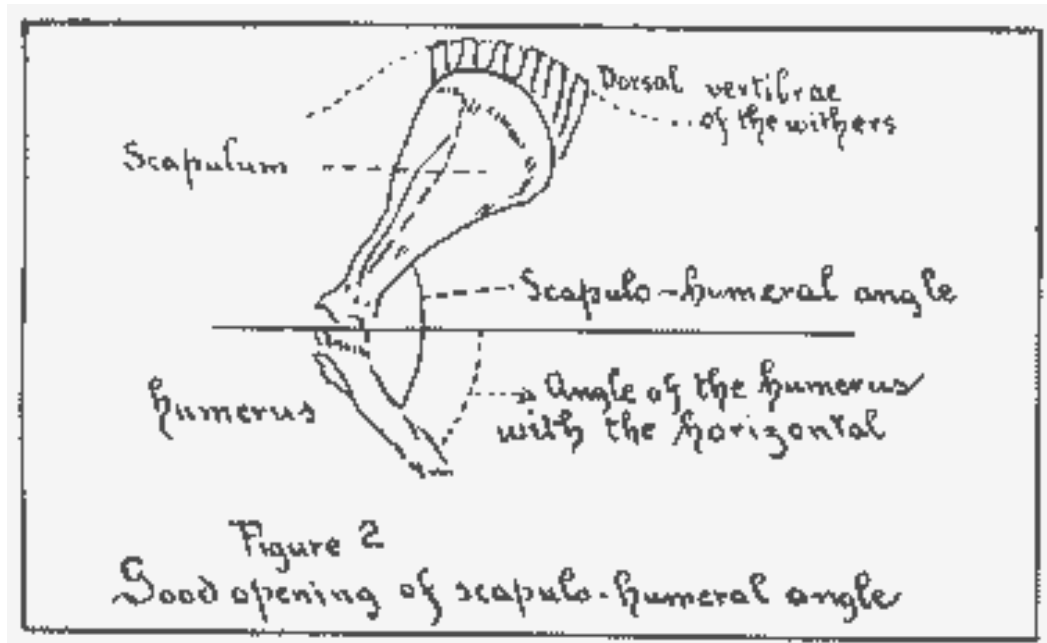
If the length and slant of the shoulder blade joined to good direction of the withers aid the balance by well distributing the weight of the rider, it is the length and verti-

cality of the humerus more than the direction of the shoulder which gives freedom of gaits and leads to agility in placing the forefeet. (See fig. 2)

The power of the hind quarters, the seat of the propelling or retrograde forces, renders the horse master of his mass, and consequently of one part of his balance; it gives him free use of his hocks so that he can engage or extend them, hold back, or stretch out according to circumstances; in a word, he is made master of his direction and speed.

Finally, if his confidence in his long sloping shoulders permits him to land lightly and without apparent efforts after the obstacle, it is the extension of the hind quarters which gives him power to clear it. The ilium, then, for the saddle horse must be wide (distance between points of hips). The outside angle (at the point of the hip) well defined; the inside angle high and above the lumbar vertebrae; that is the loin of the Irish horses; that is what, in the ignorance of its causes, is commonly called "the bump of jumping." (see fig. 3)





Conformation. — Add to these requirements a neck, less distinguished by its actual length than by the way the cervical vertebrae are attached to the processes of well

sloping withers, and one has the outline of the horse in his useful qualities, the conformation to be sought.

One of the first qualities of the saddle horse is to carry his saddle well, that is, with the girths naturally well behind the elbows. The other points of beauty and strength are a well-shaped head, above all, well attached; an open, intelligent eye; a neck well proportioned and well put on; withers prominent, sloping far to the rear, a little higher than the croup; a sloping shoulder; humerus long and well let down; forearm powerful, wide and muscled; the chest ogival and deep; the back well held up; the loin wide, with good muscles behind the saddle. The croup symmetrical, long, slightly inclined, and muscular; haunches wide and prominent; the muscles of the buttocks, thighs, and gaskins well developed, and descending as low as possible; the flank short and full; knees low, wide, thick, and clean; cannons strong and short; hocks wide, straight, and well let down; the feet tough and dry, correctly sloped, symmetrical; density in all tissue. These points taken together will generally favor the balance as well as the useful gaits of the horse, which are a walk, free and extended; a trot, starting from the shoulder, long, easy, and regular; a gallop, sweeping, powerful, and extended.

Quality.—Quality results from the hardness or resistance of the organs in the fulfilling of their functions—from the blood which supplies the energy for the organism to resist the ordinary causes of weakness; from substance which is endurance under any usage.

Good character permits quality to be completely utilized.

Quality in the horse comes from diverse sources; it is influenced by substantial feeding from early age; some limestone regions increase the development of framework and density of tissue in horses born or raised there; above all it is influenced by the breeding of the horse.

Breeding.—The necessity for the Army is a comfortable, strongly limbed type of horse, capable of carrying weight, with the qualities of endurance and energy which the thoroughbred stallion alone transmits.

The pedigree of the horse should therefore show a goodly number of thoroughbred ancestors. In breeding there should be a proper balance established between the progenitors of the thoroughbred race charged with keeping up the "blood" and the half-breds who maintain the size.

Relation between breeding and training.—The Anglo-Arab race, result of crossings with the native Arab, strong in thoroughbred blood or half bred Anglo-Arab blood, furnishes remarkable saddle horses.

The coach horse breeds, bred for trotting, only occasionally transmit to their descendants the balance and gaits of the saddle horse. Many of them are found, however, in the cavalry remount.

The nature of the product of the horse breeders bears largely, therefore, on the ease or difficulty of training. With horses bred for the saddle, education is a quick and easy matter. It can be almost entirely obtained by a well-ordered course while putting the horse in condition.

The natural balance of the horse makes him manageable; there is no pain, so no resistance, and the simple execution of the ordinary movements suffices to make him obey the aids, at the same time strengthening him.

On the other hand, with horses lacking the necessary aptitude training presents more difficulty. It consists in seeking, finding, and demanding such a position as will lead to better balance and which will best favor impulsion, obtaining a better partition of the natural forces, overcoming physical defects, in some creating by habit a second nature capable of a greater return.

CHAPTER II.—GENERALITIES.

Quality and gentleness are essential elements in the value of cavalry horses.

They can be obtained, or at least largely developed, by the care given to the education of the young horses.

Influence and responsibility of the colonel.—The colonel facilitates, by every means, the regular and complete carrying out of an instruction which must be considered as the basis of the mounted value of the regiment. By frequent inspections, by reward and encouragement of all kinds accorded to officers and soldiers who distinguish themselves in horse training, the colonel exercises a personal influence on the nature of the results obtained. He gives orders for the proper maintenance of the riding halls, the regulations of the outdoor riding squares, as well as for the construction on the drill grounds, of paths on which horses may be galloped in all seasons

Together with the service of roads and bridges, he controls the upkeep of the soft paths which follow the national and departmental highways, he thus bears witness, by the large portion of responsibilities which he assumes, of the interest which he attaches to the success of the training, and in consequence of the zeal which everyone should show in this work.

No horse is admitted to the ranks without having been presented for the colonel's examination by the rider who trained it.

Influence and responsibility of the troop commander.—In each troop the captain is responsible for the training. All the lieutenants, sergeants, and corporals and certain selected privates participate in this work.

Lessons in training given to the young horses by noncommissioned officers and privates are under the direction of an officer especially equipped for this work, chosen by the troop commander. (The officers not engaged in the direction of the training, nevertheless, train a horse each year themselves.—TRANSLATOR.)

Qualities of the instructor and the trainers.—The officer thus designated is taken from among those having already had experience and possessing special aptitude; but it must be borne in mind that among these aptitudes, those first required are good sense and methodical disposition; without these, the most brilliant qualities will remain sterile, if not dangerous.

During training the young horse is always mounted by the same rider. There results from these associations an understanding between man and horse, which serves as a point of commencement in the education of the latter. Training takes precedence over all other troop work except the instruction of recruits. For this

reason, the soldiers employed thereon are relieved from guard and fatigue duty while this work lasts.

The soldiers employed for the breaking are chosen from those having a love of horses, liking to take care of them, and known for their patience and gentleness.

The noncommissioned officers and men concerned in training should be in addition well instructed and skillful riders or there can be no hope of success. In fact, if it is the well-trained horse which makes a good rider, it must equally be remarked that only a skillful rider is capable of training a horse.

Care given on arrival in the regiment.—On arriving in the regiment, the young horses are isolated and placed for several days under the eye of the senior veterinarian, who watches the state of health; this isolation is reduced to the minimum time necessary. They are then distributed to the troops to which assigned, grouped in the same stable (in each troop—translator) and submitted to a special regime to make them used to their surroundings.

The first cares to which they are subjected are for maintaining their health, to mold their temperaments to the requirements of military life, to strengthen them by well regulated feeding and exercise, to make them accustomed to man, to familiarize them with shoeing, grooming, saddling and bridling, and the weight of the rider.

Object of the education of the young horse.—The training lessons are given both in groups and singly, taking into consideration the ability and experience of the riders, the character of the animals, and the exigencies of the service, time, and place.

Troop horses, to be regarded as completely trained, should be able to execute everything prescribed in the school of the trooper, and especially they should be quiet to mount, should move freely and true on a straight line, be manageable at all gaits and in all changes of direction. They should jump or pass obstacles of all nature, endure the pressure of the rank, leave it freely, bear all parts of the equipment, not be frightened at the sight or sound of obstacles out of doors, and be broken to the use of the arms.

The very numerous means of training are left to the initiative of each instructor, but they should all proceed from two fundamental principles; the establishing of the confidence of the horse and the methodical graduation of requirements on the part of the rider, based on the association of sensations.

There are numberless means of establishing confidence, of which the most useful are caresses, rest following the least sign of obedience, easing of the reins and legs, passing to the walk after a fast gait, or even dismounting after a result is obtained.

One should never lose sight of the benefit to be had in making the training progress methodically and without haste.

Nevertheless gentleness and patience must not exclude firmness. Persistence in the use of the aids, energetic action of the legs or spurs, and, in exceptional cases, the riding whip, driving whip, and cavesson, are means which may find employment with horses which have to be dominated.

The moment and amount with which these means should be combined cannot be laid down in positive rules; the tact of the trainer is shown by their just application. However, the officer charged with the training exercises a constant and strict supervision over the manner in which the riders use the various means given them to secure the submission of the horse.

At the end the condition of the horses, the cleanness of their limbs, and then* good tempers are the best criterion of the skillfulness with which the work has been directed.

Divisions

BREAKING AND TRAINING.

The education of the young horses lasts two years. The absolute necessity of this rule has been shown by experience under present conditions of raising horses, and no one has the right to disregard it, except in case of mobilization.

The preparation of the troop horse for his career comprises two periods, each corresponding to a very distinct end in view:

(1) The **breaking** to which is devoted the first military year of the colt (4 and 5 years old); its object is his physical development, which is obtained by appropriate work, and formation of his character.

(2) The **training**, properly said, to which the second military year is devoted (5 and 6 years old) and whose object is his complete submission to the aids.

These two years, in spite of their special denomination, do not constitute two clearly divided periods; they represent together the necessary time for the remount to respond physiologically to the requirements of military service. The words "**breaking**" and "**training**," nevertheless, each carries its idea which constantly reminds the instructors of the great difference in the work which an unwelded colt may endure and the requirements which may be demanded of a horse of 6 years. One should only submit the young horse to the necessarily severe gymnastics of training when his "morale" on one hand, and development of his frame on the other allow him to undergo it without fatigue.

The graduation observed in the exercises to which the development of the young horse is submitted constitutes a true conditioning, with laws, principles, and a hygiene proceeding from the horse's nature itself. In what concerns training the progression is practically the same as that employed in the instruction of the rider. This methodical order, in effect, proceeds from the simple to the difficult, it regulates the demands of the rider according to the ease with which the horse is

able to answer them, and causes the combinations of the aids to be increasingly difficult.

One must be careful, at least in the beginning, to execute the movements under the same conditions and in the same manner, until the horse is confirmed in his knowledge of the rider's actions by the effect of repetition. It is only little by little that an obedience, at first laborious and uncertain, will be transformed into nearly instinctive habit.

At the end of the second year, between the return from maneuvers and the 1st of January, the "training colts" work with the old horses, in the instruction of the troop, and thus learn to obey any hand. This forms a useful transition from training, properly called, and is the time when the horses enter definitely into service.

Circumstances which, may influence the duration of the education of the young horse.—It is necessary to take into consideration in the education of the young horse certain circumstances which may greatly influence the training. Health, age, race, previous feeding and work, character, and natural balance or lack of aptitude for the saddle are some factors which may impede or hasten the progress of the work.

Certain aged horses sent directly to the regiment from the remount depots may be assigned on their arrival to the 6-year old training sections. Others, on the contrary, and particularly mares having been used for breeding, should be kept in the breaking sections until their development is sufficient.

General rules.—The function of the instructor is to study and weigh all these considerations. He will know from his experience the means to obtain his end, which is to have the young horses at 7 years healthy, free from blemish, and able to fulfill on varied ground all demands of the soldier in campaign.

The instructor will be prompted by the principles set forth and developed in Chapter IV of the second part of this work and by the following rules, which he should constantly have in mind—

Never commence work without being absolutely sure of what is to be done.

Progress in the horse's education from the known to the unknown, from the simple to the difficult.

Always use exactly the same effects to obtain the same results.

Remember that in the execution of every movement position should precede action.

Never ask anything of a horse which is still under the impression of a preceding requirement.

Never combat two resistances at once.

Do not confound the rider's lack of skill with the ignorance or bad will of the horse.

Demand the new step at the end of the lesson. Pat the horse and dismount.

At the end of these rules it is proper to again remember that during the whole course of the young horse's education one must be content with a little progress every day; demand that, but no more.

Chapter III. BREAKING.

OBJECTS OF BREAKING.

First. To aid by hygiene, feeding, and work the entire expansion of the young horse's physical forces.

Second. To give him the first ideas of the aids and to prepare him for their discipline.

Its principal objective, then, as has already been said, is to gradually put the colt in condition. The various steps in raising the colt and the sojourn in the annexes,^{(Note} Evidently a step in the remount depot system.—Translator.) where the young horse should be submitted to a certain amount of work, serve as commencements of this conditioning and facilitate its beginning.

Certain military or physiological exigencies necessitate the division of breaking into several phases, each having its end in view.

Phases.—The dates which fix these steps are: First, the beginning of January, by which time the gentling should be accomplished; second, the early part of March, period of drills for mobilization; third, the departure for maneuvers, which marks the end of breaking and imposes an almost complete rest.

The periods when the hair is falling and when the horses are put on grass complete the series of stepping stones, which will again appear in the second year.

Importance of work.—Work is the most important factor in breaking. Besides the role which it plays in the development of the organs of the young horse, it is the regulator destined to keep his health and character in balance.

If the young horse does not work enough, he becomes too fat, too playful; he blemishes himself under his own weight, increased by that of the man, and he spoils his mouth by struggling against the hand that seeks to hold him down.

Nevertheless, the colt must be in rather high condition.

His work should be long and slow out of doors (one and a half hours at least), short in the riding hall (a half hour).

The use of felt or flannel boots is recommended for the protection of the legs, especially during work on the longe.

