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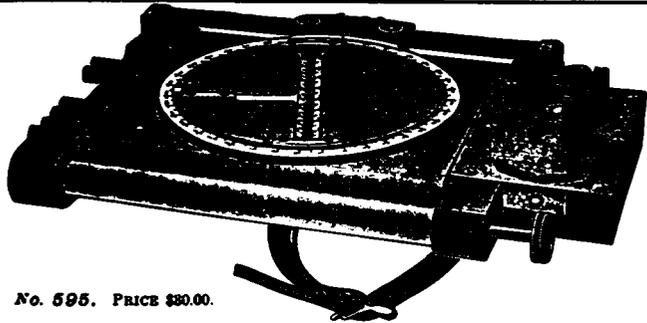
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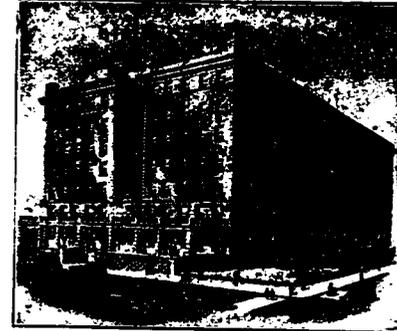
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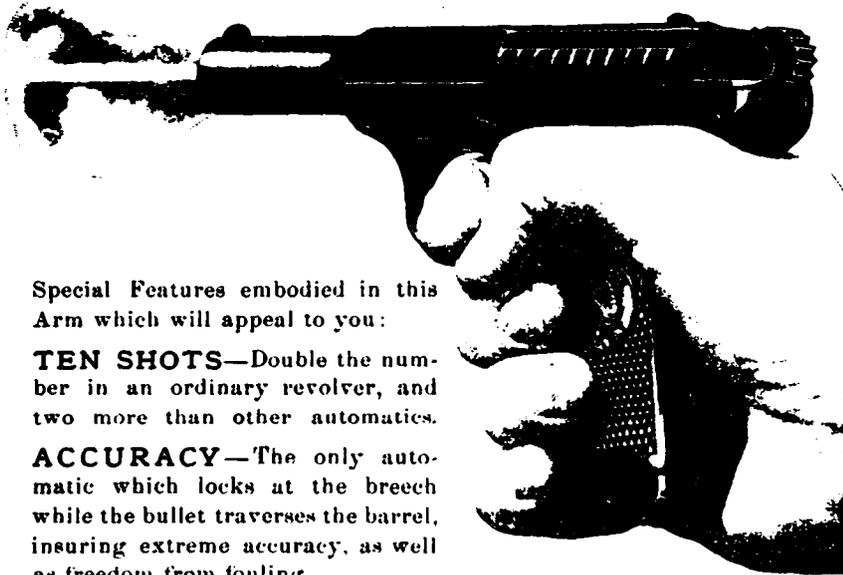
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CONTENTS FOR JANUARY, 1911.

	PAGE
AMERICAN OFFICERS AT SAUMUR—Major General WILLIAM H. CARTER	506
THE MILITARY SEAT IN THE FLAT SADDLE—Lieutenant GORDON JOHNSTON	508
A CRITICISM OF OUR CAVALRY DRILL REGULATIONS, <i>Continued</i> —Major H. H. SARGENT	604
A SCHEME OF INSTRUCTION FOR A CAVALRY COMMAND—Captain T. Q. DONALDSON, Jr.	614
FORAGE POISONING AMONGST ANIMALS OF THE FIFTEENTH UNITED STATES CAVALRY DURING THE ENCAMPMENT AT GETTYSBURG, PA., JULY, 1910—Captain GEORGE C. BARNHARDT	633
MOUNTED AND FOOT COMBAT IN AMERICAN AND EUROPEAN CAVALRY—AN OFFICER ABROAD	637
A PRACTICAL PRACTICE MARCH—Captain GEORGE E. STOCELE	642
NOTES ON THE PROGENITORS OF CERTAIN STRAINS OF THE MODERN AMERICAN HORSE—Veterinarian COLEMAN NOCKOLDS	650
LONG DISTANCE RIDES AND RAIDS—Lieutenant Colonel E. B. FULLER	666
REPRINTS AND TRANSLATIONS:	
CAVALRY IN THE WAR OF INDEPENDENCE	696
INSTRUCTIONS AND TRAINING OF THE FRENCH CAVALRY	743
THE QUESTION OF THE BAYONET	762
MILITARY NOTES:	
A NATIONAL MILITARY HORSE SHOW	768
PURCHASE OF HORSES IN SOUTHWEST FRANCE IN 1911	771
BETTER MOUNTS	772
BOOK REVIEWS	774
EDITOR'S TABLE	791
PUBLISHERS NOTICES	806

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JOURNAL
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Vol. XXI.

JANUARY, 1911.

No. 82.

AMERICAN OFFICERS AT SAUMUR.

BY MAJOR GENERAL WILLIAM H. CARTER, U. S. ARMY.

SOME eight or ten years ago our Military Attaché in Paris sent a most interesting and accurate description of the celebrated cavalry school at Saumur, France, to the War Department, and it was published in part, or whole, in the CAVALRY JOURNAL. Having been afforded the privilege of seeing the institution later on, in company with Lieutenant General R. S. Baden Powell, Inspector General, British Cavalry, I found that in my official report I could do no better than refer to Major Mott's account of the establishment and of the results accomplished there.

After personal observation my only amazement was that we, of this generation, should have been left so long in ignorance of what our allies of the Revolution were accomplishing in horsemanship and the study of hippology generally. But we had only rediscovered Saumur. Our forbears, nearly three-quarters of a century ago, had already become cognizant of the high quality of training of man and horse at Saumur, and out of it came much of the *esprit de corps* of the old Dragoons in particular, and of the American Cavalry in general.

Many years ago when reading General Rodenbough's pleas-

ing tales, entitled "Uncle Sam's Medal of Honor," my attention was attracted by a statement, in a chapter devoted to the Second Dragoons, that General Twiggs, a thorough tactician himself, "did not hesitate to place himself in the ranks of the officers for instruction in the sabre and lance exercises, and in the true method of intoning the voice in giving commands, under the newly arrived officers, Captain L. J. Beall and Lieutenant W. J. Hardee, from the Cavalry School at Saumur." I made a note of this and after my own visit to France determined to follow the matter up, if possible.

So far as can be determined from the data now available, the first American officers to receive the advantage of instruction at Saumur were three lieutenants detailed from the First Dragoons by the following order:

ADJUTANT GENERAL'S OFFICE.

WASHINGTON, August 9th, 1839.

Lt. W. Eustis, 1st Dragoons.
Lt. H. S. Turner, 1st Dragoons.
Lt. Philip Kearney, 1st Dragoons,
New York.

Sir:—The Acting Secretary of War directs that you proceed to France without delay in pursuance of the understanding with, and for the objects made known to you by the Department. The Quarter Master's Department has been instructed to furnish the necessary transportation.

I am, sir, &c.,

E. SCHRIVER,
A. A. General.

Some six months later the period of instruction was extended for the two years' course by the following order:

ADJUTANT GENERAL'S OFFICE.

WASHINGTON, Dec. 3d, 1839.

Lt. W. Eustis, 1st Dragoons.
Lt. H. S. Turner, 1st Dragoons.
Lt. P. Kearney, 1st Dragoons.
Paris, France.

Sir:—By direction of the Secretary of War, you are hereby informed that the period of your continuance at the Military

School at Saumur, France, has been extended to the first of April, 1841, as recommended by General deBrach, the Commandant of the 'Ecole Royale de Cavalerié. On the close of the course of instruction, at the time above specified, you will proceed to the United States and report at the headquarters of the Army.

I am, sir, &c.,

R. JONES,
Adjutant General.

It is remarked that the Commandant at that period was General de Brach, whose splendid book on the service of cavalry was translated by General C. C. Carr, United States Army, while on duty at the Infantry and Cavalry School as head of the Department of Cavalry. This volume has not lost its value and attractiveness to young cavalymen who aspire to perfect themselves in the manifold duties of their army as well as in the stratagems and devices of the old campaigners—the little things which in the aggregate spell success.