Work not mounted.—Leading at the side of old horses is, during the first days, an excellent exercise, permitting the colt to expend his

Energy without danger to his legs, to become accustomed to outside objects, and to become calm, -which is indispensable to useful work. Numerous circumstances in which it is necessary to lead military horses make this a useful lesson, though it is not necessary to keep it up very long. In these walks, the colts should be led first on one hand, then on the other to avoid always bending the neck to the same side.

Work on the longe.—The results to seek during the first phase are: Obedience to the longe, to stand still while mounted, to bear the weight of the rider, to move forward securely in this new equilibrium.

Work on the longe is most useful in training. It makes the horse familiar with man, while revealing the latter's strength, and thus he acquires the first notions of obedience. The longe permits him to be worked at fast gaits without fatigue, to be exercised when he cannot be mounted or when his rider is absent; to dominate a vicious animal by hard work, without fear of blemishing him. Work on the longe is the basis of training for obstacles. One should profit by the authority which it gives the man over the horse to accustom him to being girthed, to carrying the saber, for the first mounting lessons with difficult horses, and finally for teaching him to range the haunches by use of the riding whip.

All horses should be perfectly trained in this work.

The cavesson used for this work should be wide enough, well stuffed, adjusted so that the cheek strap can not injure the eye on the side away from the breaker, in working on a circle; it should be placed high enough not to hinder breathing, and should not have too much play so that there will be no violent action on the nose.

The driving whip is held in the right hand if the horse works to the left, and vice versa, the butt coming out at the side of the thumb. It is kept out of sight as much as possible, should serve only to threaten or by light touches, and should never have a lash on the end.

The first lessons are of such importance that they should be given by the instructor himself, or by noncommissioned officers of experience and proven skill. Besides, if these lessons are well given, they are reduced to a few, of short duration.

The instructor holds the longe in his right hand, 18 inches from the horse's head; the other extremity folded in eights, is held in the left hand. After petting the horse, the instructor moves forward, pulling lightly on the longe, at the same time clucking to the horse; he moves thus, accompanied by the horse, around the riding hall or enclosure, tracing straight lines and gradually sharpened curves. He stops frequently, saying "Whoa," pats the horse, then passes to the right side, changes the longe in his hands, and recommences the same work to the right hand.

If the horse moves forward at the cluck of the tongue, stops at command, and moves willingly without pulling, the instructor stops moving on straight lines, lets the longe slide a little, and puts the horse on a small circle of 2 yards radius; he himself moves on a concentric circle, a little in rear of the horse's shoulders, so as to

keep him moving. He will often stop the horse, go to him and pat him, and then move him forward again.

In the same manner he is worked on the circle to the other hand, if the horse hesitates to move forward, the instructor slips to the rear and toward the croup, while yielding the hand which holds the longe. If need be, an assistant may help him. The important thing is not to be abrupt with the horse, and not, by frightening him, to run the risk of making him pull.

When the horse moves easily to both hands, calmly and at the walk, on the small circle, the rest of the training is easy.

The instructor makes the horse take the trot, and then the gallop; to quicken the gait he uses the voice or shows the whip; at the beginning he always accompanies the horse in his circular movement, keeping in rear level with the haunches; if he wishes to stop the horse he moves toward the shoulders; little by little he reduces his own circle until he stands still.

The length of the radius varies according to the extension of the gait. A slow trot on a small circle furnishes an excellent gymnastic for the colt; on the other hand, the extended trot, and the gallop on a cramped circle, would be dangerous for horses whose joints are fragile.

If the horse attempts to escape, one must, after having ceded slightly to his movement, resist with the hand and bring him back little by little.

If the horse stops, one may point the whip toward the croup to cause him to move forward; if he cuts in on the circle the whip may be pointed toward the shoulders to force him out.

If the horse pulls violently on the longe at the fast gaits, it is because one has proceeded too fast in the beginning. Rest him often and begin again the work at the walk and slow trot on the small circle.

The early lessons may be made easier by using the corners of the riding hall. The wall may be of use in stopping a horse who has got out of hand. The voice, loud at first, should now find the same obedience when used more gently.

The longe also communicates the instructor's will to the horse; by light horizontal oscillations, the horse is kept from the center; by more or less marked movement, one may slow the gait or stop the horse when he does not obey the voice.

If the work on the longe has been well directed, the horse should be calm and regular on the circle; pass freely from one gait to another at the simple indication of the voice; come toward or go away from the center according to the liberty accorded; in a word, be on the hand with the contact of the slightly stretched longe, as later on he should be, with a light tension on the reins.

Saddling.—When the horse is calmed by work and perfectly gentle on the cavesson, one can profit by that to gradually teach him to bear the girths, a lesson which might present difficulties if given in the stable.

The saddle is at first put on without stirrups or stirrup straps; the girth is quite loose at first; it is tightened gradually during the work. When the horse is accustomed to the contact of saddle and girth, the stirrups are added and allowed to hang down on each side while the horse moves at the walk and trot.

He is thus prepared for the mounting lesson, which becomes easy; in fact, defenses nearly always result from the colt's being saddled and mounted for the first time on the same day.

Mounting lesson.—The instructor determines according to circumstances the most opportune moment for giving the mounting lesson, but he profits always by the end of the work, because the fatigue which follows it brings calmness.

This lesson may also be given during the work on the longe, but always when the horse has been extended by exercise. He personally directs the first lesson, which is given to each horse individually; the greatest gentleness and patience are here necessary.

Accompanied by an assistant, carrying a basket of oats if need be, he places himself squarely in front of the horse and pats him; he takes hold of him only in case of necessity; the rider approaches the horse's head, pats him on the forehead, over the eyes, on the neck and haunches. He strikes the saddle, lowers and raises the stirrups, then takes the reins, leaving them very long. He mounts without hurry, but also without hesitation. If, during the lesson, the horse moves out of place or backs away, he comes back to the head, draws the horse forward with the snaffle reins and quietly begins again.

The rider in putting his foot in the stirrup is careful to point his toe down and not to touch the horse's side; this might disturb him. He should not stop after raising himself in the stirrup; he would break the equilibrium and run counter to the end sought, he should use his right hand to assist in taking the right stirrup; in seeking for it with the toe he may frighten the horse.

In general, he should avoid putting the horse in march as soon as he is in the saddle, so that the idea of the forward movement will not be associated in the horse's brain with the reception of the rider's weight.

It is best the first few times to terminate the day's work by the mounting lesson, so as to be able to send the horse to the stable as recompense.

If some horses are found very difficult, the instructor immediately puts them back on the cavesson.

The mounting lesson should be given on both the right and left sides. This instruction of the colt should be pushed very far. Absolute docility must be obtained even in the midst of noise and movement—in a word, under all circumstances where, in war, it

would be valuable to have a horse perfectly still to mount. However, it is well not to require too much at the very beginning.

Training to bear the saber.—The longe may be utilized to accustom the colt to the saber. As for all new requirements, it is wise to wait until the close of work to give the lesson.

To begin with, only the scabbard is put on. When the horse bears it without fear the blade is added and he is then exercised at the various gaits. This work, it is understood, is interspersed with halts, caresses, and frequent rests.

This, however, is only a step toward the series of exercises which habituate the horse to the management and use of the saber and which take place during work on the road.

Mounted work.—Out of doors and in the riding hall: As soon as the horse accepts the rider, his conditioning must be commenced. This work goes on without interruption until the end of the military year—that is, until the departure for maneuvers. It should take place out of doors whenever possible.

It is evidently in the fresh, air and on straight lines that the colt acquires most rapidly his full strength. Nevertheless, the first sessions take place in the riding hall to enable the instructor to exercise closer surveillance, to study better the men and horses, and to avoid the always possible accidents.

Some old horses mixed in with the colts can have a very good influence on the whole section at the beginning.

The riding hall is used also when the temperature requires it. Advantage should be taken then to give the colts the first lessons of the aids.

First lessons of aids.—This preliminary education is quite necessary to permit the horse to be handled out of doors. It consists in teaching him to move forward at the call of the legs, to slow and stop at the tension on the reins, to turn with the simple actions.

The horses are bitted with double snaffles when the resources of the troop permit; otherwise with single snaffles. The quality, adjustment, and maintenance of the biting call for special attention.

Movement.—The base of all training is freedom in the forward movement. From the beginning the horse must be taught to yield to the two legs. This lesson is the first to be given and should be frequently repeated. For the first sessions the following rules are apropos:

First. Do not let the legs lie "dead" against the horse's sides; act by repeated taps.

Second. Touch him near the girths; not too far in rear.

Third. Begin by giving this lesson in passing from the walk to the trot, then in lengthening the trot, finally in passing from the halt to the trot.

Fourth. Aid the action of the legs, if necessary, by clucking immediately afterwards, with the tongue, or even with light whip taps on the shoulder. This last suggestion is more particularly useful when the lesson is given in the riding hall; outside on the road, and especially when marching behind an old leader, the colts have a natural tendency to move forward in order to follow. That is another reason in favor of working out of doors at an early date.

In the forward movement the reins should always be stretched. Otherwise, instead of being enclosed, the horse is uncertain in his direction; he wabbles, and the rider is without power to direct him.

It is easy to maintain the reins stretched with energetic horses having a natural impulsion; it suffices for the rider to fix his hands, and without altering the speed of the horse, to moderate his excess of ardor. It is more difficult to habituate lazy, cold-blooded, or grass-raised colts to go up to the hand. These, as a rule, only stretch their reins when they are tired. With those horses, it is the rider who must seek the horse's mouth. Later on, when work has made him stronger, the horse, having learned the habit of taking contact with the bit, and urged by the legs, will stretch the reins of his own accord. When the horse obeys the action of the legs, or even the taps of the heel, work on a straight line at the walk, trot, and gallop will lead him little by little to take the desired support on the hand; the rider should now be careful not to rebuke him by severe pulls. A set hand, with fingers closed, would hinder the horse's mouth and bring undesired results.

So, in the first lesson, in moving forward, the hand should not oppose the extension of the neck; the fingers, on the contrary, should be well opened so that the neck may stretch out and nothing may impede the willingness of the horse in moving forward. The legs are active, the hands passive.

With some particularly cold horses, who obstinately remain deaf to the call of the legs, it may be well to use the spurs at an early date; but even in this case the spurs should have round rowels, or should be blind spurs. With well-bred horses it is the rule not to use them during the first lessons.

The use of spurs in most cases does not seem to comprise a special lesson; the horse nearly always responds to them by a bound forward.

With mares or whimsical horses, kicking at the leg and refusing to advance, it is generally sufficient to put them on the cavesson and make a vigorous use of the driving whip coincident with the rider's attack.

Halting.—To halt, the rider gradually closes his fingers and carries the top of his body slightly to the rear. He regulates his firmness of action on the degree of sensibility of the horse's mouth. If the horse leans on the hand, he uses the half halt to modify the balance. The hands are active, the legs passive.

In halting, the horse should remain straight and up to the bit.

With nervous horses, those too low behind, and those with a tendency to back, one should not halt frequently. On the other hand, those which, from their conformation', have too much weight on their shoulders, should be frequently halted. Training is nothing else than a search for balance, and the halt is an excellent gymnastic for those horses which, high and powerful behind, are difficult to slow.

Turning.—The horses are accustomed to follow a man leading them in a snaffle bridle; this familiar opening effect serves as the starting point.

To turn to the right, the rider opens the right rein gently, carrying the hand forward and to the right. The hand which does not act must be carried forward and down so that it will not contradict the active rein.

It is very important that all sensations which the colt is made to experience should come to him true and perfectly clear.

The opening effect should be produced laterally, and the least possible from front to rear. It provokes, nevertheless, a slight slowing, which should be combated by the legs.

The horse being well confirmed in the movement forward, since the action of one leg, while assisting the forward motion, also pushes the haunches to the opposite side and the hand tends to have the same result, advantage is taken to confirm the action of the leg. The colt is thus taught the action which results from the opening of a rein and the closing of the leg and he is accustomed to carrying his haunches to the side opposite from the acting leg.

When the horse easily obeys the action of the opening rein, at the walk and trot, he is taught the action of the bearing rein; that is, taught to turn to the right under the action of the left rein, which will be a useful suppling for him later on when he is guided by only one hand. To obtain this result, it is sufficient to take advantage of the corners of the hall, turns by the flank, demivoltes, or other circular movements with the opening effect of the rein; as soon as the horse commences to obey, the action of the bearing rein is substituted by carrying the left hand forward and to the light. The opening rein serves as a sort of interpreter for the bearing rein. As soon as the latter comes into play, the action of the opening rein must be ceased and the right hand lowered to allow the bearing rein to produce its full effect. After several times alternating the two effects, closer and closer together, the use of the opening rein is diminished, and then suppressed, as the horse understands better what is asked of him.

Backing.—Backing is a movement of secondary importance in breaking. It should only be executed with the rider dismounted, and limited to a few steps.

The first lessons are devoted to teaching the colt those few notions of the aids before taking him outside. All movements possible are derived from these four elementary

actions and it is necessary that he be taught them immediately and separately before associating them in a manner which would produce combined effects.

These actions are: To move forward at the pressure of the legs; to slow or stop at the tension of the reins; to range the shoulders, and range the haunches.

These elements being well understood by the, colt, the ordinary exercises of equitation judiciously applied according to his means, the maturity of his development, and his physical condition will accomplish his education.

This will be the rôle of training, properly called.

First lessons at the gallop.—If special tracks, sanded or turfed paths are not available all work at the gallop, for colts, must be given on the soft footing of the riding hall.

With horses from the South (thoroughbreds and Anglo-Arabs— Translator) who gallop naturally, a simple closing of the legs suffices to break the equilibrium and causes the horse to take the gait sought.

It is not the same with horses from the Northwest, often coldblooded or descended from a race of trotters. Taking the gallop by extending the trot is here painful, and should be strictly forbidden as a cause of disorder and accident. It is, on the contrary, in starting from the slow trot on the circle, a turn, at the end of a movement by the flank, for example, that one may influence the horse to fall into a gallop with the desired lead. In any case the aids to employ are the action of the outside rein (bearing rein of opposition) and the action of both legs. Those actions, while holding back the play of the outside shoulder, push the mass of the horse toward the opposite side, provoke a breaking of the balance in the direction of the movement and oblige the horse to take the gallop. A few clucks of the tongue will assist the first efforts. The riders help to maintain the gait by swaying with the rhythm of the gallop, continuing the action of the legs, and gently accompanying the play of the neck by the hand.

At the end of a few lessons, the gallop departs become more and more calm.

With young colts it is not necessary that they should be numerous. It is the time spent at the gallop and not the departs which count with them. Outside, as in the riding hall, the instructor gives this lesson to only a few horses at a time; he regulates the number and the duration of these gallops by the temperament and character and breeding of the horses. Those not galloping walk about individually, are given the mounting lesson, etc.

Preliminary conditioning.—Just as soon as the colts are accustomed to the man's weight and have a sufficient idea of the aids to insure their being guided without fear of accident, the out-of-door work should commence.

Fresh air, the use of the gaits according to the nature of the ground, their regularity, their graduation in length and speed, the periods of rest and relaxation intermin-

gled with them are the elements at the disposal of the instructor to accomplish his end; the normal development of the organs of the young horse.

Organization of sections: Leaders.—The instructor groups the colts according to their breeding, character, temperament, and gaits. The examinations which he has been able to make during the first sessions in the riding hall, the descriptive lists from the remount depots, performances, and the age at which the horse was bought, all aid him in making this first grouping.

Each day, on leaving the stable, the instructor examines the colt's legs; he makes them march around him at a walk, studies their apparent condition and their expression, and asks the riders about their character, difficulties encountered, and results acquired. After this, the instructor divides into groups those capable of standing the same work, or designates those to go out alone.