While Lieutenants Eustis, Turner and Kearney were still undergoing the course, three other officers were selected—two being those mentioned in connection with General Twiggs—and sent to Saumur under the following orders:

ADJUTANT GENERAL'S OFFICE.

WASHINGTON, November 30th, 1840.

Capt. L. J. Beall, 2d Dragoons,
New York.
1st Lt. W. J. Hardee, 2d Dragoons,
Washington.
2d Lt. W. I. Newton, 2d Dragoons.
Washington.

Sir:—You will proceed without delay to Saumur, in France, for the purpose of receiving professional instruction at the Cavalry School at that place. You will be permitted to remain at the institution for twelve months.

The special instructions for your guidance, it is understood, have been communicated by the Secretary of War. I am, sir, Very respectfully your obedient servant,

R. JONES,
Adjutant General.

In those days our cavalry force was small, consisting of only the First and Second Dragoons, organized in 1833 and 1836, respectively. As new regiments were formed, the Mounted Riflemen in 1846, and the First and Second Cavalry in 1855, officers from the Dragoons were promoted into the new regiments and, thus, the whole cavalry service, prior to the Civil War, became imbued with the code of ethics which had characterized the Dragoons and had been the means of upbuilding a splendid *esprit de corps*. And this, too, continued in 1861 when, similarly, officers selected for their known ability were promoted from the old regiments to the Sixth, the only regiment of regular cavalry organized during the Civil War.

There were many martinets in the old days, but those still in the service, who touched elbows with the generation of the old Dragoons, render full homage to their ability and devotion to the cavalry arm. It is true that youngsters found the grooming at morning and evening stables, never less than an hour, somewhat tedious, but when the old type of Dragoon sergeant, usually with an Irish accent, said, "Cease grooming," the fingers of a white glove could scarce turn a speck of dust from glossy coats. Things have changed and doubtless we are progressing in providing equipments that require no polishing, but the horse has not yet been sired that does not look more proud of mien, as a trained charger, with a well groomed coat. But lest a reminiscent mood lead to pastures old, let us bear witness to the good influence of the French Cavalry School on early American Cavalry and indulge the hope that those young graduates of our own modest but rapidly growing School of Equitation at Fort Riley, who may be honored with the privilege of attending Saumur in the future, will not only accredit themselves well, but bring back to their own service something of value to justify the government in seeking such gracious favors of a friendly nation.

Before taking leave of this subject it may be proper to remark that in all probability the system of "Cavalry Tactics, adapted to the organization of dragoon regiments," published by authority of the War Department dated February 10, 1841, was traceable to the knowledge acquired by the dragoon officers who attended Saumur from 1839 to 1841. However, this was not the first system of cavalry tactics in our army, for, many years before

any of the present regular cavalry regiments were organized, a board was appointed to prepare a system of cavalry drill, always designated tactics until just prior to the War with Spain. The First Dragoons, as has been previously stated, was organized in 1833. The report of the board was submitted with the following letter of transmittal:

WASHINGTON, December 11, 1826.

Sir:—The Board of Officers assembled at this city, under your orders of October 5, 1826, among other purposes, to report "*A Complete System of Cavalry Tactics*," have now the honor to submit, through its Recorder (Lieutenant Eakin), the annexed sheets.

WINFIELD SCOTT,
Maj. Gen. and Pres. of the Board.
T. CADWALADER,
Maj. Gen. Penn. Militia.
WM. H. SUMNER,
Adj. Gen. Massachusetts.
BEVERLY DANIEL,
Adj. Gen. of the Militia, N. C.
ABRM. EUSTIS,
Lieutenant Col. 4th Artillery.
Z. TAYLOR,
Lt. Col. 1st Reg. U. S. Infantry.
E. CUTLER,
Lieutenant Colonel 3d Infantry.
CHARLES J. NORSE,
U. S. A.

To the Secretary of War.

This report is rather remarkable as indicating that the much-talked-of bringing together of the regulars and national guard in recent years was an accomplished fact in 1826, when militia officers served with regulars as members of a board to prepare a system of tactics for both cavalry and infantry. There is always much to learn from the records of those who have gone before us in the task of upbuilding and perfecting our military system, and those who would construct today, in the cavalry or elsewhere, should without fail acquaint themselves with the foundation problems solved by their forebears.

THE MILITARY SEAT IN THE FLAT SADDLE.

BY FIRST LIEUTENANT GORDON JOHNSTON, SEVENTH CAVALRY.

BY seat will be meant the pose of the rider, the position of the legs and carriage of the body, as well as the actual point of contact with the saddle.

There are various seats in the so-called English or flat saddle used for various purposes. There are, for instance, the flat racing, steeplechasing, cross country, park and riding hall seats. Some first class riders vary but slightly, while others equally good make most decided changes. The latter class would probably shorten their stirrups two holes from the park or riding hall seat for cross country work or jumping, and probably two more for flat racing, with corresponding changes in the pose of the body. There are good reasons for all these changes, but that again would carry us a bit wide. While it is true that the mounted officer may on occasion, either in line of duty or for sport, be called on to avail himself of one or the other of these forms and should have them at his command, this paper will limit the subject to that form most commonly used, the park or riding hall or marching seat, whatever you choose to call it.

Not only do the forms of seats vary, but for any one seat consider for a moment the infinite assortment of figures of riders. Look at any group of riding men, hunters, racing men, or officers, and one glance will convince the observer that it would be impossible or even absurd to attempt to prescribe exactly one seat for all. Furthermore, the conformation of horses differs immensely, and the saddle itself presents some difficulties to any one prescribed form of seat.

Three years of observation and experiment at The Mounted Service School have brought the conviction that there is no shorter cut to defining a good seat than to acquiring one. Two things are certain, however, that there are certain under-

MILITARY SEAT IN THE FLAT SADDLE. 509

lying principles which hold good in every case, and that good seats are productive of good results, while bad ones as surely produce the opposite.

So, the attempt will be made to overcome the many difficulties by approaching the subject from these two directions. Given the principles to which one must conform and a clear idea of what are the good and bad results coming from good or bad seats, and there is no reason why the intelligent and persevering rider may not find his own way to the very best seat possible for his particular build. The most important principle is that of balance. When the center of gravity of the rider coincides with that of the horse, then both are in balance for that particular gait and pace. The rider is in balance when he maintains his position without improper assistance, as from the reins, and remains in equilibrium with a minimum of friction, pressure or grip of the legs. Assistance may be required to restore the balance or maintain it during violent or unexpected movements of the horse, of course. When horse and rider are thus in balance, the rhythm or cadence and pace at any gait remain constant and regular. Every departure of the rider from this balance is an aid or indication to the horse for a change, as his constant endeavor is to maintain this balance also. For instance, the jockey who climbs out on the horse's neck, thus throwing his center of gravity in front of that of his horse, is giving a powerful driving aid. Similarly, the polo player throws his weight violently to the rear to check his pony in full speed. Most important of all, however, is that work, for both horse and rider, is accomplished with a minimum expenditure of energy. Therefore, from this point of view, a good seat is one which permits the rider to remain in balance with his horse or to depart from it intentionally at will.

Another principle involved is that of communication. The great problem of horsemanship is the establishment of perfect harmony and mutual understanding between horse and rider. We have seen that in the balance of the rider lies a means of communication which the horse understands perfectly from the natural laws which govern his movements. Here

we have driving and retarding aids as well as those for changes of direction.

The next place at which communication is established is where the calf of the leg comes in contact with the sides of the horse at the rear edge of the girth. With stiff hard leather between horse and rider at all points of contact, there can never be a fine feeling established. This is the most natural point, and, in fact, the only one where signals and indications may freely pass from one to the other. It is here that the rider taps the outer layer of muscles covering the frame. He feels the preparatory movement which a horse must always make prior to any execution, thus receiving fair warning. The frame expands and contracts at every stride, and he may decrease that expansion by pressure of the calf and give an indication for decreasing the stride; or, similarly, he may increase the contraction and thus extend the expansion and get more action. That isn't hard for a horse to understand. Obedient to the laws of action and reaction on muscles, he may act directly on the haunches with calf or spur, giving again natural aids. Furthermore, he controls here the lateral displacement of the haunches and sends the horse straight between the reins without disturbing his balance or the rest of his seat, as the case would be if the lower leg were thrust out to the front or held away from the sides. So there are good reasons for assuming such a seat as will allow the calf of the leg to rest lightly at the rear edge of the girth, a point of communication, an outpost against surprise, and a central station.