The horses who work in group are redivided into small sections of four or five each and take their exercise on different roads or at sufficient distance to assure independence, and hence calm, in each section. At the head of each section, at least during the first days, an old horse is placed to act as leader.

Value of the various gaits.—The walk plays an important part in conditioning because it can be sustained a long time without fatigue. At its full extent it supplies all joints, strengthens and hardens the tendons, and produces quietness and power. By accompanying with the hands the play of the neck, which is very pronounced at the extended walk, the rider gives the horse confidence and teaches him the habit of bearing the contact of the bit. For these reasons, this gait should play a large part in breaking.

The trot is useful in the beginning, at first for “taking the edge off,” then for putting him in motion forward while teaching him to accept the support which he will meet and which is necessary for him in moving straight; thus enclosed by the legs which push and the hand which supports, the horse falls into the habit of fixing his neck in the direction of motion, which facilitates his training further on. From the physical point of view, the trot stimulates the circulation at the same time that it develops the muscular system.

The times at the trot, to commence with, should be frequent and short. The length is increased when the horse commences to come into condition.

The gallop is the gymnastic “par excellence” for the colt; it puts him at once both on the haunches and on the hand, and it develops his breathing powers to the highest degree. It is a gait which the horse ought to be able to sustain a long time without fatigue; training for it must then be started early; but because of the mechanism and power of this gait, it will not be used outside except on good ground. Lacking favorable ground, it will be preferable to gallop only in the riding hall, until the horse is more developed. Outside there is no question of proper leads; the instructor proceeds as in the riding hall, by breaking the equilibrium, and he regulates the length of the gallop by the progression of his work, and above all the physical state

of the horses.^{(Note} These gallops at first very short—400 to 500 yards—are increased progressively to reach at the end of the period 1,500 to 2,000 yards.)

In the beginning, one should avoid bringing on a struggle harmful to the colt's mouth and which might break his gaits and kill his natural impulsion. In all this part of the work, whose objects are above all physical development and the establishment of confidence, the rider plays, in a way, a passive part and he makes every concession which will not have bad results on the health or character of his horse.

Defenses of the colt.—Here a distinction must be made between meanness and playfulness. While the first should be suppressed from the beginning, it would be wrong to punish the waywardness of a colt. When the rider feels the colt ready to jump, he should close his thighs and lower legs, lower his hands, close his fingers, and wait. Likewise, when the colt escapes the hand, and bolts out straight to the front, or jumps to one side, don't try to bring him back, as do ignorant riders, by a regular action of the aids (since the colt barely understands them when he is calm and at a low gait) but set the hand and then when he is calmer, stop, put him in the right direction and move forward. This method of procedure is always, even with old horses, that which gives the most certain and prompt results.

In any circumstances, the instructor cautions patience and gentleness.

Use of the double bridle.—When the horses give themselves over freely in bold, extended gaits and accept the support of the hand without hesitation, one may put on the double bridle without fear, always remembering to demand nothing but work on the straight line until the bars are accustomed to the curb. In doing this, one avoids letting the colts acquire the bad habit of overloading the shoulders and boring on the hand. However, it is best not to use curb chains and to choose mild mouth pieces.

In training there is no fixed way of holding the reins. It is for the rider to find according to his end in view and the resistance he meets, the method of holding which permits him to utilize most effectively the necessary actions of curb and snaffle.

Preparation of the colt for his future use in case of mobilization.— After several weeks' work, it is indispensable to commence to prepare the horses for the role which they are eventually called on to play in case of mobilization. While strictly following the established program of development of the horse one may, for example, carry the saber and double bridle in the road work, from time to time accustom the young horses to the pack, to the distinctive head-dress of the rider, to the cuirasses, to the handling of arms standing still or at the walk, to march in route column or in line. Likewise by taking them on the target range they may be accustomed to firing.

Hygiene.—The hygiene of the colts should be a subject of continual thought for the instructor who has them in charge.

Grooming plays a large part in keeping the horses' health. To obtain good execution rivalry among the men should be stimulated by every possible means. The troop commander and the officer charged with training visits the young horse's in the stable daily, regulates the feeding hours, satisfy themselves that the horses are eating well, that their teeth are in good shape, that they receive the prescribed ration, order the proper substitutions according to season (carrots, etc.), prescribe the days and hours for mashes, and determine their composition and see that they have a good bedding, which alone will secure them the rest needed for their health.

Once a week they have the horses, in snaffle bridle and stripped, led out by the men who ride them, so as to 'better examine their appearance and the state of their legs. They examine carefully the feet and shoeing.

Shedding and period on grass.—The period of changing the hair (March-April) and the time when young horses must largely be fed green food (May-June) are, for them, depressing. Slacking of work becomes at these periods an absolute rule, as well as an increase of feeding to combat the physical depression whose effects may often be felt for quite a while.

Choice of ground.—The choice of ground plays an important part in the work of young horses. Without exaggerating the precautions to take, there should be chosen, at least for galloping, just as soft soil as possible; the drill ground track, sanded parades, side paths of the roads, and as a last resort, the riding hall. On hard ground the joints tire, and the lower parts of the legs are blemished. A heavy or slippery ground also offers grave difficulties, the joints are strained, and windgalls and bursal enlargements are seen to appear. But when the colt has gained some experience out of doors, is more solid, and stronger in his gaits, taking him over broken and varied ground is good practice. His initiative is awakened, and leaving him great freedom of neck, he learns to depend on himself.

Individual work.—Individual work, which can only be outlined in the riding hall or on the drill ground, is performed very regularly out of doors. On the first return to the stables the instructor divides them, into groups, whose size will be diminished each day, and has them go home by different roads. These groups divide up, until finally the colt is accustomed to work alone. The requirements are increased until each shows absolute freedom and quiet.

The mounting lesson is frequently given during work out of doors. Results acquired in the riding hall have value only as they serve as the base for the utilization of the horse in campaign.

Harness.—Ministerial instructions require the breaking to harness of a certain number of young horses destined to draw the regimental transport in maneuvers. They are chosen from among those animals showing most aptitude. This training is quieting for certain particularly nervous and excitable horses. To obtain this result, the regulation breaking cart, which should be found in each regiment, is used, or, if need be, the forage wagon.

First instruction over obstacles.—There is advantage in commencing early the colt's training over obstacles, provided only freedom and skill are sought. An exaggerated effort must not be demanded; but at the same time he must be taught to respect the obstacle; so he is exercised over low, stiff ones.

Leading.—The horses having been taught by the work on the longe to follow their trainer without hesitation, advantage is taken of this to make them pass in the same manner, in hand, all the small natural obstacles that may be found, such as ditches at the side of roads, little brooks, banks up and down, slopes, etc.

The instructor should not forget that his aim is to develop skill, that this is only obtained by quietness; and that gentleness can only come from the patience of the trainer. So no violent means are allowed in this work.

Nevertheless care must be taken that the horses do not profit by the amount of liberty which is thus necessarily given them, to turn on the man and strike him.

Passing obstacles by leading the horses should not only be regarded as a step to jumping mounted, but also as an end in itself. It is a manner of crossing which must be cultivated and perfected.

A troop must count on using this method as well as a lone rider who finds himself faced by a difficult crossing.

On the longe.—As the colt gains in strength, the instructor adds, for each of them, some lessons in jumping on the longe or at liberty.

To jump on the longe, the horse is put on a circle, or rather on an ellipse, so that he will always have a certain space of ground to cover on a straight line before taking off, which allows him to calculate his strides; and so also he will not turn too short after jumping. The instructor, to maintain him on this ellipse, himself moves practically, on the long axis. He should always be level with the horse's croup when the latter arrives at the obstacle.

At the moment of the jump and for the first strides which follow, the longe should be allowed to slide easily.

One commences with the bar on the ground. It is not raised until the horse passes it at the three gaits without hastening or slowing. To calm the horses and lead them to raise their shoulders there is advantage in making them jump a long time from the walk and trot.

Every time, during the course of training, that the horse shows apprehension or enervation the bar is put back on the ground. The kind and height of the obstacles is often varied, and the horse is worked to both hands. The full extent of the horse's power should never be sought; it is by patient, quiet, and repeated work, over small obstacles that his aptitudes are developed and he becomes a sure jumper. The instructor should consider jumping as a difficult exercise and give the lessons himself, aided by skillful noncommissioned officers.

At liberty.—Jumping at liberty in a circular chute or in the riding hall may be employed usefully to perfect the style of some horses, or to teach others who hold back, to jump in their stride. But it is a very delicate instruction which necessitates the presence of the officer and all his vigilance.

Work in the circular chute renders the horse calmer than that in a straight chute because they may be made to jump several times in succession.

This chute is built on ground measuring about 45 meters long and 20 to 25 meters wide. It is composed of two tracks, one within the other, each consisting of two straight sides joined by suitable curves. Each track is 3 1/2 to 4 meters wide. The inside palisades which enclose them should be 1J meters high, the outside one 2 meters high.

On the straight sides are distributed obstacles both in height and width, made so that they may be jumped in both directions. The interior track, reserved especially for the gymnastics of jumping, has only obstacles whose height may be varied according to the abilities and degree of training of the horse. The outside track, intended to make the horses skillful in the open, includes the more important fixed obstacles which the trooper may meet across country— bank, mounds, road crossings, wet and dry ditches, etc. Wide jumps: Ditches, covered ditches, and those with guardrails or hedges, frequently found out of doors, must be insisted upon.

The instructor remains in the central part and directs the horse's work by the voice and driving whip.

Mounted.—When the horses jump skillfully and without hesitation they are made to cross, mounted, several obstacles chosen from among the most simple. In this case it is well to have them preceded by a leader. The riders try to leave the neck very free and they take hold of the pommel if need be.

CHAPTER IV.—TRAINING.

The trained or balanced horse understands the rider's intentions from his smallest movement, and immediately responds to them with exactness, lightness, and energy; in other words, the horse is sensitive to the leg and light on the hand.

Training is distinguished from breaking in that, during the fifth year, the colt's acclimation and physical development are of the greatest concern to the rider, who makes great concessions; while at six years it is the horse which must submit to the rider's demands and show complete obedience.

Training should only be undertaken when the horse, strengthened by fresh air and rational work, inclined to move forward, and confident in his rider, is in shape to understand the language of the aids and to lend himself to their requirements.

To give good results, training should be derived from a doctrine, follow a method, and conform absolutely to the rules of both.

A doctrine is a collection of principles established by experience and justified by reason.

In training the fundamental principle imposes the search for a calm, forward, straight, and manageable horse.

Method adds to the principles the means of execution and rules the order of their use. It varies according to the particular end which one desires to attain, and according to circumstances of time and place.

The method of training set forth here has as objects:

1. The development of the horse's physical strength and moral qualities.
2. His submission to the aids, obtained by a rational progressive education, excluding all effect of force.
3. The search for balance.

The means of execution depend upon the temperament of the instructor and the skill of the rider.

The progressions, containing neither rules nor means, are offered only as aids to the memory. The series of movements enumerated in the progressions are a mere nomenclature of the figures.

In training, the value of the figures lies only in the manner in which they are executed. It is the position imposed on the horse by the rider's aids which counts. One rider may trace all the figures in the regulations, on horseback, in the best established sequence, without obtaining the least result. Another, "working on these same figures but with a clearly defined object, and using his aids in the service of this object, will train his horse very quickly.

Principal factors in training; the instructor.—The worth of the instructor and of the rider play an important part in the training. The instructor should possess great knowledge of the horse, the theoretical and practical science of equitation, and be methodical; finally, if his advice is not sufficient he should be able to successfully take the case into his own hands.

The rider.—But the personal value of the rider is the principal factor in horse training. Whatever may be the method, the quality of the horse, the worth of the instructor, if the rider does not know his part, the horse will never be obedient, or at least only imperfectly so.

Therefore the first requisite for successful training is good riding.

The work.—Any method of training which is not based on bringing the horse into condition is not a military method. In training, as in breaking, exterior work forms an essential part. The instructor must maintain the proper proportion between exterior and riding-hall work, so as to further both the suppling of the horse and his conditioning. Under normal conditions the work in the riding hall should not exceed a third of the whole; in any case the sessions in the riding hall should not last longer than three-fourths of an hour, during which frequent rests will be commanded.

Time.—One should not forget that, whatever may be the rider's skill, the physical and mental development of a colt is subject to the essentially variable laws of nature. No requirement can hasten the natural evolution and substitute itself for the work of time.

Patience and gradual increase of effort carry considerable weight in training; to go slowly is to arrive quickly.

PHYSIOLOGY OF TRAINING –

INFLUENCE OF CHARACTER AND CONFORMATION.

The horse's mental constitution has also considerable influence on his education. We must study it to take advantage of it.

Its characteristic is the memory. This quality aids training when one knows how to profit by it. On the other hand, it makes, errors dangerous; it is difficult to retrain a horse—that is, to make him forget bad lessons.

Aptitudes vary in different animals, quantities of intelligence likewise. Some are found which understand immediately what is asked of them, others are very slow to learn.

The horse is generally kind; he is sensitive to good treatment, to the voice, and caresses. Blows do not subdue him; they only serve to make him irritable and restive.

He is capable of attention and reflection, since sometimes he executes in the morning movements which were difficult for him the evening before; he has a tendency to imitate. It is on this latter aptitude that the use of leaders is based.

He is patient, but his patience is not unlimited. To know the-limit of the requirements which he can endure during each period- of his training is one of its difficulties.

Training disciplines the horse but cannot completely transform his character. A mean or vicious horse, however well trained, is always to be suspected. In studying the mental faculties of his horse and in joining his own efforts to them the rider hastens his submission. His physical make-up and temperament both require observation. It is through consideration of the length and direction of his members, the play of the joints, the ease of nutrition and digestion, etc., that one may foresee the good qualities which the horse may offer or the difficulties he may present.

Limit of training.—In the study of each subject the instructor decides the means of training which best suit the case and regulates the work accordingly.

It is not possible to give a horse qualities he does not possess; but one may always develop his means without ever trying to obtain by force what he has not strength to give.

Certain methods of training may pretend to obtain absolute domination of the horse. They subdue finally both his mental and physical forces. But these methods, whose base is the complete rasmobler on the spur, are not in the domain of secondary equitation. ' The exigencies of work in the troop and on varied ground, on the contrary, make a constant appeal to the horse's natural forces, to his instinct, often even to his initiative.

Base of an equestrian language.—In order that man may transmit his will to the horse, act on his intelligence and control, it is necessary to establish between them a sort of conventional language which the rider may easily teach and utilize, and which the horse may as easily understand and accept.

This language is based on the law of association of sensations: "When impressions have been produced simultaneously or have immediately succeeded each other, it is sufficient that one be presented in the mind for the others to immediately follow." For example, if a horse moves forward at the call of the tongue, it is because one day he **saw** a whip, **felt** the lash, and at the same time **heard** the call of the tongue. Whenever the last sensation, which affects only the hearing, is alone presented, those of sight and touch will come immediately to his mind and he will move forward as he did under the effect of the lash.

Likewise the horse has learned to range his haunches under the effect of the riding whip; later he will range them under the pressure of one leg, because the two sensations will have been associated in the beginning.

The movements which the horse executes naturally under the influence of the aids are very rare. The most docile horse can not obey his rider's commands if he does not understand them. It is by following the principle cited above that one may build up the language which permits the necessary understanding. Sight, hearing, touch, and even taste successively come into play, and each has its part in this education.