In accordance with these principles, people who have intelligently pursued the business or art of riding for several hundred years have found that the upper body should be held erect, without stiffness, for the secret of balance lies in suppleness, or slightly inclined from the waist to the front or rear or side wise, as occasion may demand; the shoulders allow a natural chest expansion; the upper arms fall naturally near the side, elbows fairly close to the body; the weight of the body is borne about half on the crotch and half on the two seat bones (a wide base of support), and over the center of the saddle, thus utilizing the entire bearing surface equally; the legs drop easily around the horse, maintaining contact at least

to the calf, where it rests at the rear edge of the girth; the toes turned out enough to allow the leg contact and the ball of the foot on the stirrup tread, heel slightly lower than the toe.

This merely outlines the normal seat and there are infinite variations, made necessary by the conformation of the rider. A bow-legged man, for instance, could maintain an easy leg contact with the feet parallel to the horse's side, whereas a knock-kneed rider would be forced to turn the toes out at right angles to accomplish the same result.

It is, however, by results that a good seat is known, and these are reflected in the horse. The general indications that all is not well with the horse are as follows: Mouth, tightly closed and jaw stiff; mouth, opened wide or attempting to take the lower branches of the bit in the teeth; tongue rolled over the mouth-piece and thrust from side to side or balled up back of it; eyes rolling nervously and indicating mental uneasiness; ears laid back from time to time, and not attentive to surroundings; head, unsteady, tossed up and down, jerked from side to side, chin turned in close, or nose extended too much; neck stiff and muscles contracted; back, bucked up; tail, switching nervously; gait, irregular with hop steps or jerky action behind; haunches turned to one side or the other, or frequently shifted instead of going straight ahead. These signs are not always indications of bad riding, but bad riding will certainly be exhibited in one or the other of these forms. The reverse, or, in some cases the absence of them, indicates good riding.

The general indications of bad riding from observation of the rider are somewhat as follows: Toes pointed downward to hold the stirrup; ankle stiff and lacking springiness, lower leg wide of the horse and swinging excessively back and forth, or out and in, or thrust forward of the girth; daylight under the knees and too much shifting of the knee on the skirt at any gait; leg gripping the horse continually; seat too far back toward the cantle or not in the center of the saddle; seat rolling from side to side or shuttling back and forth or leaving the saddle at any time except when rising to the trot; seat, touching the saddle twice in quick succession when rising to the trot instead of a clean regular lift from the same diagonal at each stride; seat too much on the crotch or too

much tucked under; waist stiff instead of being pliant and taking up the motion of the horse, thus permitting steadiness of seat and shoulders; back contracted; shoulders constrained, rounded, or rising and falling too much; arms stiff with elbows bobbing; hands, unsteady.

But the best result of a good seat is good hands. Good hands are independent of the rest of the rider, almost detached one might say. No matter what motions the body may be making the hands are steady. They measure the rein which the horse must fill, they set a bit so steadily that a horse will go on it with confidence and bend his jaw to it with easy flexions. Such hands come only from perfect balance which, in turn, comes from the good seat. Lacking good hands, the remedy must be sought in the seat. Balance of the horse, evenness of gait, cadence and tempo and general effect of steadiness can only be maintained by good hands.

A few tests will be given by which the correctness of seat and hands may be determined by each rider for himself.

I. Assuming a seat in which the rider feels comfortable and secure and conforming roughly to the principles outlined above, put the horse at a free trot. Rising to it, the rider drops the reins and, continuing to rise, observes if the hands can be placed and held steadily in their place, say, a hand-breadth above the withers. He may vary this by placing them on the thigh or waist, or by extending the arms to the sides or to the front and noting if any of the signs of bad riding, as stated above, are evidenced in the leg, seat, or body.

II. The same at a gallop (reins tied and dropped on the neck) but particularly trying to keep the seat steadily in the same place, taking up the motion of the horse in the waist and back without gripping with the leg. Attempt to increase and decrease the pace slightly by the balance aids. Try this until all indications of faults in horse and rider are eliminated.

III. Either in a chute or on the longe take a small jump, say 3 feet 6 inches, again without reins but with stirrups. Here the faults of the rider are most clearly shown. If the seat remains easily in the saddle, no daylight showing under it, no pounding of the saddle; the legs in place and upper body not falling forward on the neck of the horse at landing, the rider may begin to hope that he will soon be able to sit his jumps

smoothly and let the reins slide through the fingers instead of holding on to the horse's head. Nine-tenths of the spills at jumps come from bad hands, and even when a horse makes a mistake if he can have a free head and neck he will pull out of it a thousand times better than otherwise. To sit still and let the reins slide to the buckles, when the timber is crashing under the horse, is just about the best evidence of a perfect seat that can be given.

IV. Same as test III, except that two jumps are placed about ten feet apart or so that the horse must make a double. When this is executed in good form, with stirrups and without reins, the rider may feel reasonably sure of his seat.

In jumping without reins the hands should be placed on the thighs close to the body, thumbs to the rear, or with the finger tips touching the withers.

At Hanover the final test is a course of three jumps about ten feet apart without reins and a course through a chute over a variety of stiff jumps with the lance held horizontally at arms length above the head.

During these tests the rider will infallibly find the proper length of stirrup and the most secure seat which his figure permits.

The greatest difficulty in acquiring a good seat and good hands comes from stiffness or contraction. This may come from gripping tightly with the legs, or holding the reins too hard, or from nervousness and a feeling of insecurity. Men who have ridden a long time in the McClellan saddle thrust the leg to the front and sit to the cantle end of the saddle with stiff backs and excessive shoulder action.

The tests should be tried gradually and progressively, acquiring a satisfactory proficiency in one before proceeding to another. Of course, a steady, old horse would be used for this work.

The writer is fully aware of the many deficiencies of this article, but feels that a start must be made somehow, and hopes that some other may succeed in covering the ground more concisely and with greater clearness.

In any case, the intelligence of the rider must be appealed to and logically satisfied before those who are not born riders may hope to acquire proficiency.

A CRITICISM OF OUR CAVALRY DRILL REGULATIONS.*—Continued.

By H. H. SARGENT, MAJOR SECOND CAVALRY.

Author of "Napoleon Bonaparte's First Campaign," "The Campaign of Marengo," and "The Campaign of Santiago de Cuba."

IN an article entitled, "A Criticism of Our Cavalry Drill Regulations," in the CAVALRY JOURNAL for July, 1910, I stated that, "It may be laid down as a general principle, applicable to all commands consisting of three parts, or which should consist of three parts, that the first part should tell *what is to be done* and the second *how to do it*." And I added that, "If this principle were followed in our drill regulations, the commands would be more easily and quickly comprehended by the subordinate officers, and be more easily remembered by the regimental or squadron commander, for he would not then have to burden his mind with remembering in each case which part of the commands should be uttered first. If he wished to throw his command into line of fours, he would not have to hesitate and try to remember whether he should say, 1. *Line of fours*, 2. *On* (such) *troop*, (See 787), or 1. *On* (such) *troop*, 2. *Line of fours*, (See 629). He would begin with, *Line of fours* in both cases, thus telling first *what was to be done*, and follow it with, *On* (such) *troop*, thus telling, secondly, *the method of doing it*."

It is the purpose in this article to extend somewhat the discussion and to point out how the principle above set forth may apply in the analysis of practically all commands, and how its application to different parts of commands will enable us to determine the proper number of these parts and the proper order of their arrangement.

*Numbers in parentheses refer to paragraphs of the Cavalry Drill Regulations, 1909. To simplify the discussion, most of the commands are here given for a movement to only one flank.

It may be stated as a general truth that the commands for any movement of a squad, platoon, troop, squadron, or regiment consist, or should consist, of three parts, each of which is either expressed or understood. The first part tells, or should tell, *what movement is to be made*; the second part tells, or should tell, the *manner of making it*; and the third part, the command of execution, tells *when it is to begin*. As a rule no more than three parts are needed, for when you are told *what is to be done* and the *way of doing it* and the *time to begin* nothing more is necessary.

In many commands, especially in the simpler ones applicable to squads, platoons, and troops, the first part, the part which should tell what is to be done, is omitted. For example, being in line and wishing to form column of fours (478), the commands are, 1. *Fours right*, 2. MARCH. In this case, the part which should tell what we wish to do is omitted, but it is nevertheless understood; for what we wish to do is to form the line into *columns of fours*. Hence it is clear that if all the parts were expressed the commands would be, 1. *Column of fours*, 2. *Fours right*, 3. MARCH. In passing, it may be remarked that in this case, and in many others, the first part of the commands is properly omitted, since it is wholly unnecessary to the execution of the movement and since its omission simplifies and shortens the commands.

Or take another example. Being in line to march in column of platoons to the front (493), the commands are, 1. *Right by platoons*, 2. MARCH. Here again the first part is properly omitted, but is nevertheless understood. With all three parts expressed the commands for this movement would be, 1. *Column of platoons*, 2. *Right by platoons*, 3. MARCH.

Or take the commands, 1. *Right forward*, 2. *Fours right*, 3. MARCH. (478), which are given in the drill regulations as the proper commands for forming the troops into column of fours to the front from line. Here, too, the first part of the commands, namely, *Column of fours*, is omitted. But it will be noted that the second part of the commands, which should consist of but one part, namely, 1. *Right forward*, *fours right*, consists of two, namely, 1. *Right forward*, 2. *Fours right*. Hence, in this case, if the first part be omitted, as it should be, the com-

mands properly written would be, 1. *Right forward, fours right*, 2. MARCH.

As to the omission of the second part, which tells, or should tell, how the movement is made, there are a few cases in which it is omitted. And it may be added that when it is omitted, or may properly be omitted, it is because there is only one way described of executing the movement and, therefore, this part becomes superfluous and unnecessary.

Take, for example, the commands, 1. *Close column*, 2. MARCH. (643). Here the first command tells what is to be done, but the command telling the manner in which it is to be done is omitted. Written in full the commands would be, 1. *Close column*, 2. *On first troop*, 3. MARCH. But since there is only one method laid down for closing the column, since it is always closed on the first troop, the second part of the commands becomes superfluous and unnecessary and is therefore omitted.

Or take, for example, the commands, 1. *Take full distance*, 2. MARCH. (645). Here, as in the previous example, the command telling how the movement is to be made is omitted. Written in full, the commands for the execution of the movement from a halt would be, 1. *Take full distance*, 2. *First troop forward*, 3. MARCH. But since there is only one way to take full distance, namely, of taking it from the front to the rear of the troops successively, the second part of the commands becomes superfluous and unnecessary and is therefore omitted.

Again, for example, the regiment being in line and the colonel, wishing to form double column of fours, commands, 1. *Double column of fours*, 2. MARCH. (799). Here, again, the second part of the commands, the *Center forward*, is omitted because it is unnecessary, there being no other way described of forming a double column of fours. It is therefore proper that it should be omitted, and we might add, in passing, that it might better also have been omitted in the commands for the squadron (662).

Again, take the case of a troop obliquing to the right by heads of platoons, to form column of fours. The commands are, 1. *Column of fours*, 2. *On first platoon*, 3. MARCH. (514). In this case we have all three parts of the commands written out,

but it should be noted that the second part might properly be omitted, since there is no other way described for executing the movement than for the first platoon to begin it. And, similarly, in the oblique to the left, the second part, *On fourth platoon*, might properly be omitted, since there is no other way described for executing the movement than for the fourth platoon to begin it. And, in this connection, it may be remarked that all unnecessary parts of commands in our drill regulations should be omitted, not only because they are unnecessary, which in itself must be a sufficient reason to all persons, but also because their omission shortens and invariably simplifies the commands.

Before taking up another example, it should perhaps be pointed out that in the examples just cited the "on" is improperly used, just as it is improperly used in forming column of fours from mass (637), and in forming echelon from line (516). In each of these cases the movement is not made *on* the first platoon or *on* the first troop, but is made in part *by* the first platoon or *by* the first troop.

Then again, there are a few cases in which the first part of the commands is omitted and the second part used, that would be greatly simplified if the reverse process were followed. For example: being in column of fours to form column of twos or column of troopers (326 and 327), the commands are, 1. *By twos*, 2. MARCH or, 1. *By trooper*, 2. MARCH. Or being in column of twos to form column of fours or column of troopers (328 and 327), the commands are, 1. *Form fours*, 2. MARCH or, 1. *By trooper*, 2. MARCH. Or being in column of troopers, to form column of fours or column of twos (329), the commands are, 1. *Form fours*, 2. MARCH or, 1. *Form twos*, MARCH.

Now if all three parts of each of these six commands were written out, they would be:

1. *Column of twos*, 2. *By twos*, 3. MARCH.
1. *Column of troopers*, 2. *By trooper*, 3. MARCH.
1. *Column of fours*, 2. *Form fours*, 3. MARCH.
1. *Column of troopers*, 2. *By trooper*, 3. MARCH.
1. *Column of fours*, 2. *Form fours*, 3. MARCH.
1. *Column of twos*, 2. *Form twos*, 3. MARCH.

And since there is but one way described of making each of these movements, the second part of each of the commands might well be omitted, if the first part should be found preferable. In the first place, why should the command be written *By twos* in one case and *By trooper*, instead of *By troopers*, in the other case? for surely what we are forming is not a *column of trooper*, but a *column of troopers*.

Secondly, why should *Form* be used in one case and *By* in the other? since in both cases a column is formed. It would certainly seem that in these examples, if the second parts of the commands are to be used, the use throughout of the one form or the other would be preferable; for the use of both makes the commands faulty, in that it necessitates remembering at all times which of the two forms must be used in a particular case. And this naturally leads to confusion and errors, for although the commander will probably never forget that *Form* is to be used in one case and *By* in the other, he will be very apt soon to forget in which particular case the one or the other form of command is to be used. And as a result he will very probably find himself time and again forming column of twos from column of fours by the commands, 1. *Form twos*, 2. MARCH; or column of twos from column of troopers by the commands, 1. *By twos*, 2. MARCH.

But why, indeed, should he be required to tax his mind with remembering either? If he wishes to form his column of fours into column of twos, why not say, 1. *Column of twos*, 2. MARCH? or to form his column of fours into column of troopers, why not say, 1. *Column of troopers*, 2. MARCH? or to form his column of twos into column of fours, why not say, 1. *Column of fours*, 2. MARCH? or to form his column of twos into column of troopers, why not say, 1. *Column of troopers*, 2. MARCH? or to form his column of troopers into column of fours, why not say, 1. *Column of fours*, 2. MARCH? or to form his column of troopers into column of twos, why not say, 1. *Column of twos*, 2. MARCH? Indeed, if this simple method were followed in these cases, it would not be necessary for him to tax his mind with remembering anything; for, knowing what he wants done, he would simply state that as his first command and add the command MARCH.

Now in a few cases we have two movements covered by one set of commands. For example, to retire in line of fours from line (624), the commands are, 1. *Fours right*, 2. *Troops*, 3. *Column right*, 4. MARCH. As we may have a compound sentence made up of simple sentences, so in this example, and other similar examples, we have a compound set of commands made up of simple sets of commands. And as each compound sentence can be easily resolved into its simple sentences and each simple sentence into its subject and predicate, so each compound set of commands can be easily resolved into its simple sets of commands and each simple set into its three parts either expressed or understood. In this example the two simple sets of commands written out in all their parts would be:

1. *Column of fours*, 2. *Fours right*, 3. MARCH.