It is on the longe that the first elements of this are given. The touch, then alone the sight of the whip, produces the forward movement, to this one will associate the cluck of the tongue, substituting later on the action of the legs. The traction of the longe, in the same way, paves the way for the opening rein, which will serve in its turn to interpret the bearing rein.

The opening and bearing actions will finally lead the horse to understand the actions of opposition, to which the action of the leg will be soon joined; then actions further combined, more discreet, though perhaps less precise.

At this time the greatest clearness is necessary in the impressions transmitted, because on the distinctness of these first indications will depend the clarity of the whole language, and consequently in part the rapidity of the education. In part only, for it is not sufficient that the horse shall recognize the demands, it is necessary still that his mind shall consent to the often painful requirements of man.

Again it is the law of sensations which gives the means for assuring the horse's obedience; for the horse to yield and submit, it suffices to follow a movement well executed by recompense, and its refusal by an energetic punishment.

By the repetition of this procedure, obedience, hesitating at first, will become more and more prompt, then absolute, finally instinctive.

To arrive at this last result, training demands much patience in order not to irritate nervous horses, but also much firmness. During the course of training, a moment always comes when difficulty appears, a struggle is necessary and must be taken up. The tact of the rider consists in determining the cause, physical impossibility or unwillingness. In the first case one must be particularly patient and moderate in one's requirements. In the second case, on the contrary, one must take up the struggle resolutely and conquer lest the horse become conscious of his strength, always by association of sensations, shall become restive.

Care must be taken not to abuse the resignation of the horse under pretext that his strength is disciplined.

The trainer should be fine enough to foresee the warning signs of impatience and revolt, and to limit or stop his requirements for the time being.

It is, however, easy enough to avoid making a horse impatient, and, one may make him repeat the same series of exercises every day provided there is a certain variety and on condition of giving him after each well executed movement, some moments of repose which break the work and produce the necessary and sufficient relaxation.

For the horse's education to be complete his obedience must be not only prompt and absolute; it must be automatic. When the horse has that, the producing of the least signal suffices to unroll the mechanism of association and provoke the execution of the movement demanded. In the beginning, it was necessary, in order to obtain a labored gallop depart, to use both hands to place the forehand and both legs to place and determine, the impulsion: later on, the closing of the fingers on the rein or the mere feeling of the boot suffices to obtain this same movement, because this action has awakened the remembrance of all the other absent sensations.

Since it is by repetition that associations penetrate the memory, the operation is necessarily long. But by substituting for the repetition, or rather by adding to it, the intensity of a transmitted sensation, the progress is hastened. Strong impressions, even though little repeated, leave associations in the mind more quickly than weak ones which weary or enervate the horse, according to his temperament.

It is by reason of these principles that the curb bit and spur, when properly used, allow the duration of training to be shortened. If the horse, by distraction, laziness, or bad intent, attempts to avoid doing what is expected of him, the energetic action of the fingers on the reins or a simple pinch of the spurs will quickly remind him of the established convention; to fix the associations, by the intensity of one of the impressions associated, is one of the keys of training.

Principles of movement.—The locomotive energy of the horse takes, in equitation, the name ***of forward movement or impulsion.***

Impulsion.—The forward movement is the first degree of impulsion. This quality exists in the horse when he responds to the first pressure of the legs by extending his action without sensibly increasing the height of the movements.

Impulsion is forward movement submitted to the exact discipline of the aids, and exploited in view of the object to be obtained. It is the base of training. It resides in the hindquarters, which push the mass forward, or at least should always be ready to do so.

The forward movement is natural or acquired; it is natural in the hot, generous horse; in the cold or lazy horse it is the result of a training and dies out as soon as the action which has provoked it disappears.

A rider is only fully master of his horse when the latter has entirely given over to him his impulsive forces. Certain horses hold them back, part with them with regret, or even oppose the most complete inertia. Others use their whole muscular power to struggle against the rider, resist him, or to completely escape him. Others, finally, lend themselves generously and seem to put their strength at their rider's service. It is this moral as well as physical submission to the aids, in the forward movement, which should be sought before all else in training.

Speed is not a criterion of impulsion. The impulsion is shown much more by the manner in which the horse lends himself to the rider than by the rapidity of the gaits.

One horse, marching at the trot or gallop, even extended, may lack impulsion, while another may show much in walking. This freedom in the forward movement should be carefully protected, not only during training, but during the horse's whole military life.

Besides, good use of strength leads to proper division of weight, or to balance, and consequently, to mobility and manageability.

Balance.—The horse's muscular force and weight are two elements which concur in the production of movement.

Muscular force is essentially productive of energy. The mass of the horse being inert, it is muscular force which provokes the displacement; its use will therefore give the proper distribution of weight.

The precise object of training is to govern this force, in the combination of the several gaits, in the several degrees of speed, in the changes of direction, so as to oblige the horse to execute what his rider demands.

In theory, movement is determined by the different positions of the center of gravity with respect to the base of support. In the state of rest the center of gravity is over that base. Movement is nothing else but the rupture of that equilibrium, the members intervening to steady the mass and prevent a fall. Thus the four movements: Forward, backward, to the right and to the left always take place because the center of gravity draws the mass in one of these four directions.

In practice, a balanced horse is one which remains light in his gaits and agile in his changes of direction.

It may be admitted that the horse in liberty, balances himself naturally. His movements are more or less simple; but the mobility which he exhibits, shows that he is master of his strength and can make judicious use of it. With rare exceptions, as soon as the horse is mounted, this equilibrium finds itself broken by the rider's weight which displaces the center of gravity (two-thirds of this weight falls on the forehand); in addition, the voluntary or involuntary actions of the aids provoke numerous contractions. One part of the horse's muscular power is thus employed in resisting the rider.

The less a horse resists his rider, the better he can balance himself; the more he is manageable.

The conformation also has great influence on the use which he makes of his strength. A well-made horse balances himself more easily under the best possible mechanical conditions.

Whatever be the conformation of the horse, the rider should seek to make him retake, as soon as possible, a natural balance, or at least a balance which approaches it. At the beginning, therefore, the horse will be given great liberty, for in restraining his movements he is prevented from refinding this balance.

The more the rider is steady, exact, and conciliating in his actions, the more confidence will the horse have and the quicker will he regain his equilibrium.

As training progresses the number of resistances will diminish. The horse in yielding to the aids will make better use of his strength, better division of his weight, and the rider will then be able without difficulty to give him the position leading to the movement which he wishes to execute.

Locomotion.—The order in which the horse places his feet in the different movements and the several gaits forms the object of the laws of locomotion.

In superior equitation application of some of these observations may lead to good results; in secondary equitation a wider point of view must be taken under penalty of following a road but slightly practical and of aggravating the difficulties.

The rider, then, has only to occupy himself in giving the horse the position which should precede the movement, leaving to the horse the care and time of placing his feet accordingly.

Rôle and position of the head in movement.—When the horse uses all his natural means to aid in the execution of his movements he employs his head and neck as a governor, by which he balances or modifies his forces. If he wishes to move forward he straightens his head, stretches out his neck so as to draw the center of gravity in the direction of motion; on the contrary, if he wishes to stop or back, he brings in his head, shortens his neck, and thus impresses on the mass the movement to the rear.

In movement to the side, oblique or circular, it is again the displacement of the head and neck to the right or left which facilitates, rules, and maintains the turn.

The rider who wishes to be master of his horse should place his head in such a position that the bit may regulate its displacements as well as those of the neck. In this way the latter bends, shortens, or stretches out, according to the impressions which the mouth receives from the rider's hand.

In order that the impression of the hand may be transmitted to the horse's mouth clearly, and that the breathing may not be hindered, the horse's head should be a little in advance of the vertical. It should be made to take this position in the ordinary gaits and the simple, regular movements.

The more the gait is to be shortened, the more should the head approach the vertical line; on the other hand, the more it is wished to increase the speed, the more the head should leave this line.

In these two last cases the position which the head assumes may be considered normal, since the attitude favors the slowing or the development of the gaits.

The head may effect an irregular position, too close or too far from the vertical, by reason of defective conformation of the forehead, badly adjusted biting, excess of sensibility in the chin groove or bars, or—and it is the most frequent case with horses that "stargaze"—by defective conformation in some part of the hind quarters.

The rider not only combats the faults of position by a judicious use of the aids, but also by using a milder or more severe bit, raising or lowering it in the horse's mouth, loosening his curb chain.

Thus, with a "stargazer" one should increase the value of the arm of the lever; consequently, use a bit with long branches placed low in the mouth, in order to bring the head in. For the horse who carries his head too low, or is too much gathered, the bit should be placed as high as possible and have short branches.

If, in the state of nature, the position of the head is determined by the attitude of the neck, with the bridled horse it is the bit which, by its action on the mouth, makes the head take a position to which the neck is forced to yield. The neck will therefore raise, stretch out, and bend to the right or left, according to the manner in which the hands act.

Rôle and position of the neck.—The neck being the indispensable balance for aiding movement, its position at the poll should be such that, while remaining supple and accepting the lateral and retrograde displacements without resistance, it should always preserve its support and even a certain degree of firmness. Its direction should be that which it takes naturally when the horse unmounted is in place and at attention.

If the head and neck were raised too much, the play of the shoulders would be freer; but at the same time the loin and the whole hind quarters would be cramped, the haunches and hocks hindered in their action, the displacements of the hind quarters would be restrained, unequal, and jerky; consequently, the gait would lose speed and regularity at the same time.

If the neck were too low, the overcharged shoulders would render the horse heavy and difficult to guide.

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The neck, then, should be neither too high nor too low; it shortens or stretches out at the same time that the head approaches or leaves the vertical. In coming in, the head bends the neck at the poll without breaking its line; in stretching out, it extends the neck without raising it.

With the horse thus placed, the reins will preserve their whole power, and the members of the forehead, like those of the hind quarters, will coordinate their actions in the movements, whether collected or extended, as the rider may desire.

In seeking the position to give the neck, the rider should always take into consideration the manner in which it is naturally joined on. Some riders make the mistake of demanding great elevation of neck from horses which naturally carry low heads. In

acting thus the hand stops the impulsive forces. In requiring a position contrary to the horse's construction the hocks and loin are cramped and he loses freedom in his gaits.

The gather.—The gather is only the placing of the head a little in advance of the vertical, the position which has just been indicated as most favoring the management of the horse; one should seek to obtain it from the moment the horses are put in double bridles.

In secondary equitation, it is principally by work on straight lines, by the extension and collection of the gaits, that the horse is taught to take this position. The legs play a prominent part here; they should always precede the action of the hands, for the head only comes in, the neck only bends by the effect of the forward movement. Once moving forward the horse meets the hand; the latter, held steady and low, offers the mouth a gentle support which, in restraining the extension of the neck, fixes the head and forces it to bend and as soon as the horse obeys, the legs and fingers relax and only again take up their action when the head itself takes up a defective position. The alternate active and passive effects of the hand, provided they do not hinder the impulsion, will soon give the neck the flexibility it should have.

Suppling the colt.—Gymnastic work tends to develop the colt's strength and suppleness. It also serves to conquer resistances which he may show.

It is executed at the three gaits; at the walk because the rider being steadier, is more master of himself and makes the horse, who is more attentive, better understand the movements demanded; at the trot, because from the conformation of the horse it is at this gait that the joints play most easily in lateral movements; at the gallop, because this is the combat gait, and the end to obtain.

Resistances.—The fatigue resulting from the work of training and the constraint to which young horses are submitted during their education, may, on their part, give rise to certain resistances that may come from physical defects—blemishes and weakness—or from nervousness occasioned by awkward or misunderstood demands.

The principal seats of resistance are the haunches, the spinal column, the shoulders, and the mouth.

Whether the cause of these resistances be moral or physical, it is by rational gymnastics directed to the several parts of the horse's body that one succeeds in suppling and strengthening the joints and muscles.

Certain movements lend themselves more particularly to suppling of certain parts; the instructor regulates their use according to the end in view.

To obtain engagement of the hind quarters and mobility of the haunches.—The haunches are the seat of impulsion; at the same time they form a sort of rudder in the changes of direction.

The mechanism of impulsion resides in the play of the hip joints. It is this articulation which, in more or less closing, leads the hocks to engage under the mass, allows the horse to embrace more or less ground in accordance with the energy of extension of the propellers.

The movement of engaging under the mass leads to a lowering of the hindquarters—a position very favorable to rapid changes of direction.

The croup should also be able to move quickly in a lateral direction. But from his constitution the horse can only execute the movement by passing the right hind, for example, in front of the left hind; here again the horse must lower his croup, and draw his hocks under the mass.

The movements which permit us to obtain this engagement and this mobility of the haunches are: Starts and halts, extending and collecting the gaits, backing, the demivolte and demivolte reversed with great collection, the false gallop, the broken line, and the circle.

Extending and collecting the gaits—This work includes: Being at the walk: Slow walk, extended walk; from the slow walk to move at the extended walk, and inversely.

Being at the trot: Slow trot, trot, and extended trot; changing from slow trot to extended trot and inversely.

Being halted: Walk and halt, extended walk and halt.

Being at the walk: Take up the extended trot; halt from the extended trot.

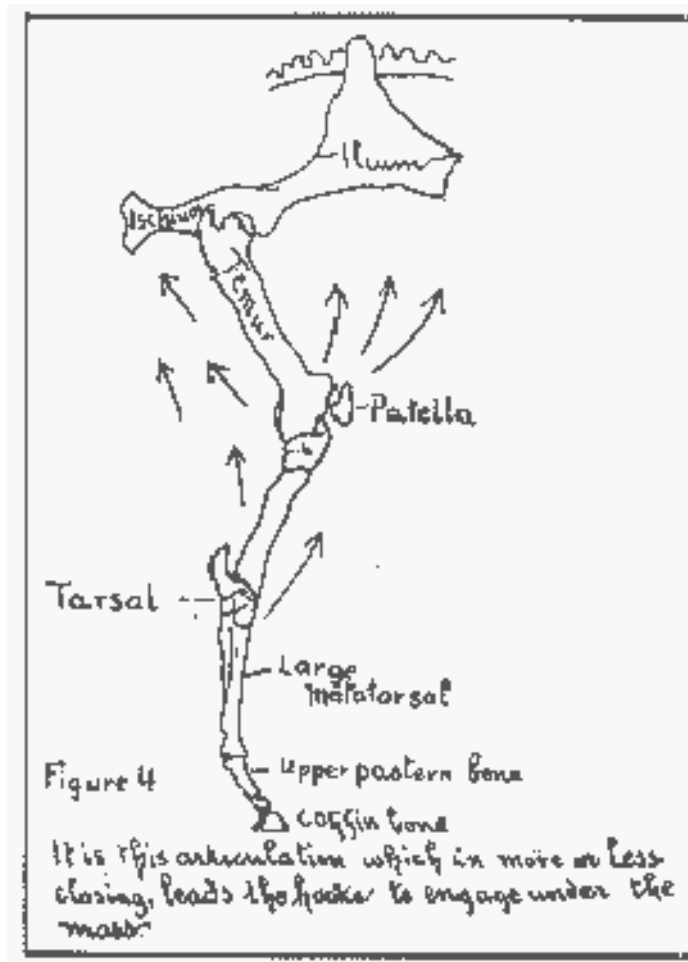
It includes also the gallop departs from the walk, halt, and from backing; passing from the gallop to the walk, halting from the gallop, extending and collecting the gallop.