1. *Line of fours*, 2. *Troops; column right*, 3. MARCH.

Now for the sake of brevity and simplicity the first part of each set may be stricken out, leaving the commands to read as follows, 1. *Fours right*, 2. MARCH. 1. *Troops; column right*, 2. MARCH. But as we wish to make of this one continuous movement and not two separate movements; or, in other words, as we wish the column right to begin at the moment the fours complete their turn; and as this cannot be done if we utter the first MARCH, the first MARCH is therefore omitted, and the commands properly written would then read, 1. *Fours right*, 2. *Troops; column right*, 3. MARCH.

To the commands as corrected in the above example, the criticism might be made that *Troops* should form a separate part, since, after uttering it, there should frequently be a pause to allow the trumpeter time for sounding the drill signal. The reply is that the matter can be easily regulated by the punctuation. A colon or semi-colon after *Troops* would indicate that a pause is allowable no less effectively than would a comma and a number after the word.

As to the third part of the commands, the command of execution, it can never be omitted, for without it there can be no movement.

Now bearing in mind that the commands for a movement of troops should consist of three parts, each of which is either

expressed or understood; that the first part, when uttered, should tell *what movement is to be executed*; that the second part, when uttered, should tell *how it is to be executed*; and that the third part, which is always uttered, should tell *when it is to begin*; and applying this simple system of writing commands to the commands in our cavalry drill regulations, we shall be able to eliminate therefrom many errors, inconsistencies, and absurdities.

The application of this system would change,

1. *In column of fours, 2. Assemble, 3. MARCH.* (404) to
 1. *Assemble, 2. In column of fours, 3. MARCH.*
- 1 *Right forward, 2. Fours right, 3. MARCH.* (478) to
 1. *Right forward, fours right, 2. MARCH.*
1. *Platoons, 2. Right forward, 3. Fours right, 4. MARCH.* (504, 510) to
 1. *Platoons; right forward, fours right, 2. MARCH.*
1. *Right front into line, 2. Platoon columns of fours, 3. MARCH.* (505) to
 1. *Line of platoon columns of fours, 2. Right front, 3. MARCH.*
1. *On right into line, 2. Platoon columns of fours, 3. MARCH.* (506) to
 1. *Line of platoon columns of fours, 2. On the right, 3. MARCH.*
1. *Platoons, 2. Right front into line, 3. MARCH.* (509, 511) to
 1. *Platoons; right front into line, 2. MARCH.*
1. *Platoons, 2. Column half right, 3. MARCH.* (512) to
 1. *Platoons; column half right, 2. MARCH.*
1. *Platoons, 2. Left half turn, 3. MARCH.* (520, 521) to
 1. *Platoons; left half turn, 2. MARCH.*
1. *Assemble by platoons, 2. MARCH.* (565) to
 1. *Assemble, 2. By platoons, 3. MARCH.*
1. *Fire by platoon, 2. COMMENCE FIRING.* (574) to
 1. *Fire, 2. By platoons, 3. COMMENCE FIRING.*

1. *Troops, 2. Right forward, 3. Fours right, 4. MARCH,* and
 1. *Troops, 2. Column right, 3. MARCH, and*
1. *Troops, 2. Right front into line, 3. MARCH.* (591) to
 1. *Troops; right forward fours right, 2. MARCH, and*
 1. *Troops; column right, 2. MARCH, and*
 1. *Troops; right front into line, 2. MARCH.*
1. *Line of platoon columns to the right, 2. MARCH.* (654) to
 1. *Line of platoon columns, 2. To the right, 3. MARCH.*
1. *On right into line of platoon columns, 2. MARCH.* (655) to
 1. *Line of platoon columns, 2. On the right, 3. MARCH.*
1. *Right front into line of platoon columns, 2. MARCH.* (656) to
 1. *Line of platoon Columns; 2. Right front, 3. MARCH.*
1. *Column of platoons, 2. First troop, 3. Forward, 4. MARCH.* (661) to
 1. *Column of platoons, 2. First troop, forward, 3. MARCH.*
1. *On second (or such) troop, 2. Close intervals, 3. MARCH, and*
 1. *On (such) troop, 2. Extend intervals, 3. MARCH.* (659) to
 1. *Close intervals, 2. On (such) troop, 3. MARCH, and*
 1. *Extend intervals, 2. On (such) troop, 3. MARCH.*
1. *Column of masses, 2. First Squadron, 3. Right front into mass, 4. MARCH.* (776) to
 1. *Column of masses, 2. First Squadron mass, right front, 3. MARCH.*
1. *Right front into line of fours, 2. MARCH.* (780) to
 1. *Line of fours 2. Right front, 3. MARCH.*
1. *Right and left front into line of fours, 2. MARCH, and*
 1. *Left and right front into line of fours, 2. MARCH* (781) to
 1. *Line of fours, 2. Right and left front, 3. MARCH, and*

1. *Line of fours*, 2. *Left and right front*, 3. MARCH.

1. *Right front into line of masses*, 2. MARCH. (782) to

1. *Line of masses*, 2. *Right front*, 3. MARCH. And similar changes for *right and left*, or *left and right*, into *line of masses* (782).

1. *Column of fours*, 2. *On first (or fourth) troop, first (or third) squadron*, 3. MARCH. (784) to

1. *Column of fours*, 2. *First (or fourth) troop, first (or third) squadron, forward*, 3. MARCH.

1. *Column of fours*, 2. *First (or fourth) troop, first (or third) squadron*, 3. *Column right (or left)*, 4. MARCH. (784) to

1. *Column of fours*, 2. *First (or fourth) troop, first (or third) squadron, column right (or left)*, 3. MARCH.

1. *On (such) troop (such) squadron*, 2. *Extend (or close) intervals*, 3. MARCH. (796) to .

1. *Extend (or close) intervals*, 2. *On (such) troop (such) squadron*, 3. MARCH.

1. *Column of *Platoons*, 2. *First (or Fourth) troop, first (or third) squadron*, 3. *Forward*, 4. MARCH, and

1. *Column of Platoons*, 2. *First (or Fourth) troop, first (or third) squadron*, 3. *Forward*, 4. *Column right (or left)*, 5. MARCH. (798) to

1. *Column of platoons*, 2. *First (or Fourth) troop, first (or third) squadron, forward*, 3. MARCH, and

1. *Column of platoons*, 2. *First (or Fourth) troop, first (or third) squadron, column right (or left)*, 3. MARCH.

Many other commands than those cited herein, or than those cited in my article in the July CAVALRY JOURNAL, might be given to illustrate this system of writing commands; but a number of these other commands deserve special discussion, and for that reason I purpose to devote another article to their consideration.

Before closing, I should like to state that, on page 59 of

*The capital "P" here is undoubtedly a typographical error in the text.

my article in the July CAVALRY JOURNAL, the eighth of the commands from the top of the page should be changed to read:

1. *Line of platoon columns of fours*, 2. *On the right (or left)*, 3. MARCH. And on the same page, seventh line from the bottom, the "to" should be omitted, so that the phrase will read, "and most naturally emphasized." In this latter case, the printer, by inadvertently inserting the "to," seemingly made me use a split infinitive, which grated upon me somewhat, inasmuch as I have never used a split infinitive in any of my books or published articles.

(To be Continued.)

A SCHEME OF INSTRUCTION FOR A CAVALRY COMMAND.*

BY CAPTAIN T. Q. DONALDSON, JR., EIGHTH CAVALRY.

THIS is a subject as comprehensive as it is important. It embraces all the elements of cavalry training, individual and collective. It should have for its object, *which should never be lost sight of*, preparedness for war. This maxim, true of all branches of the service, is especially so of the cavalry. From the nature of its employment, it must be ready to act at once on the outbreak of war. Past history shows that if it is not so ready it will be of very little value.

The length of our Civil War gave time for cavalry, insufficiently trained, or, rather not trained at all, to finally be in our war and the South African War, would be appalling, and the expense of supplying remounts might be prohibitive. This expense nearly swamped our Quartermaster's Department during the first two years of the war and the same was true of the British Remount Department.

During this period our government furnished nearly 300,000 efficient (General Upton states that the Federal cavalry did not really become efficient until the battle of Beverly Ford in 1863, two years after the outbreak of the war) but subsequent wars have shown that this opportunity will not always exist, as witness the examples given by the wars of 1866 and 1870. Even did this condition exist, the loss of horse flesh, as 1000 horses to about 60,000 men, or almost five to one, and the rate in the South African War was nearly as high. Not all of this loss was due to improper training but the greater part of it was, and I think the remark that Captain Rhodes made in regard to the Boer War can as well be applied to our own war:

*Thesis prepared as a part of the course in Military Art at the Army Staff College, 1910.

"The great lessons to be learned in this regard were the losses due to lack of previous training of cavalry officers and men, and the absolute necessity of an efficient system of supplying reserves of trained men and horses."

As Captain Rhodes also shows, it is a fair deduction from the Boer War that militia reserves cannot be depended upon, as far as the cavalry is concerned, and, in that war, the mixing of volunteers and regulars did not tend to efficiency.

Much more might be quoted on this subject, but the few examples cited will illustrate the point that is made; viz., that cavalry, to be efficient, must be kept thoroughly trained in peace and ready for the call that may come to it at any time.

This leads to the conclusion that our peace organization should be the same as that of war, so as to prevent a large influx of recruits and unbroken horses at the outbreak of war, and that we have a reserve of trained men and horses. Since the establishment of our remount depots the outlook for a reserve of trained horses has become bright, but that for the trained men is still uncertain.

What is meant when the word trained is used is, facility in the performance of duties required, and not perfection, for, as one has well remarked, there never was a perfectly trained horse or man.

SELECTION OF CAVALRY RECRUITS.

Closely connected with the subject of training is the character of men we get for the cavalry service. It is well known that some men have no aptitude whatever for the cavalry and no amount of training will ever make them efficient. This does not mean that such men do not faithfully attempt to make themselves good cavalymen, but that they are by nature unfitted for such service. These men should be transferred or discharged, as they are only an encumbrance on the organization to which they belong.

It is difficult for recruiting officers to tell whether a man on his first enlistment is fitted for any particular branch of the service and therefore, the sorting out should be done at the recruiting depots after a man has been carefully sized up and only such men sent to the several arms as best suited thereto.

PRESENT REGULATIONS ON THE SUBJECT OF INSTRUCTION.

Paragraph 241, A. R., 1908, prescribes that each division commander and commander of a department not part of a division will announce in orders annually the period of the year to be devoted to practical instruction in drill and other military exercises, prescribing their character and the time to be given to them, and that he will also designate the period of the year for theoretical instruction to be conducted in accordance with orders from the War Department, except at posts commanded by general officers where the foregoing subjects are left to the discretion of the latter. All other post commanders are to supervise the instruction of the officers under their *immediate* command, and company commanders are to be responsible for the practical and theoretical instruction of their non-commissioned officers.

Paragraph 240 provides that a regimental commander should labor continually for the instruction and efficiency of his regiment, and that he should supervise the instruction of the officers of his *immediate* command.

General Orders, No. 124, War Department, series of 1905, prescribes the theoretical instruction for the officers and men of the army and designates the subjects to be studied. Paragraph 4 of that order places the responsibility for the military instruction of non-commissioned officers' schools, makes the company commander instructor in such schools, and prescribes that the subjects of instruction shall be drill regulations, army regulations relating to enlisted men, minor tactics, and subjects which specially pertain to the duties of non-commissioned officers of the arm of the service to which they belong.

General Orders, No. 177, War Department, 1907, provides for the practical training of the cavalry, infantry, and field artillery of the army and divides it into two distinct phases, garrison training and field training, and gives in detail the subjects to be included under each head.

In accordance with these orders, each department commander issues annually an order for the instruction of the troops of his department, and of course these orders will vary according to the ideas of the different commanders.

Other regulations and orders on the subject are:

Paragraph 440, A. R., relating to parades.

Paragraph 1220, A. R., relating to the use of the emergency ration.

Paragraph 1438, relating to first aid, and paragraph 1580, relating to instruction in signaling.

Drill Regulations, as amended in 1908.

Manual of Guard Duty.

Provisional Small Arms Firing Manual, 1909.

Regulations for Sabre Exercise.

Instructions from the War Department in regard to athletics (letters of November 5, 1907, and February 11, 1908).

Field Service Regulations.

These regulations and orders would appear ample to secure the training desired in all branches of the service, but I believe it will be conceded by the majority of our officers that the results are not altogether what should be expected. We find one regiment, for instance, giving undue prominence to a certain line of work, while another regiment does the same with another line. One will overdo target practice, another thinks close order drill the first requisite, another horse training, and so on. In other words there is no co-ordination of training among all the regiments in order to attain the desired result,—efficiency *in all* cavalry work. This defect, I believe, is caused by our system. There is a lack of feeling of responsibility among organization commanders to higher authority, and penalties of shortcomings are not imposed with sufficient severity, and there is no one whose special duty it is to keep the several teams pulling together on the same road towards the same objective.

It would seem that some modification of the German or English method by which organizations are examined by the commanders of the next higher units at different periods of instruction would work well in our service, especially if the latter had sufficient authority to correct defects found. If, in addition to this, we had cavalry officers for inspectors and their recommendations were enforced, there would soon be a marked in-

crease of efficiency of interest and of activity throughout the cavalry service.

It is only logical to suppose that cavalry inspectors for the cavalry, infantry inspectors for the infantry, and field artillery inspectors for the field artillery would render better service than inspectors taken from one arm to make inspections in either or both of the other arms. In commenting on this subject a cavalry officer of experience and attainments has said:

"We cannot persuade ourselves that they (officers of other arms) have the professional knowledge of our arm required to judge the technique of our art. In this age of specialties we don't believe in the possession of universal knowledge of individuals. Of course, a general must know how to make use of all three arms, but, unless his brain be hyper-Napoleonic, I can easily fancy that even a cavalryman, acting as inspector, might fail to note the fine points in the manipulation of the disappearing gun-carriage, the three-inch field piece, the hospital corpsman's pouch of dressings or the infantry soldier's blanket bag."

The quotation seems to express the idea exactly.

However, the general staff is, I believe, giving this whole subject of instruction their attention and it is hoped that the acting chiefs of the three arms, with the advice and co-operation of their officers, may soon evolve a system which will give us the desired results. In the meantime, we have to deal with conditions as they are.

DIFFICULTIES IN DEVISING A SCHEME OF INSTRUCTIONS.

In attempting to formulate a scheme of instruction we are at once struck with the difficulty of making a detailed schedule that will fit every case. The conditions under which troops are stationed, scattered as they are over the United States and the tropics, some in small posts and some in large, are too varied to make this possible. What can be done, however, is to outline a progressive plan which will cover the whole ground of instruction and which, if followed, will enable a *new command* to get into shape as quickly as possible.

It is assumed that this command is a regiment with competent commissioned officers, some trained non-commissioned officers in each troop and that most of the privates and the horses are untrained, and that the whole regiment is stationed

at the same post which has a target range and other accessories necessary for the instruction of the command. These conditions are, I believe, more favorable than those under which our last cavalry regiments were organized.

INDIVIDUAL INSTRUCTION.

This instruction is the basis of all future instruction. If it is neglected or is not thorough, subsequent training is certain to be defective. Given a man well trained in the use of his arms, who understands and appreciates his horse, the horse also being trained, and the rest comes easy.

To impart this instruction, it is necessary to have capable active officers and non-commissioned officers as instructors.

In a new command, as the non-commissioned officers will not at first be capable, unless they should be transferred from old commands, it will be necessary for the troop officers to instruct both privates and non-commissioned officers. The instruction will take place in the troop under the direct supervision of the troop commander, who should go over the program for each day with his officers and non-commissioned officers before it is put into effect. As a matter of course, strict discipline must be enforced and no laxity of either officers or men permitted.

THE PRIVATE.

The recruit has to be taught everything from the beginning. Given good instructors his progress will depend on his intelligence.