The horses have learned, during breaking, to obey the hand by slowing the gait, and the legs by an increase of gait. This is again taken up and insisted upon until the slowing is obtained without the least movement of the head indicating struggle against the hand, the extension is "very frank and immediate.

Each time that the horse fights the hand in slowing the fast gaits, he must be put back to slowing the walk.

Obedience once obtained, one should concern himself with the *manner* in which the movements are executed; the haunches drawn under the mass in slowing, the vigor of the hocks and loin in the extension. This is obtained by alternate extensions and collections brought nearer and nearer together.

These results acquired, one should demand the most marked extensions and collections—the immediate halts from fast gaits.



In the work which consists in balancing the horse between the hands and legs, it is essential that these two aids never act simultaneously. The horse, in slowing should let the gait die out while moving close to the ground; at the call of the legs, he should push himself vigorously forward. If his motions are high, it is because the hand has not yielded in time to let the impulsion pass.

If the horse moves sidewise in slowing, he is straightened by opposing the shoulder to the haunch. These supplings are interspersed with periods at a free gait. With lazy horses one should especially insist on immediate obedience in the extensions; with hot horses, in the collections.

When once this work is well executed on the straight line, it is repeated on the circle which will permit a greater engagement of the interior haunch. The diameter of the circle is reduced according to the progress of the horses; but the horse must not be allowed to modify this diameter himself at the same time as the gait; that is, to make it smaller in slowing and larger in extending.

In the riding hall one will practice only the increase and decrease of the riding-hall gallop; outside, on straight courses, the speed will be changed in every form of gal-

lop, from the most collected canter to the run and inversely. That is proof of all preceding work. If the horse bores, or fights the hand, he must be returned to the riding hall for the work in slowing the walk and canter; the object is thus accomplished more surely and with less risk to his legs than if one were to insist on submission in the work at fast gaits.

The Halt, the half halt.—Considered from the point of view of training the object of the halt is not to stop the horse in some position or other, but above all to teach him to balance himself by the engagement of the haunches.

The halt is produced by the action of the fingers in closing on the adjusted reins. If the hocks remain out in rear or are thrown to one side to avoid an engagement, which is always painful at first, the legs intervene to push the haunches gently under the mass. The hand remains passive.

The results of halting are to gather the horse's forces, educate his mouth, fix his head and haunches, and to make him lighter.

The halt must be practiced gradually and very gently at first. One should be very careful with horses whose necks are "upside down," who are long coupled, tucked up, or too nervous. These kinds of horses are generally weak in the loin, they accept the halt with difficulty, and the remedy becomes worse than the evil.

With horses which are lacking in impulsion the halt must be absolutely avoided.

Summing up, halting is only suitable for horses having good loins and sufficient vigor in the haunches and backs to stop cleanly on the hindquarters.

It is not the same with half halt. The half halt is produced by the action of the hand acting from below upward and slightly from front to rear, without stopping the horse, but raising the forehand when the horse bears on the bit.

The half halt, which was defined in the chapter on aids, irritates" the horse less than the halt; one may, therefore, employ it without fear on all, save again those that hold back.

The result sought is to support the forehand and consequently to lower the croup, without producing a slowing of the gait.

The broken line, circle, and serpentine, when demanded by the reins alone acting on the forehead, not only have the effect of suppling the shoulders but also favor the engagement of the haunches.

The same movements, when the leg pushes the haunches to the outside, give great mobility to the hindquarters. One should know, in using them, the end to be obtained, and employ them accordingly.

The search for mobility of the hindquarters is limited to necessity, which is strict obedience to the leg. Its only object is to permit the horse to be kept straight in all circumstances.

The demivolte, when the radius is decreased, leads to more marked engagement of the haunches. The half turn on the haunches (about on the haunches), which is its limit, gives the last degree of this engagement.

The demivolte reversed, as the radius is decreased, prepares the mobility of the haunches. The half turn (about) on the forehand, which is its limit, gives absolute mobility of the hindquarters by displacing them, about the forehand.

False gallop.—The horse is prepared for the work at the false gallop by the broken line at the gallop in accentuating the false turns which this movement gives. Following this, the figure of eight and serpentine are taken up.

The work on the eight is commenced on a large eight inscribed in the length of the riding hall and executed only once (two consecutive changes of hand). When the movement is executed without excitement the horses are kept for a longer time on this large eight. When they gallop calmly and well extended the figure is made smaller little by little. The suppling should be sought by long frequent work on the large eight rather than by an exaggerated closing of it, especially with cold-blooded horses. Likewise, the serpentine consists at first of only one turn, to be made gradually smaller as the horse progresses.

This work leads the horse to modify his balance himself, and it gives the alternacy of extension and engagement which is sought in all these gymnastics.

To avoid the useless difficulty of departing in the false gallop, one should always commence by a true turn. During the false turn the inside rein, by calculated opposition, maintains the inside shoulder and haunch in rear, so as to avoid the change of lead. This opposition diminishes as the horses take the false turn more willingly.

Backing.—Although backing may be quite a punishment for a horse which, in spite of halts and half halts, seeks to force the hand or to bear heavily on the bit, it is also a means which serves to supple his spinal column and which may dispose him to place himself on his haunches.

Backing marks a further degree in the gymnastic which consists in alternately reducing and increasing the base of support.

The suppling undergone by the young horse in the extension and collection of gaits will generally lead to his backing without difficulty.

The horse, nevertheless, through pain or stubbornness, may refuse to back. He braces himself with his haunches, contracts the spinal column, and resists the action of the reins. To combat these bad habits, which lead to his always hanging back, the rider should displace the croup by the actions of the leg or oppose alternately each of the shoulders to the corresponding haunch. One must profit by the displacement of the haunch to take up again the action of the hands.

In the execution of this movement the horse should be calm, straight, move slowly, and should always remain ready to move forward at the call of the legs. In

the beginning, above all with hot horses, it is best after having again moved forward to follow the movement of backing with rest, the reins long.

These results acquired, one should commence to pass from the forward to the backward movement and reciprocally; the horse is thus balanced between the two, only making a few steps in each.

Suppling of the spinal column is obtained by the movements just enumerated, but, above all, by work on a small circle executed at the gallop with increasing rapidity. This is the best lateral suppling; it should be frequently practiced.

The horses being at the gallop on the circle, the instructor, to avoid the fatigue of prolonged work on short turns, alternately diminishes the circle for several turns, then enlarges it. The tendency on the part of the horses to slow down as the circle is diminished must be combated. The short turn is easy at the slow gallop; what is difficult and what must be obtained is the short turn at a rapid gait.

To obtain free play of the shoulders.—The horse which, in liberty, moves and balances himself with ease, generally becomes heavy on the hand when mounted. This change of attitude comes in part from the division of the rider's weight and in part from the fact that while the horse would balance himself for movements which he wishes to execute, he does not yet know how to balance himself for the movements which the rider demands.

The best gymnastics to give mobility to the shoulders and lightness to the forehand include collections, especially the broken line and serpentine, the turns being demanded by the reins alone, making the forehand pivot about the haunches—the circle with the croup inside, demivoltes collected until the half turn on the haunches is reached, two tracks, and shoulder in.

The broken lines, at a very collected gallop, should be especially insisted upon. This is the best lesson for rendering the horse supple and mobile in the gallop, easy to guide, and clever on varied ground.

All these movements are demanded by the bearing rein, which acts indirectly but very efficiently on the shoulders.

It should be remarked that the several movements enumerated above do not of themselves carry a special power leading straight to the end sought. The rider intervening according to his object and the resistance which he meets must act with tact; that is, with more or less energy or gentleness, according to circumstances.

Wide at the beginning, in order not to discourage the horse, the different movements should be progressively made smaller, so that finally the complete submission to the aids necessary to individual combat will be obtained.

The forward movement must be carefully guarded during all the gymnastic work, and it is always necessary after collected work to let the horse stretch himself in extending the gait before resting him, through fear of losing impulsion.

To obtain suppleness of the jaw.—Suppleness of the jaw is the apparent sign of lightness; it indicates a general relaxation. With a horse whose mouth is normal, the gymnastic exercises which supple and strengthen the colt lead naturally to this mobility of the jaw. This is, in a way, the proof of his willing obedience. But some horses, in spite of a relative suppleness of the rest of the machine, preserve an abnormal stiffness in the jaw.

The origin of all defenses is pain. Contraction of the horse's jaw may be provoked by a bit badly adapted to his conformation, whether the mouth be too sensitive for the bit or whether its sensibility has been deadened until it no longer perceives the effects.

The first remedy consists in properly choosing and adjusting the bits. Their nature, their position in the mouth, the dimensions of the branches, the thickness of the canons, the presence or absence of the curb, the tightness of the curb chain, permit us to combat many resistances.

Nevertheless, under the action of a brutal or merely awkward hand, the best bitted horse will take up positions or habits which are true defenses, since they permit him to avoid the constraint of the bit.

In these particular cases it is necessary to reeducate the mouth by aid of appropriate supplings. The object is to destroy the bad habits, in order to replace them by good ones.

A horse is said to yield to the action of the hand, when, being in gentle contact with it, he half opens the mouth under the pressure of the fingers, moves for an instant his tongue and the bits, and immediately retakes the contact. The yielding should be confined to the mouth, without provoking the least movement of the head or neck. The first elements of this suppling may be taught dismounted, with the horse at the walk; but, as impulsion in this position and gait is nil or nearly so, its use in secondary equitation may be dangerous.

To obtain this demonstration, the rider should engage his horse in a free gait. By gentle fixity of hand he will lead him to take a confident bearing in the position, even vicious, which is most familiar to the horse. .

Having obtained this the rider will have recourse to the *division of supports*.

To divide the supports is to break the normal symmetry of the bearing of the bits by relaxing one or several reins while the fingers are closed on the others. The rider uses successively the different combinations of the reins by actions more or less close together; for example, give and take, play the snaffle from side to side, alternate the snaffle and curb.

These different actions tend to defeat the resistances by constantly changing their bearing point and to reduce the contraction of the muscles by their incessant movement.

Following the kind of resistance offered by the horse, the half halt or the vibrations executed on one or several of the reins of the combination in play will lead sooner or later to the relaxation demanded.

When by repetition the horse obeys without hesitation and when all the combinations of reins lead to this same submission, the education of the mouth is finished.

The advantages of the relaxation of the jaw have their reflection in the poll and neck, whose muscles are not slow to relax. The neck retakes at first its natural position, then, thanks to progressive gymnastics, it arrives at the ramener (gatherer), which constitutes the indispensable attitude for the easy control of the horse.

In practicing the supplings of the mouth it is necessary to exercise severe control in the preservation of impulsion, to avoid rewarding by passing to an inferior gait and on the contrary to yield and caress in extending the gait. This local gymnastic must be limited to necessity, and the true object of training, harmony of all the forces, must not be lost to view.

Two Tracks and shoulder-in. – Two tracks by lateral aids is a movement which finds application in the use of the horse alone and in ranks.

With the horse marching to the right hand the movement on two tracks is obtained by the use of the left rein and leg, which act by pushing the shoulders and haunches toward the right; the horse is then bent away from the side toward which he moves.

In this movement the shoulders and haunches follow two parallel paths, so that in gaining ground to the right the members of the left lateral biped cross in front of those of the right lateral biped, or reciprocally in gaining ground to the left.

In training two tracks is useful to further the horse's knowledge of the effects which a combination of aids may produce; it constitutes in addition the first degree of an excellent suppling for the colt.

This movement should only be demanded on an inside track—i. e., away from the wall—or on the diagonals and during a relatively short time. Executed on the track, two tracks has the bad effect of teaching the horse to be guided by the wall and not by the aids. Also it frequently happens that the horse not being able to pass the outside leg in front of the inside leg through fear of striking the wall passes it behind the inside leg, which does not give him the desired result.

If the displacement of the forehand be slightly accentuated by greater requirements of the hand and leg, the horse passes from the movement on *two tracks* to that of ***shoulder-in***.

The horse is said to be on right shoulder-in (inside the arc of the circle in which the spinal column lies) when he marches bent to the right; he is said to be on the left shoulder-in when he marches bent to the left. Whatever be the direction in which one is moving the horse may thus be placed and worked sometimes with the right shoulder-in, sometimes with the left shoulder-in.

The movement is executed by the command "Right shoulder-in," "Straighten," "Left shoulder-in," "Straighten." To place horse in right shoulder-in, for example, and to work him in the most favorable attitude, the shoulders are moved off the line of march by the action of the right rein (opening effect), strengthened by the leg on the same side; the horse is in the first step of a turn. As soon as he is in this oblique and circular position, the line of direction previously followed is again taken up, all the while keeping the horse bent and crossing. The right rein now becoming a bearing rein of opposition acts in the direction of the left haunch, has effect on the horse's whole body, which it bends and pushes forward and to the left. The right leg acting the least bit in rear of the girth aids in likewise moving the haunches toward the left. The left hand after having yielded limits the bend of the neck, strengthens the action of the right rein, and also draws the forehead forward and to the left; the left leg acts on the girth to keep up the forward movement.

This lesson gives the horse entire suppleness and great freedom in all parts of the body.

It brings about: (1) Freedom of the shoulders, obedience to the hand, and consequently lightness in the forehead. (2) Suppleness of the haunches, obedience to the leg, also engagement of the hindquarters. (3) Pliability of the spinal column which gives harmony between forehead and haunches.

It leads to free play of the shoulders because when the horse works vigorously while thus bent the right leg is obliged to describe a movement of rotation and to lift itself in order to pass in front of the left.

It leads to agility of the haunches because the right haunch is, on the contrary, obliged to lower itself in order to allow the right hind to pass in front of the left hind from which comes the desired engagement of the hindquarters.

It gives suppleness and pliability to the spinal column in consequence of the continual play of the vertebrae in all directions.

It puts the horse up to his bit because the leg acting in the same direction as the hand obliges him to accept the tension of the rein.

It disciplines the horse to the leg because the rein, acting in the same direction as the leg, makes him understand and accept its action.

Shoulder-in, therefore, is the very best of all gymnastic movements which may be demanded of the horse. Its execution is easy and its results excellent and quick.

One must avoid executing this movement on the track, for the horse is then attracted by the latter, he seeks to reenter it, and consequently only bends his neck instead of freeing his shoulders, and this is opposite to the object sought. Shoulder-in is first demanded on the circle; little by little the horse is made to understand it when carried off the circle for several steps—then pet and straighten him, and commence again.

As soon as the horse understands what is asked of him and the movement is well executed at the walk, it is repeated at the trot.

For good execution of the movement, it is necessary that the hand which retains the inside shoulder shall act rather steadily on a short rein and not operate by any traction from front to rear.

The horse should be frequently exercised in this movement. The shoulders must be carefully alternated. Between each change one must move on the straight line for several steps. The supplings must last only a very short time.

One should profit by the engagement of the hind legs to push the horse into a cadenced, extended trot.

The cadenced trot. – The cadenced trot is a very regular trot of great extension, produced by the energetic distension of the haunches and hocks. It is obtained when, impulsion having been accumulated in the hindquarters by the action of the legs, the rider eases the hand, contenting himself with giving the head and neck the necessary support to facilitate the extension of the gait.

At first it is demanded only during a few strides. As the horse becomes more vigorous, better disciplined, and better able to use his strength, the time at this trot may be prolonged without requiring it—in training at least—during more than a hundred yards. A free extended walk with loose rein should always follow the cadenced trot.

This gait alternated with shoulder-in makes the horse bold and light.

Balance.—In the extensions, collections, and changes of gaits which have just been discussed, there was always an underlying obligation for the rider not to inclose the horse between the legs and hand. The rule still exists that by exact action of hand and legs his impulsion must be carefully preserved and he must be submissive. But according as the training is perfected, these actions tend to approach each other; sometimes they seem to confound each other. The horse, thus balanced between hand and legs, moves with high strides in a sort of equilibrium, which is nothing else than the "rassembler" while marching.

The rassembler in marching has for its object the shortening of the animal's base of support; the horse then works on short bases, which accentuate his mobility but necessarily reduce his speed.

As soon as it is wished to return to an extended gait it is necessary to abandon the rassembler and allow the impulsion to pass, at the same time the neck stretches out, the gait extends, and the horse works again on a long base.

To oblige the horse to work on short or long bases according to circumstances; to accustom him to pass from the most collected work to the most hardy, outdoor equitation; in a word, to put the horse in balance, is the object of the changes of gait, the increase and decrease of speed, of which we have just spoken.

Observations on the gait.—One may draw from the mechanism of the walk, trot, and gallop, some observations which are very useful in training.

The rider must know how to take a certain gait, to maintain, or to change that gait. In the walk and trot, the lateral bipeds move in parallel planes; in the gallop, on the contrary, the horse tends to travel with one haunch slightly to the side. This remark is necessary, and it suffices to show the rider that in the walk and trot the horse should be held absolutely straight, while in the gallop he should yield to one haunch very slightly.

With a young horse, therefore, each time that the rider wishes to take the gallop he should give him this natural position. On the other hand, each time that he wishes to pass from the gallop to the trot or walk he has only to straighten his horse.

Another obligation for the rider consists in obtaining the gaits which allow the horse to cover the most ground without fatigue. For the horse to expend the least energy all impulsion must act in the direction of the movement.

But the horse may travel high; he may travel low; or high and low at the same time.

The horse travels high when, suppled, trained, and correctly ridden, he is able to assume the rassembler in marching. Then the muscles of the high, flexed neck will lift the forelegs in their contraction; while the hind legs engaged under the mass will also have an action from below upward.

Thus placed, he can give only very limited speed, since he loses in extension what he gains in height, and since his joints are constantly flexed, but this position is very favorable to immediate changes of balance, and therefore of direction and gait. This finds frequent employment in secondary equitation since both in maneuvering and in individual combat the horse should be able to work on short bases.

The horse may travel high in front and low behind when, ridden by an inexperienced rider he holds his head high through fear or force. As in the preceding case, the muscles of the neck, by their contraction, lift the forelegs; but the hind legs, placed far away from the front legs, can not engage. Their motions will be jerky, the spinal column will have no play. The horse will move with considerable expenditure of energy, and a hindrance in the loin and hind legs shown by disorders of all sorts.

Finally, the horse will travel low when he moves with his neck stretched out and extended, its direction approaching the horizontal. The hind legs, under the action of the rider's legs, may easily engage under the mass, because the position of the neck will allow the spinal column to bend from above downward and then extend in the direction of the movement. The muscles of the neck in contracting draw the forelegs forward and not upward. This position will therefore favor speed, and all the horse's efforts will tend to produce the movement with the minimum of fatigue. No strength will be lost. It is this position which the rider should seek to impose on the horse whenever he can work on long bases.

Considered from the point of view of training, the gaits, some of whose points were discussed in breaking, offer still further resources.

A free walk, extended without exaggeration, is restful. It is the best reward which the rider may give the horse to show his satisfaction of a well-executed movement. It should be frequently used.

Further, at this gait the seat being steady, the rider is in possession of all his means, and should profit thereby to correct bad positions of the horse and to teach him the positions which should precede each new movement. The horse, being himself as much more disposed to obey as the aids are more distinct, and as much more master of his balance as the gait is less rapid, finds himself best disposed to receive the lesson.

Every new movement, every new position, should therefore be taught at the walk before proceeding to the rapid gaits.

But at the walk, for the very reason of its slowness, the gymnastic effects on his joints and muscles are little marked in lateral movements. Likewise at the gallop, if the extensions and collections of the gait on the straight line form an excellent exercise for the spinal column, on the other hand, work on two tracks has no useful effect, since in this movement he moves by a series of bounds parallel to himself without crossing his legs, consequently without great effort.

On the contrary, in the trot, by reason of the mechanism of the gait, the movement on two tracks forms a suppling as much more complete as the impulsion is greater and the gait more cadenced.

In order that the left members, for example, shall open widely toward the left and the right members shall pass in front of them, the horse must move with long strides, the speed must be maintained; without it there would be no deep work of the muscles, no extended play of the joints—in a word, neither suppling nor impulsion.

The gallop departs.—The importance of the gallop requires that the rider be familiar with the least details of this gait, for the manner in which the horses take it, keep it, modify, or leave it has great influence on their value.

Besides, the study of one complex movement, which necessitates all the rider's skill and absolute obedience on the part of the horse, gives occasion to apply in one concrete case the principles set forth in training, and to show in detail the rôle and value of the aids. To completely analyze the gallop departs is to sum up all of training and set forth in the study of one movement how all others are obtained.

The horse at liberty takes the gallop in several different ways. As a general rule, he breaks into the gallop according to the circumstances which have provoked it; sometimes by a sort of loss of balance in throwing his weight forward, sometimes by taking on the hind quarters the weight of the fore hand, engaging his hocks under the mass, balancing himself, as it were.

Mounted, he acts in the same way when a cause foreign to the rider's will leads him to take the gallop (cluck of the tongue, crack of the whip, fear, etc.).

When the rider wishes to impose the gallop by authority of the aids he must consider in the choice of means the effects which the hand and legs may have, since, according to the degree of his training the horse can only understand a part of the effects of the aids.

To make the horse understand that the sensation that he perceives commands the gait of the gallop, he must be placed in a situation which, in taking away from him all hesitation, only leaves one movement to execute—the one demanded.

Whether the horse takes the gallop by losing his balance or by balancing himself, position should always precede action.

It is the very mechanism of the gallop which indicates the position which the horse should be made to take. The gallop is characterized by one lateral biped being more advanced than the other; thus in the right gallop the two right legs are more advanced than the two left legs, and inversely.

(a) With young horses, ignorant or imperfectly disciplined to the aids, and who, meanwhile, must be galloped for their development, and to advance their conditioning, the object should be to start the horse on some circular movement (circle, passing a corner, movement by the flank) where the interior lateral biped, having less ground to cover than the exterior biped, may be easily advanced more than the latter. By pushing vigorously with both legs, when the horse is thus placed, the gallop will be taken naturally, especially if the rider carries his body forward and slightly to the right for the right gallop. The horse, being in a way surprised and thrown forward by the leg action, **falls** into the right gallop.

The reins not having to act on the horse's balance, this way of doing has the advantage of leaving his head free and of putting him in the gallop without fail, while leaving him calm and impulsive.

The rider has profited by the favorable position *taken by the horse himself*, to determine the gallop. By the aid of this method the horse is familiarized with this gait, combined with the rider's weight; by practice, the departs become easier, and the horse goes into the gallop willingly.

Such is the first degree of the lesson in the gallop.

This method is sufficient to give the colt the necessary work; it is also the only one which may be employed at this moment, since he is ignorant of even the elementary actions of the aids.

(b) The gallop is not always taken up on curves; one must be able to take that gait without changing direction, that is, on the straight lines. The work which leads to this result constitutes the second degree of the gallop depart. Here, it is necessary that the rider may, if he wishes, place the horse in the position which commands the gallop.

The horse should then have undergone a certain amount of training and should know the elementary actions of the aids.

To take the right gallop, for instance, one must retard the left lateral or advance the right lateral. To obtain that result one may cramp the play of the left shoulder, at the same time liberating the right, one may push the left haunch toward the right, or one may bring the right haunch forward of the left.

Any actions of the rein or legs which will bring these results will be good, though in different degrees, and they will prepare the horse^ according to the degree of his training, to take the desired lead.

1. To retard the left shoulder, resist with the left rein, either by a light direct effect of opposition or by a bearing effect of opposition calculated according to the resistance met.
2. In joining to one of these actions of the rein, that of the left leg, one obtains a more or less marked deviation of the left haunch towards the right. This places it in the rear of the right haunch, in the position of the gallop right.
3. To obtain the gallop depart by advancing the right haunch act with the right leg at the girths; this will engage the right hind leg under the mass (superior equitation).

These several actions may be combined to obtain a more prompt and exact effect. The position once obtained, it is only necessary to give the impulsion corresponding to the speed of the gallop by an equal pressure of the legs.

Taking the right lead by the resistance of the left rein is a simple, irresistible method; it is the one which should be employed in the first periods of training, and, as a general rule, every time that there is difficulty in starting with the proper lead.

Taking the right lead by the predominating action of the left leg has the disadvantage of traversing the horse, and if the horse takes the gallop under a too energetic action of the inside leg he may depart false.

The right lead, taken by the predominating action of the right leg at the girths, is certainly the most correct, since the horse takes the gait without traversing; but this action of the leg is rather an effect of education than a natural effect. This silent, sweeping manner of taking the gallop can therefore be only employed at the end of training by experienced riders having precision and tact, and with calm, obedient, and quite sensitive horses.

A distinction must be made between **conditioning at the gallop**, in breaking, and the **gymnastics** of the **gallop departs**, in training. Contrary to what was prescribed in breaking, it is here necessary to multiply these departs on each foot to thoroughly accustom the horse to them. The instructor must appreciate what he can and should require. The only fixed rule is never to demand anything from the horse until he has become calm and never to let a badly executed movement pass unconnected.

Only the determining aids have been spoken of; they do not exclude the others. In regulating or strengthening the demand addressed to the horses the latter contribute powerfully to the execution of the movement.

Summing up, the progression followed has consisted in going from the known to the unknown, that is: Only using, to teach the departs, the aids which the horse was able to understand, according to the degree of his training; observing and using, at least in the beginning, the positions of the horse at liberty, only modifying them little by little; but with the constant thought of substituting the straight for the traversed position and the exact balanced, instantaneous depart for the uncertain, disordered depart.

To pass from the gallop to the trot or the gallop to the walk, the horse is replaced in an absolutely straight position. Thus placed, the horse modifies the combination of legs and falls back into the trot or walk.

As soon as the gallop is broken one should act with more or less firmness on the reins, according to the gait which it is desired to adopt and the quickness with which one wishes to take it. The legs must be relaxed. Nevertheless, they remain in contact, ready to intervene to keep up the forward movement when the horse is installed in his new gait.

Conditioning.—Conditioning of troop horses is only distantly related to the training of race horses. If the application of the rules of hygiene and the respect of the physical laws are absolutely the same, if the progression in the work is drawn from the same principles, it is not a question here of preparing the horse to withstand trials of speed on fixed days, but of permitting him, by the rational development of all his organs, to acquire and to keep during his whole military life the endurance, hardiness, and agility on varied ground, which are indispensable to the horse for war.

Therefore, one cannot fix absolute rules for the conditioning of the young horse. His state, appetite, the preservation of his legs, his general appearance are the only regulators and guides in an art which brings out all the qualities which distinguish the true horseman.

The conditioning of the 6-year-old horse moves hand in hand with his suppling, of which the various exercises have been studied.

Logical work demands sessions whose duration varies between one and one-half hours at a minimum and three hours at a maximum. All the prescriptions enumerated in breaking concerning the general state of the horse, the importance of proper feeding, development of muscles and lungs, the care of the legs and feet, should be observed as much more carefully as the work is more intense at 6 than at 5 years.

The object of the instructor is to bring all the young horses into shape to execute easily, towards the month of August, a march of 20 to 25 miles in four hours.

The training at the gallop is likewise regulated so that towards the same period the horses may withstand a maneuver gallop of 3,000 to 4,000 yards over good ground.

Scrupulous regularity of gaits is the base of conditioning.

The instructor assures the success of this work by employing a reasonable scale of time at the trot and gallop, combined with the walk and rest.

This work should continue through the whole year, each week bringing a slightly superior effort and therefore development of the organs. The long ascent, however, should be broken by resting places, where the horse may take hold of himself, renew his strength, energy, and gaiety, and prepare himself to respond to the new efforts which will be imposed on him. It is even good, at times, if not for all the horses, at least for the least courageous and for those having weak legs, to diminish or even stop the work, substituting for it mere walks in hand.

A horse, in good working condition, presents a general aspect of health, wide-awake eye, brilliant coat, supple skin, muscles standing out; his flank is well let down, and his easy, calm gaits show strength.

Jumping.— The horse being mounted. Skill on varied ground and boldness over obstacles should likewise be the objects of a regular exercise.

Work on the longe, in the riding hall or out of doors, is of too great aid in training for obstacles to be neglected. Horses must frequently be given this work.

Practice in out-of-door riding permits us to group the difficulties which the horse presents in jumping into a small number of defenses, which it suffices to recognize in order to promptly correct them.

It is a fact of experience that usually a horse limits his resistances to one or two defenses which he always presents.

When a horse refuses to jump the first thing for the rider who is called on to overcome the resistance, and also for the instructor, who, if need be, must indicate the remedy, is to take into consideration the character of the defense.

If the horse has shown sufficient strength on the longe, and if his jumping lessons thereon have been well conducted, the only explanation of his refusal to jump, mounted, lies in his rebellion against the aids, or in a lack of tact on the rider's part.

In the first case, it is wise not to insist, and to perfect his training before recommencing to jump.

If it is through the man's awkwardness to obtain immediate obedience, it is usually sufficient to indicate to him the fault committed.

The different defenses in jumping generally enter one of the following groups:

The horse stops short.

The horse runs out at a distance from the obstacle.

The horse runs out close to the obstacle.

(a) If the horse stops short it is through lack of impulsion or fear of the rider's hand.

When there is lack of impulsion one must leave the obstacle, regive the lesson of the legs, or that of the spur if necessary; then when the horse is felt to be anxious to go forward, bring him back calmly and very straight, pushing him only in the last strides; dismount as soon as he has obeyed and pet him.

If the horse refuses through fear of the hand, after having modified the biting, if necessary, one must lower the bar, or out of doors choose very small obstacles; make the rider pass over them at the walk or slow trot, reins long, leaving absolute liberty to the neck and aiding himself, if necessary, by holding the pommel; jumping in this manner until the horse regains confidence and in jumping stretches his head and neck.

(b) The horse which runs out at a distance from the obstacle throws himself brutally on the rider's hand; he places his head and neck in a position which enables him to avoid the authority of the bridle, and escapes in any direction he can.

The rider, in this case, must decompose the trouble. Stop his horse, calm him, replace the head and neck normally, and bring him back, holding him closely and until the last moment between his active legs and stretched reins.

(c) The horse runs out close to the obstacle. Two cases may come up: Where the horse runs out with one shoulder forward; where he runs out with the haunches preceding the shoulders.

In the first place the shoulder which is in front must be restrained either by an action of the opening rein, if the horse shows a mere attempt to swerve, or by an energetic intervention of the bearing rein if he roughly forces his shoulders out of the straight line; one must push him vigorously at the same time with both legs.