His instruction will have to be carried along a number of lines at the same time, such as the care of his horse, the use of his arms and equipments, and his duties in garrison and camp and personal hygiene.

At the same time, his physical equation should be studied by his troop commander with a view to giving him all round symmetrical physical development.

He should be impressed with the fact that although he must know how to use every one of his arms, the saber, rifle, and pistol, his horse is his most important weapon, the most delicate and the one that deteriorates and suffers most quickly from neglect, that he must cherish and protect him at all times until

perhaps the occasion arrives when under orders he will be obliged to ride him to death. He should also be impressed with the fact that, whatever else he may be, he is first a cavalryman.

The leading idea in this instruction should be that the man must be taught to think and act quickly from the very first drill until he is thrown on his own responsibility as a scout, vedette, or courier. In other words, there should always be some proposition for him to solve.

The dismounted and mounted drills must be carried along at the same time, and if the horses are not trained, they will also have to be trained at the same time. With both horses and men untrained quite a problem is presented to the instructors, but it can and has been solved, although it takes care and patience.

The care and training of the horse is a matter of the utmost importance to the cavalryman and requires the closest attention. Unless circumstances make it absolutely necessary, the horse should never be placed in ranks until he is thoroughly trained.

All drills and instruction must be progressive and in accordance with the prescribed drill regulations, orders, and manuals.

NON-COMMISSIONED OFFICERS.

The army regulations and orders referred to make the troop commander responsible for the practical and theoretical instruction of his non-commissioned officers. Good material for non-commissioned officers is not apt to be found in abundance in a new command and it takes the closest kind of supervision and a great deal of intelligent hard work on the part of the troop commander to work the material, after it is found, into a trained body of assistants. Yet no troop without efficient non-commissioned officers, especially an efficient first sergeant, can be a well trained troop.

The importance of this subject has always been recognized by organization commanders of all branches of the service and volumes have been written on the different phases of it. The main idea here also, as in the instruction of the private, is to make the man think, to awaken and hold his interest and, above all things, to avoid merely perfunctory work.

With the new non-commissioned officers the instruction will have to begin with the routine troop duties and close and extended order drills, and advanced as quickly as possible to include his duties in the field. He should be taught to cultivate self-reliance and the habit of reaching quick decisions. This is best accomplished by practical work, by constantly putting "situations" up to him and requiring him to find a method of meeting them.

This is certainly the best method of imparting the necessary knowledge of the Field Service Regulations. A scheme should be worked out in advance covering the non-commissioned officer's duties in patrolling, leading of the squad, advance guard and outpost work and other field work, and the troop commander, with his lieutenants, should go over the scheme on the ground before the troops are actually used.

Special attention should be paid to map reading, sketching and practice in writing and sending field messages.

The making of simple maps and road sketches is not difficult to learn, by the average man, at least to such an extent as making clear a field message.

Map reading should at first be taught on a map of the reservation where the ground itself can be studied in connection with the map. A particular part of the map should be studied at each lesson, the contours, topographical signs, etc., explained, and then the non-commissioned officer taken to the ground represented and the map compared with the ground.

This instruction should be extended to as many privates as possible, also, as, although they are not expected to be experts, it is important that they should have some knowledge of the subject and know how to pick out the hills and valleys and stream lines and understand the topographical signs and be able to find their way about by means of the map.

The subject of messages is equally important and might well be taken up in the early part of a recruit's instruction and continued throughout his enlistment, without interfering with other necessary instruction. By the time he becomes a non-commissioned officer he will be fairly well instructed in the subject.

Non-commissioned officers should be given every opportunity to exercise command and to act as instructors.

THE TROOP.

The troop commander, under the regulations and orders cited in the first part of this paper, is responsible for the drill and instruction of his troop. He should see that its training advances progressively, and when any laxness is observed in the performance of any drill or exercise that has once been well taught, special attention should be again devoted to this phase of instruction until the troop is again up to the standard in it.

In addition to the attempt to acquire a good first sergeant and other non-commissioned officers, every effort should be made to get good men for the following positions: Cooks, horseshoer, farrier and clerk. If these men cannot be obtained from those originally assigned to the troop, application should be made to the Adjutant General of the Army for them, and, this source failing, men will have to be selected from the troop and trained by the troop officers.

The squad system is required by par. 279 A. R. and par. 449 Cav. Drill Regulations and pars. 282-283 A. R. prescribe some of the duties of chiefs of squads in barracks. This system works well where there is not a heavy demand on the troop for details from the non-commissioned officers, otherwise not.

The troop commander should lay out definite tasks for the squad leaders and chiefs of platoon and inspect their work at the end of stated periods, and endeavor to stimulate in every possible way the interest of the officers and men, and to prevent the drills and exercises from becoming irksome. As soon as the troop becomes proficient in one thing it should pass on to the next.

After the close order and extended order formations are well understood, the field work of the troop should begin, and thereafter the instruction should be given in the form of problems, a problem being given every time the troop goes out. These problems should be carefully prepared by the troop officers,

and at first worked out in advance with the non-commissioned officers by means of tactical rides, and then solved with the men present.

It can be seen that there is a great variety of these problems that can be given which will, in the aggregate, involve all the necessary elements of field training, and they can be solved at nearly all the posts where cavalry is now stationed.

Routine duties, such as guard duty, grooming, the inspection required by orders and regulations, the making out of the returns and troop papers, must, of course, receive proper attention, and they form part of the instruction of the troop.

Target practice is of special importance, and every effort should be made to make the men good shots and to give them confidence in their weapons. If a man doesn't believe he can hit anything the chances are not very good for his advancing or staying on the line under a heavy fire from the enemy. But still I believe we devote too much time to individual fire, and not enough to the collective fire of the troop. The Provisional Small Arms Firing Manual, 1909, which is now being tested by the army, promises to give the men a very much better idea of battle conditions than they have had before, and provides what appears to be a good system of imparting instruction in fire control by the troop officers and non-commissioned officers.

Instruction in bridge building, swimming, demolitions and field entrenchments should be given when the troop is stationed where facilities are available, and afterwards this instruction should be applied in the solution of field problems.

THE SQUADRON.

The army regulations and existing orders give the squadron commander very little control over his squadron, unless he happens to be post commander also, or, what amounts to the same thing, is in command of a detached squadron, any further latitude permitted him, other than there laid down, will depend on the action of his post commander.

The squadron commander should certainly have the supervision over the drill and instruction of his squadron and be

held responsible for its efficiency. He should inspect his troops at stated times and test them for efficiency and report the results of his inspection to the colonel, at the same time informing each troop commander of the state of instruction in which he found his troop.

The instruction of the squadron, after the close and extended order movements are fairly understood, should be principally tactical, by means of problems carefully worked out so as to cover the work likely to be required in the field. He should endeavor to arouse and hold the interest of his officers and men. The problems should be as simple as possible, each should be discussed on the ground immediately after its solution, and no written reports required. As in the instruction of the troop, the squadron commander should make frequent tactical rides with his officers and selected non-commissioned officers, and require his officers, in turn, to prepare problems to be solved on these rides.

THE REGIMENT.

The instruction and efficiency of the regiment will largely depend on the energy, activity, efficiency and tact of the colonel.

There is not likely to be a well trained regiment without a good colonel—one who not only knows his duties, but also knows how to get the most and best work out of his officers and at the same time hold their respect and loyalty.

The regimental commander must keep a close supervision over the training of his regiment, and, of course, where he has control of it, should be held responsible for its efficiency.

Field work should begin at the earliest opportunity and carried out in a manner similar to that outlined for the troop and squadron, frequent use being made of tactical rides and problems.

The lieutenant colonel and majors should be required in turn to prepare problems for solution.

THEORETICAL INSTRUCTION OF OFFICERS.

The War Department has prescribed a *general* course of instruction for officers in General Orders No. 125, 1905, but, in addition to that, cavalry officers should take up special

duties relating to the employment of their own arm, using as a text book or books such a work as "Cavalry on Service," by Pelet-Narbonne. Each regimental commander could arrange the course of theoretical instruction for his officers in such a way as to allow them ample time for recreation and yet get the maximum amount of instruction. In a new regiment, however, it would be several months before instruction of this nature could be taken up.