In the second case, if he escapes by the haunches leading, to the left for example, it is by lateral aids in placing him in the left shoulder-in (left bearing rein of opposition, left leg), that the haunches may be held in the proper direction. The horse's head is drawn, it is true, in the direction in which he wished to escape; but under the action of the left rein and leg, the whole mass – and it is that which counts – is thrown toward the right. He is straightened at the last moment, and the impulsion provoked by the rein of the shoulder-in, joined to the energetic action of the legs, sends the horse boldly to the jump. All the defenses which have just been analyzed are preceded, at some point or other, by a quick abandonment on the part of the horse of the rider's hand. He profits by this moment of liberty to assume the attitude in which he desires to resist. The rider, in approaching the obstacle, should carefully guard the impulsion with his seat and legs, and keep his reins stretched in order not to lose contact with the mouth. That is called "Riding close to his horse"

PART III.

APPLICATION OF THE PRINCIPLES OF EQUITATION AND HORSE TRAINING TO THE MANAGEMENT OF THE HORSE.

CHAPTER I.—USE OF THE HORSE.

Following training, the horse has become bold and quiet. His suppleness and physical strength have been developed and his resistance overcome by the special gymnastics of training; the horse has felt the aids and acknowledges their authority. There remains the application of the acquired results to the daily work. The rules set forth hereafter serve as a basis for perfecting the riding instruction of the troopers.

Keeping the Horse straight.—It is important that the horse travel straight, first, because of the position in ranks which he must occupy, and, second, because this position aids in imposing the gait demanded and regulating the speed.

The horse moves straight when the left shoulder and haunch and the right shoulder and haunch march or are placed on parallel lines. In equitation it is convenient to say the horse is straight in following a curved line when his haunches and shoulders are placed so as to follow concentric curves.

When the horse is straight, the two hind feet follow exactly the line traced by the two fore feet; the haunches and shoulders are then in positions which assure their straight forward and backward play. When the two haunches move equally, the impulsion is equally divided and the translations of weight are regular and easy. The forces which emanate from the two ends of the horse find no contradiction in their combined play, and all work toward a common end, the direct march, for which the horse is perfectly adjusted.

If instead of moving straight the horse is traversed, all the harmonious agreement between the forces of the fore hand and those of the hind quarters are seen to disappear, as well as the equitable division of weight and the ease of changing direction; further, the haunches oppose the shoulders and afford a point of support for resistance.

It is most important before undertaking anything else to place and keep the horse straight.

The actions of the reins and legs, studied before, permit the horse to be straightened. In referring to the table of effects produced, in particular those of opposition, and in utilizing the aid which the legs carry to the hand, the rider will find all necessary means to straighten the shoulders and put the haunches into line, to maintain and if necessary to force the horse into his proper direction. But to obtain the result which a proper application of the aids should give, the energy of impul-

sion, must be maintained. True, easy gaits depend entirely on the activity of the haunches and the horse being straight.

To change the gait and in a given gait to change speed.—The change from one gait to another rests on two principles: First, when the legs close to carry the horse forward, the hand should not oppose the movement; second, when the hand acts to moderate or extinguish the impulsion the legs should have no effect.

In consequence, in passing from the halt to the walk, extending the walk, passing from the walk to the trot, and extending the trot, the rider should close his legs with more or less force, according to the result sought and the sensitiveness of the horse. At the same time he lowers his hand and opens his fingers, if necessary, for the movement. The hands meanwhile should be ready to resist and even, if necessary, to act, so as to regulate the gait when the effect produced by the legs is superior to that wished for.

To extend the walk, the rider, without ever losing contact with the mouth, allows the horse great liberty in extending his neck. In this position the horse is more solid on his legs, sees his ground better, and is in a situation which favors movement without fatigue. To extend the trot, one must push the horse forward and keep him true by not letting one shoulder be more advanced than the other. The rider may find it convenient to hold the reins separated in the two hands, so as to more easily utilize the effects of opposition.

The horse which pushed at the trot takes the gallop without its being demanded is a horse behind the bit; it is necessary to rein him in, close the legs to engender impulsion, let the neck stretch out, and lead him to take on the bit a bearing which will favor speed.

Inversely, to slow the gallop, the trot, and the walk, to pass from the gallop to the trot, from the trot to the walk, from the walk to the halt, and to back, the rider fixes the hands, straightening up and carrying back the top of the body, the fingers closed on the adjusted reins. The legs should be ready to resist and even to act if necessary—that is, if the effect produced by the tension on the reins is superior to that which the rider wished to obtain. Therefore, they have only occasion to intervene when the horse has commenced to yield to the action of the reins.

To maintain a given gait and a given speed.—With well-balanced horses, which while moving forward freely remain submissive to the aids and respectful of the rider's hand, a slight tension on the reins is sufficient to maintain the gait and speed which are chosen. To keep the horse light and to oblige him to yield the jaw and clamp the bit, one must act by the play of the fingers or by the division of supports while keeping up the impulsion.

But it frequently happens that, whether from pulling or holding back, the horse does not maintain regular gaits.

The horse may pull for many reasons: nervousness, pain, lack of balance, contradiction, etc. These several causes are manifested to the rider's hand in two ways. The latter

may feel on his hand an inert mass, heavy to carry and difficult to displace (the horse goes on his shoulders); this is called weight resistance. It may be combated by the half halt, which obliges the horse to raise and sustain himself. Or the rider may feel in his fingers forces coming from muscular contractions of the jaw, and which the horse instinctively or voluntarily directs against the bit. These are combated by flexions or vibrations.

Horses may not keep up to the gait desired, through laziness, lack of strength, fear of the hand, or ignorance of the positions favorable to the movement.

If it is through laziness, attack vigorously with the legs or, if necessary, with the spurs to reestablish a profound respect for the legs.

If it is through lack of strength, conditioning, age, and nourishment, combined with the action of the aids, little by little will increase the horse's vigor.

If the horse is afraid of the bit, he shows his fear by raising his head and refusing the hand. He thus crushes the hindquarters and, instead of engaging, jigs without gaining ground. In this case it is necessary to modify the biting, give him confidence in the hand by light play of the fingers, and cause the extensions of the neck which lead to power in the extension of the loin and later in the action of the propellers.

Summing up, with a trained horse, a steady gait is kept by light hand and the play of the fingers, never allowing the horse to pull.

With a horse who fights the bit one must have a light hand which always maintains the same passive tension on the reins, or use the vibrations.

With a horse who goes on his shoulders, the hand must be firm and half halts must be used. In each case the legs should be fixed, but passive.

Finally, with horses behind the bit, one must seek the cause and act accordingly, whether by energetic action of the aids or by hygiene and work.

Change of directions.— A turn is only the consequence of a new objective which the rider proposes to reach. The choice of a point of direction should, therefore, precede the turn.

In practice there are three ways of turning: A wide turn, a short turn, a turn in place.

A wide turn is executed in advancing on the arc of a quite large circle; the rider has therefore room and time. It is obtained by either the opening rein or bearing rein.

The opening rein shows the horse the new direction; the two legs push him in this direction; this is the most elementary of the turns in advancing. It is also that which colts best understand; it must therefore be used not only at the beginning of breaking, but also every time that the horse resists the other effects of the reins (running out, swerving around, etc.).

For this turn to have its full effect it is of the utmost importance not to annihilate the action of the determining rein by a premature action of the regulating rein; at the beginning of the movement, therefore, the opposite rein must be greatly ceded.

The turn by the bearing rein and the two legs is also a turn in advancing. The weight of the neck leads the horse in the new direction toward which both legs push him; it is the turn most employed in riding out of doors. It is also the only one which the rider having his reins in one hand may use.

As in the preceding turn, it is necessary, in order to leave the determining rein all its effect and power of action, that the regulating rein be relaxed at the start so as not to interfere with the position which the horse's muzzle should take, by the solicitation of the bearing rein. Riding with one hand, however, the inside rein is automatically relaxed.

The short turn which is used when the rider wishes to make a quick change of direction or lacks space may be obtained by lateral or diagonal effects.

The lateral effect (right direct rein of opposition and right leg) draws the shoulders to the right and throws the haunches more or less quickly to the left; the horse faces to the right, slowing. This turn is of current use in training. It gives a first suppling, short but energetic, to the spinal column, shoulders and haunches. It is also this movement which permits the horse to be given the first lesson of one leg, and it makes him accept this aid.

The short turn by the diagonal effect (left bearing rein of opposition and right leg to turn to the right) is the most collected, most prompt, and at the same time the shortest of the turns.

The left rein pushes the shoulders to the right, the right leg pushes the haunches to the left; the horse faces to the right without slowing.

So, of the two wide turns, the first is the most elementary; the second the most used in out-door riding; of the two short turns, the first is excellent for forcing obedience to the leg; the second is most rapid and regular.

The different changes of direction which may be demanded are: Obliques (change of hand), the broken lines, movements by the flank, the half turn, the circle, the demivolte (the half turn and change of hand), the demivolte reversed (change of hand and half turn).

Individual combats and the pursuit are only the applications of these several movements imposed by successive points of direction.

The turn in place is used when the rider being halted wishes to change direction; it is executed on the shoulders, on the haunches, on the center of gravity.

The half turn on the shoulders ("about on forehand") is the last degree of the demivolte reversed. Executed correctly and rapidly, it proves the horse's submission to the leg and the agility of the haunches.

The half turn on the haunches is the last degree of the demivolte. Executed correctly and rapidly, it proves the lightness of the forehand, the suppleness of the shoulders, the strength of the loin, and obedience of the haunches. If these two movements be decomposed step by step, the horse will better understand the mechanism, but there will be no gymnastic effect. In order to derive much benefit from them they must be executed briskly.

The half turns on the shoulders and on the haunches are difficult to execute perfectly. The half turn in which the horse pivots on his center of gravity while carrying his shoulders to the right and his haunches to the left, for example, is of easy execution and constant application. It is obtained by the action of the left bearing rein of opposition which carries the shoulders to the right and makes the haunches deviate toward the left, and by the action of the right leg by which also carries the haunches to the opposite side.

Galloping a horse.—The mediocre quality of troop horses requires great care in the use of rapid gaits, and greatly limits the speed which can be demanded of them, as well as the distance over which they can be exercised.

Nevertheless, the practice of the charge necessitates for the trooper not only the use of extended gallop, but also the intermediate speeds.

The instructor exercises care over the details of this work, chooses his day and ground, and gradually teaches men and horses to take and maintain a sustained gallop.

In these exercises the rider attempts more than ever to push his horse up to the hand. The more the horse takes confidence in this bearing the better will he place himself to assure speed. Thus, for the first times it is better to use a snaffle or double snaffle. The first gallops are made easier by grouping the horses by twos or threes at the maximum. To be secure at the gallop the rider must shove his feet home in the stirrups, have the thighs against the saddle, the lower leg fixed against the horse's body; he should carry the top of the body slightly forward, which will relieve the loin, allow the haunches to act with more power, and consequently favor speed.

But the seat, while being raised, should remain so that it will instantly regain its normal position when it is wished to come back into the saddle; this will be so when the thighs, knees, and calves retain their adherence. The reins are separated as has been said in the school of the trooper.

The hands should be held low, bearing against the base of the neck, so as to be more steady and to give the horse a more stable and constant bearing.

The rider is taught to gradually increase the speed up to the full run, then to make the gait die out while always preserving contact with the mouth and keeping the horse straight. These exercises, including the increase and decrease of gait, should not exceed from 700 to 900 yards. One must be very careful to regulate the work according to the age and race of the horses. The periods at the

walk should be as much more prolonged as the gallop has been more rapid and long.

Advantage should be taken of this work to teach the rider to judge and regulate the speed of his horse, to use, report, and reason on all that goes about him; in other words, to acquire the head, sang-froid, quick sight, and judgment indispensable in war and which the trooper should preserve even at speed.

Cross country and over obstacles.—Principles of equitation find their application across country and in jumping. The qualities of boldness, seat, steadiness, suppleness, respect for the horse's mouth, and the observation of the laws of balance, which have been constantly mentioned in the education of man and horse, here play a considerable part.

Boldness in jumping is the first requisite of the out-of-door rider; it is rapidly communicated to the horse and becomes the best guaranty of his freedom. If the rider is not keen, the horse will perceive it and become apprehensive.

Seat, which is the close, gentle contact of the buttocks and thighs with the horse, assures a good hand, gives the rider use of his legs, which more than ever control impulsion, and allow him, in case of a serious mistake, to avoid a fall by slipping down deep into his saddle.

The seat is independent of the head and shoulders; the rider may have his body slightly forward and be well seated as he may carry it to* the rear and not be well seated. Steadiness, which has been defined in equitation as the absence of all involuntary or useless movement, here forbids any exaggerated projection of the body forward or to the rear, as well as any displacement of the legs forward or the hands in the air or to the rear.

Suppleness on horseback is the result of seat and steadiness, together with pliancy of the loin; it is the chief quality which allows the rider to seemingly be part of his horse at all variations of the gaits; it is this that is called "going with the horse."

The laws of balance and the mechanism of the gaits require the rider, in jumping, not to overweight the parts at work, that is the hindquarters, seat of impulsion, at the moment of taking off, and the forehand which acts to steady the mass at the moment of landing.

Finally and above all, the play of the neck being as much more pronounced as the gait is slower and the leap more violent, for the horse to use all his strength and for his mouth not to suffer from the least awkwardness it is necessary that the rider's hand give the head freedom in accordance with the energy of the extension. The more the ground is difficult, the obstacles varied and serious, the reactions violent and unexpected, the less easy it is to apply these rules, especially as the necessities of the maneuver or evolutions render their use still more delicate by limiting the initiative and independence of the trooper.

Whatever be the gait employed, the rider in approaching the obstacle steadies his legs, increasing their pressure if necessary to assure impulsion. He inclines the body slightly forward, the buttocks remaining in the saddle; the hands held low, accompanying the movements of the neck, the fingers open, if necessary, to allow the horse to make use of his head and neck.

Riding thus, the horse having impulsion and being well inclosed between steady legs and long-stretched reins, the rider might be said to turn his horse loose in the "chute" of the aids, and he is placed for jumping under the best conditions.

In conclusion, without attempting to cover the thousand cases which real practice in out-of-door riding will reveal, a formula which sums up the best attitude for the rider in jumping is the following: Don't jump before the horse, nor after the horse, but jump with the horse.

Individual combat.—The value of the trooper in individual combat is a function of the training of his horse. The combat exercises should therefore tend to make the latter indifferent and free.

These exercises should be carefully conducted, and as an example might follow the progression given below:

(1) Distribute a number of manikins about the riding hall in various positions, standing, kneeling, lying down, in the middle of the hall, by the side of and even on the tracks, and make the horses pass beside them and over them at the three gaits until they no longer take notice of them.

By riding with two hands, the reins separated, and by frequent petting, this result will be quickly obtained.

Have the troopers strike the manikins with saber at all gaits and in jumping obstacles, both at will and by command. This exercise tends to make the horses indifferent to the blows which the riders deliver, and consequently, if in course of the combat exercises they have received several jerks and saber blows, which is inevitable in spite of precautions, and they then manifest repugnance for the work, they are put back on this exercise until all trace of bad humor has disappeared. It is well to always commence and finish the work by several minutes' exercise against the manikins.

When the horses show entire indifference and freedom, have the sections pass each other, merely crossing the blades; then imitate a mêlée, without saber blows. The mêlée is conducted at first in whole riding hall, then in half, then in a quarter, and at the three gaits.

3. When the horses are confirmed, one should pass to the pursuit of mounted manikins, then to the pursuit of riders, finally to the individual combat.

The serious requirements to which the horses are submitted in the course of these exercises require them to be made very short, to be broken by long periods at a free gallop with long reins and by periods of rest with everything relaxed. Every horse which shows hesitation should be stopped and put back on the manikin exercises, as was said above.

CHAPTER II.—DEFENSES OF THE SADDLE HORSE.

The restlessness of a horse may lead to a number of vices which it is important to overcome as much for the animal's preservation as the safety of the rider; but the solution of the difficulty lies more in the rider's skill than in laying down set rules applicable to the very numerous cases which may arise. The following will therefore be considered as useful advice, worthy of being thought about but not absolute rules:

Ignorant horses.—When a horse disobeys through ignorance of what is asked of him, by manifesting only a certain difficulty or a passive resistance, he is made to obey by again taking up his training at the point where he is at fault and in following thereafter the series of exercises indicated to complete his education.

Horses that are afraid.—By gentleness and patience the horse is given confidence. When his rider perceives an object capable of frightening him, he should sit tight, leave his reins long, pet him, and quiet him by the voice. If a horse constantly is afraid of the same object, show it to him often, and dismount to lead him to it rather than drive him with the spurs. If the horse seeks to turn around through fear, hold him in the straight path by opposing the shoulders to the haunches.

Horses with bad conformation.—The horse with bad conformation naturally undergoes the consequences of weakness in the organs concerned and resists the execution of movements which throw special stress on these organs. The rider should avoid immoderate requirements which would have the result of provoking defenses if the horse lacks strength, or of still further damaging the parts if the horse submits.

Mean horses.—To master a horse of difficult character the rider must prove that he is the stronger and never let a disobedience pass nor yield to a whim. It is rare that one may lead him to yield without force; on the other hand, every concession on his part should be rewarded. With a horse who no longer obeys the simultaneous action of both legs, it is necessary to go back to the leg lesson given with the longe and driving whip. The rigid reins might also be employed in this case.

Horses that rear.—This defense has its beginning in halting and getting behind the bit. The first thing to do is, therefore, to prevent his getting behind the bit by attacks on the straight line, attacks which produce movement forward and throw weight on the forehand. If the horse resists moving forward he must be turned in place to decompose the forces which are necessary for him to rear. In swinging his haunches to the side all parts of the horse are decontracted and he is prevented from throwing his weight on the haunches. The use of 'the rearing reins will help in combating this defense.

Horses that Kick.—If a horse has the habit of kicking, the snaffle must be used to prevent his lowering the head and at the same time he should be vigorously pushed with the legs.

With a horse that kicks it is an error to always hold his head high, for it often happens that this defense is caused by pain in the loins and hocks, and by raising

the heads of these horses one would only increase their irritability and provoke their defenses.

The horse that kicks at the boot should be put back on the lesson of the single leg, with the longe and riding whip. Every time that he tries this defense his rider should immediately riposte with a vigorous blow from the spur.

Horses that fight the Hand.—The causes which lead to this fault are numerous. They pertain generally to super sensitiveness of the bars, a badly chosen bit, or a too severe hand. The methods indicated in training for the education of the horse's mouth permit these to be remedied. Seek a suitable biting, and if necessary discard the curb chain. The standing martingale may be advantageously used in this case; likewise work on the longe with the reins fastened to a surcingle.

Horses that lower the head against the chest.—A horse may do this through weakness or lack of training. It is the case with many colts. It then suffices to give him confidence in the hand by the forward movement and extensions of the neck. If this position becomes a defense, use the snaffle reins to raise the head, if necessary by a quick sharp action from below upward. When a horse raises his head, prevent any slowing of the gait by acting with the legs. Require but little to begin with, and as soon as the horse raises his head very little and yields his jaw ease and pet him.

Horses that star gaze.—The star gazer has a high, nearly horizontal head and a stiff jaw; a bad conformation predisposes to this fault, but this defective position generally comes from the horse's having been badly ridden and fearing the hand. To correct a horse whose nose is in the air, fix the hand on the pommel of the saddle, the reins remaining stretched, close the legs to push him up to the bit, and keep the fingers tightly closed until the horse lowers his head a little; then open the fingers immediately and yield to him. Repeat this lesson until the horse yields to the least pressure of the fingers and until he well understands that the hand is severe only when he carries his head up and that it relaxes as soon as he places his head properly. The rules laid down in training for the education of the horse's mouth here find application.

The use of the rearing reins, running martingale, and Colbert reins may assist in this case.

Hot-headed horses; horses that jig.—The reasons for which horses fret and jig are numerous. Some have too short a walk; training should remedy this fault. Others lack impulsion and become sulky at the pressure of the leg; they must be taught the lesson of the spur and put back in the forward movement. Others again, too nervous, fret, move sidewise, and can not bear the pressure of the rank; they must be worked alone for a long time, put into high condition, and the rider must be as steady as possible. But most of the time the fault comes from the fact that the horse, through fear of the hand, does not dare to take the support or bearing on the bit which favors a free, extended gait; in this case the rider whose hand is too hard must be changed, the horse must then be made to extend his neck frequently to give him confidence in the hand and to lead his weight on

to the forehand. These first results accomplished, one should extend him by long periods at a slow trot on serpentines, circles, and figures of eight, to accustom the horse little by little to the actions of the aids.

Horses that pull.—Being at the walk, use half halts on one rein; when the horse yields let him straighten himself and take the original gait. Repeat this same lesson at first at the slow trot and then at the ordinary trot. The stiffness of a pulling horse is thus finally broken by forcing him to bend and to engage his hindquarters. (Halts and half halts constitute excellent gymnastics for the horse which goes too much on his shoulders and who is heavy in hand.) One might use pulley reins on this sort of horse.

Work at the slow trot on voltes, serpentines, and diagonals.

Horses that open the jaws and pass the tongue over the bit.—For the first, use a noseband or strap tightly buckled above or below the commissure of the lips. For the second, in addition to the noseband use a bit with a palette of leather or rubber. The tongue may also be tied with a string.

SUCCESSIVE PHASES OF THE EDUCATION OF THE YOUNG HORSE.

This outline is made up for average horses; it sums up the methods which have preceded. It is not absolute; the requirements may be varied by the means at hand, climatic influences, the kind and quality of the animals. It marks, nevertheless, the normal steps in the training of the troop horse.

OBJECT.

Breaking (5 years).....	Establishing confidence.
	Preliminary conditioning.
	Elementary education in the aids.
Training (6 years).....	Conditioning.
	Suppling the young horse.
	Complete obedience to the aids.

BREAKING.

[Four periods.]

First period: October 1 to January 1.

Second period: January 1 to March 1.

Third period: March 1 to August 15 (departure for maneuvers).

Fourth period: August 15 to October 1.

FIRST PERIOD.

[Oct. 1 to Jan. 1, three months.]

Object.....	Acclimation.
	Taming.
	Establishing confidence.

I.—Acclimation.

Put under observation. Installed in the troop. Care on arrival. Particular hygiene. Air. Rations and substitutions. Endurance and hardiness.

II.—Taming.

Assignment of the same horses to the same riders. Choice of riders. Familiarizing the colt with the life of the garrison (noise, watering, shoeing shop, etc.).

III.—Establishing confidence.

Out of doors and riding hall. Proportions in which they should be employed. Work not mounted. Leading by the side of old horses which are mounted. Work on the longe. Accustoming the equipment, weight of man, mounting lesson. Saber.

Mounted work. Walks out of doors. Organization of squads. Nature of the work. Role of the walk in strengthening the joints. Familiarizing with out-door objects. Influence of leaders.

SECOND PERIOD.

[Jan. 1 to Mar. 1, two months.]

Object:	Preliminary Conditioning
Preliminary preparation for possible	Elementary Education of the aids
use in case of mobilization	Leading the young horse to take place in the ranks of the mobilized troop.

I. - Preliminary conditioning.

Making the stomach. Progressively leading the colt to assimilate the Government ration (watching the droppings; mashes, gruels, carrots). Making muscle. Progressive reasonable alternation of gaits. Particular influence of each. Usefulness of varied ground.

Organization of groups and redivision of work. Long slow walk. First lessons in independence and freedom.

Leading over small obstacles. Horse skillful and bold. Developing the lungs. The gallop; when and how to commence it. Considerations which rule this work. Race, blood, ground. Hiding hall on straight lines. Leading the colt to gallop 1,500 to 2,000 yards (5 to 6 minutes). Aspect of the horse in work.

II.—Elementary education in the aids.

The simultaneous action of both legs or both hands may be taken up out of doors with the conditioning. The action of the reins provoking changes of direction is taken up in the riding hall on days when bad weather prevents going out.

		Passing from walk to trot.
		Passing-from halt to walk.
(a) Simultaneous action of both legs.....	Passing from halt to trot.	Extending the walk and trot.
	Passing from trot to walk.	
(b) Simultaneous action of both reins.....	Passing from walk to halt.	Passing from trot to halt.
	Opening rein	Changing tracks in changing hand.
	Bearing rein	Broken Line
(c) Action of single rein.....	Opening rein and both legs	Turns, half turn.
	Bearing rein	Demivolté.
(d) combined action of both legs.....	and both legs	Demivolté reversed.
	with one or the other rein	On Circle

Taking gallop by breaking the equilibrium.

III.—Leading the young horse to take his place in the ranks of the mobilized troops.

Making him familiar with arms, to their handling, standing still and marching; to the pack; to the bridle; to the trooper's equipment; to firing.

During work out of doors some marches in column, in line, deployment, movements by the flank, to the rear.

THIRD PERIOD.

[Mar. 1 to maneuvers, 5.1/2 months.]

Objects.....	Further conditioning.
	More marked obedience to aids.

I. —*Further conditioning.*

Increase the outdoor work according to the state and temperament of the horse (1 1/4 to 2 hours).

Continue the training at the gallop to attain at the end of the period 3,000 yards (7 to 8 minutes).

Lesson of independence out of doors. Confirming freedom and quiet.

Obstacles.—Lesson on the longe and at liberty; skill on tree trunks, ditches, banks, etc.

Hygiene.—Period of shedding (March-April). Watch the hygiene and feeding. Modification of work.

Period of feeding grass.—The horse should be rather fat. Increase the grain. Cut down work outside. Appearance of horse in condition—eye, skin, muscles, flank, legs.

II.—*More marked obedience to aids.*

Some riding-hall work as during the second period; in snaffle at first, in double bridle during the last month.

Further:

1. Confirm the forward movement. First search for balance by increasing and decreasing the gaits on a straight line.

Passing corners.
2. Mobilizing the haunches (efforts of one.....Serpentines
leg alone Demivoltes reversed, etc)
3. Mobilizing the shoulders (action ofSerpentines
Passing corners.

the bearing rein)

Demivoltes

4. Extending and redressing the neck.
5. Gallop departs on straight line by lateral aids.

FOURTH PERIOD.

[Aug. 15 to Oct. 1, 11/2 months.]

Periods of rest.—Leading; large substitutions for grain rations. Mashies, purges. Fatten the horses.

TRAINING.

[4 periods.]

First period: October 1 to December 1.

Second period: December 1 to June 1.

Third period: June 1 to August 15 (maneuvers).

Fourth period: August 15 to October 1.

FIRST PERIOD.

[Oct. 1 to Dec. 1, 2 months.)

Objects..... Putting the horse back in work.
..... Bringing him under the aids again.

I.— *Taking up work.*

New assignment of horses to officers, noncommissioned officers, and selected men.

Out of doors.—Man and horse become accustomed to each other. Taking up work gradually. Influences which hold back. Lessons on the longe and mounting lessons by new riders. Jumping on the longe and at liberty. Fixed obstacles for the young horses. Horses quiet and bold alone.

II.—*Obedience to the aids.*

Riding hall.—Gradually repeating, at first in snaffle, then in double bridle, work ' of preceding year. Putting the horse in the forward movement. Increasing and decreasing gaits on straight lines, circles, and changes of direction.

SECOND PERIOD.

[Dec. 1 to June 1, 6 months.]

1.—*Conditioning.*

Out of doors.—Long periods of 1½ to 2 hours. Increase the requirements gradually while taking notice of period of shedding and green food (as in breaking). Attain 3,500 yards at gallop (8 minutes) at end of period.

Work on broken ground.—Passing natural obstacles, horses mounted. Push as far as possible, independence, quiet, and boldness. Leave the column and go in opposite direction, troop being in march at walk, trot, and gallop. Mounting lesson out of doors.

II.—*Suppling and complete obedience to aids.*

Riding hall.—Short sessions (three-fourths hour at most) with a definite object.

Impulsion.—The action of the spur. Double bridle. Choice of bits. Accustoming the horse to bit. Progression to follow. Various means of holding reins in training. Repetition with double bridle of work in snaffle. Study of reins in opposition. Mobility and engagement of hind quarters. Increasing and decreasing gaits, starts, halts, backing, rassembler, demivoltes reversed, half turn on shoulders, serpentines, and circles with haunches inside and outside. False gallop. Suppleness and freedom of shoulders. Demivoltes half turns on the haunches. Serpentines and circles, the shoulders pivoting about the haunches (action of bearing reins), shoulder in.

Mobility of the jaw: Suppling, position of the head and neck favorable to training.

The gather:

Application; Balance work on long and short bases.

To change gait, and in a given gait changing speed.

Halt, half halt, and backing.

Gallop departs from walk, trot, halt, and backing. Horse straight.

To maintain a given gait and in this gait a given speed.

Regulation gaits, work on long distances.

Change of direction: The turn.

Obedience to aids in the rank, out of doors, flexible squares.

The horse bold, straight, and light.

Riding with one hand.

THIRD PERIOD.

[June 1 to maneuvers, 21/2 months.]

Objects.....	Conditioning, Confirming obedience to aids Application of acquired results to military work.
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I.—Conditioning.

Take up gradually the work which was cut down during the period of green food. Lead the horses to sustain 3,500 to 4,000 yards at the gallop (10 to 12 minutes). Execute several road marches (20 to 25 miles in four hours). Exercises on the track in preparation for charge. Galloping over 500 or 600 yards.

II.—Confirming obedience to the aids.

Same work as in the second period. Pass from work in flexible squares out of doors to work of section together in riding hall, cadencing and balancing the horses. Half turn on haunches, on shoulders, on center of gravity. Riding with one hand at all gaits and in all directions. Work at will.

III.—Application of acquired results to military work.

The flexible squares lead to the school of the group (one rank, double rank, ranks open and closed).

Work with arms. Use of arms mounted. Work with manikins. Preparation for individual combat. Pursuit.

Individual missions. Couriers, flankers, patrols. Quiet to noise and firing. Swimming, harness. Jumping in troop.

FOURTH PERIOD.

[Aug. 15 to Oct. 1.]

Rest. Same prescriptions as at end of breaking.

PROVING THE RESULTS.

PRINCIPAL POINTS ON WHICH INSPECTIONS SHOULD BEAR.

(a) Breaking: General state of horses, condition, legs:

Riding hall—

Quiet, regular, swinging gaits.

Obedience to aids in simple movements.

Quiet to mount.

Trial at the gallop (out of doors if the ground permits).

Out of doors—

Free, quiet gaits, individually and in troop.

Passing small obstacles in hand and mounted.

Handling arms.

Quiet to firing.

(b) Training: General state of horses, conditions, legs.

Riding hall—

Quiet, regular, swinging gaits.

Individual examination, proving obedience to aids in collected movements.

Work of section together.

Pursuit.

Jumping.

Trial at the gallop (out of doors if ground permits).

Out of doors—

Individual work.

Boldness in execution of all individual missions (scout, flanker, courier).

Work in troop—
Use of arms.
Proof of condition.

Approved, Paris, January 9, 1912.

MESSIMY, *Minister of War*.

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