MACHINE GUN PLATOON.

The proposed Field Service Regulations provide for the organization of a provisional machine gun troop, with three officers and 86 men, for each cavalry regiment. Undoubtedly some such organization will soon be permanently adopted, making practically a thirteenth troop to a regiment. The instruction of this unit will proceed along the same lines as that of the troop, keeping in view, as the objective, preparation for active service.

The tactical use of this arm has not been definitely decided, but it will probably be employed principally on the defensive. The machine gun platoon should be included in the problems for the squadron and the regiment.

The following general extracts from the "Cavalry Training, 1907," English service, are interesting:

"The regimental commander is responsible for the training and efficiency of his regiment.

"The practical and theoretical training of the officers in their functions as leaders in war and instructors in peace is his special duty.

"He will frequently arrange to carry out tactical exercises on the actual ground, accompanied only by the officers. Such exercises will tend to assist in establishing a uniformity of method in dealing with tactical problems, and foster a mutual understanding between him and his subordinate commanders.

"The regimental commander will fix a date by which squadron commanders shall have arrived at a definite point in their course of training, when they must be prepared to submit their squadrons for inspection. He will allow them due freedom as regards their system of instruction, and will encourage all efforts on their part to improve the training; he should only interfere when the method followed is manifestly wrong, and must work harm. In other words, he should seek to make his influence felt rather by a general supervision over the whole than by interfering in the details of squadron and troop instruction.

"The squadron will be treated as an independent, self-contained unit, and the squadron commander will frame his own programme of training.

"The squadron commander will frequently set problems to be solved out of doors dealing with some tactical situation. He will ride out with his officers, non-commissioned officers and section leaders, and consider the circumstances of the exercise on the actual ground.

"The troop commander is responsible to the squadron commander for the training and efficiency of his troop.

"The squadron commander should give his troop commanders as free a hand as possible, and encourage initiative and emulation among the officers by every means in his power."

It will seem from the above extracts that the principle running through all their training is the same, namely, a free hand in the method of instruction, and responsibility for results to the commander of the next higher unit, and that the system of inspections by next higher commanders is compulsory. Some attempts to use this method of inspection as an aid to training have been made in our service, but it has never been made compulsory.

In one of the department orders of last year it was suggested, or recommended, in the following language:

"Fixed tasks for fixed times, followed by inspections of each unit by the next higher commander, throw each organization commander upon his mettle, develop interest and a feeling of responsibility, abate monotony and create a spirit of emulation. Let each unit commander be given a clear objective to be attained and then let him be left in great measure to devise ways and means to attain it."

But there is nothing compulsory about it, and post commanders could follow it or not, as they saw fit. It is undoubtedly the correct principle to be followed in training a command.

Subject to the foregoing remarks the following outline of a scheme of instruction for one year is submitted:

FIRST MONTH.

First Week.

Daily: Athletics adapted to the physical requirements of the men, not to exceed one-half hour. To be continued throughout month.

Nomenclature of arms and equipments and instructions for their care.

Articles of War and paragraphs of the Army Regulations relating to enlisted men.

Dismounted: Two hours daily. School of the Soldier, paragraphs 27-188, Cavalry Drill Regulations.

Mounted: Two and one-half hours daily, School of the Trooper, paragraphs 179-281, C. D. R.

Stables twice daily. In addition to grooming, the men to be taught the points of the horse and how to care for him.

Second Week.

Dismounted: Paragraphs in C. D. R. same as preceding week. In addition, one hour daily, Saber Exercise on Foot, paragraphs 1-93, Provisional Regulations for Saber Exercise.

Mounted: Same as preceding week, but in addition, Manual of Rifle Mounted, paragraphs 275-288, C. D. R., and Saber Exercise Mounted, paragraphs 94-132, P. R. S. E.

Third Week.

Dismounted: Same as preceding week.

Mounted: Review of work of preceding week. In addition, the Squad Mounted and the Squad in Extended Order, paragraphs 291-338 and 375-448, C. D. R.

Fourth Week.

Dismounted: Same as preceding week, to include everything in the school of the soldier, C. D. R.

Mounted: Same as preceding week, to include everything in the School of the Trooper and the Squad in extended order.

Practical instruction of non-commissioned officers and men during entire month, in paragraphs of Manual of Guard Duty relating to duties of enlisted men.

A track containing hurdles, ditches, head posts, etc., should be constructed between the stables and the drill ground and the men practiced riding over it a few minutes going to and returning from drill each day, beginning about the middle

of second month. A gaiting course should also be laid off on the way to the drill ground.

Instructions should be held every Saturday, at two of which instruction in shelter tent pitching should be given.

Throughout month the men to be practiced in carrying short verbal messages.

SECOND MONTH.

Athletics to be continued, reduced in time to 15 minutes daily.

Dismounted work same as last week of preceding month, two hours daily.

Mounted work, three hours daily.

First two weeks same as last week of preceding month.

Remainder of month, School of the Troop, paragraphs 448-585, C. D. R.; last week with full field equipment.

Each troop commander to devote one day each of last two weeks to solution of field problems by his troop.

Inspection and examination of the troops in each squadron by squadron commander during last week of month.

THIRD MONTH.

Dismounted: Two hours daily. One hour per week, first aid.

Three hours per week, four men, signaling with the flag, to be continued in succeeding months until they are proficient.

Non-commissioned officers and selected men to be given instruction in packing, map reading and making simple road sketches, dismounted.

Mounted: Troop and squadron instruction—former, two hours; the latter, one hour daily. Two troop and two squadron marches, all day, during month. Two troop and two squadron problems each week.

FOURTH MONTH.

Dismounted: Continuation of that of preceding month, with the addition of preliminary drills for target practice.

Mounted: Three days' squadron instruction two days' regimental, each week. If regiment is not already in camp, one day's march should be made, camping overnight.

At least two field problems should be solved each week.

Inspection and examination of squadrons by regimental commander.

FIFTH MONTH.

Target practice, rifle and pistol. Continuation of work of preceding month when not on the range.

SIXTH MONTH.

Same as fourth.

Throughout the entire six months every available opportunity to be taken to train the horses and to make the men expert horsemen and expert in the use of the sabre.

The training of the machine gun troop will proceed along the lines laid down for the troops as above indicated. The Band and trumpeters will be trained under the direct supervision of the adjutant. The guard should be mounted by troop.

If the regiment is not ordered into the field by this time the regular theoretical instruction prescribed by the regulations and orders already referred to should be taken up, but all problems should be solved out of doors with the troops whenever the weather permits. We would have then for the succeeding months as follows:

SEVENTH MONTH.

Review of preceding six months' work. Continuation of work of fourth month.

Officers' school, in which some work relating especially to cavalry should be studied, in addition to that fixed in orders. Non-commissioned officers' schools under troop commanders, at least three times a week. As many selected privates as possible should be made to attend these schools, and the instruction begun in the earlier months extended and carried to completion. Prac-

tical exercises should always follow the theoretical instruction as soon as possible, otherwise it will probably be wasted.

When the weather is too inclement for outdoor work, the time should be put in the riding hall, special attention being paid to the sabre as well as to horsemanship. The sabre is mentioned again, because I regard the instruction in its use of the greatest importance, and I believe it is a subject which is treated in a perfunctory manner generally throughout the service. No man is going to have any confidence in a weapon unless he is shown its capabilities and taught how to use it.

The problems and tactical exercises begun in the preceding months should be continued for the troop, squadron and regiment in connection with the theoretical instruction until officers and men have a good working knowledge of their duties.

EIGHTH, NINTH AND TENTH MONTHS.

Similar to the seventh.

ELEVENTH AND TWELFTH MONTHS.

Target practice, rifle and pistol. Practice march or maneuvers.

CEREMONIES.

This subject has not been touched upon, as it is considered of minor importance. It is regulated by orders and A. R. drill regulations and manuals and the ceremonies will have to be held as therein prescribed. Guard mounting should take place in the middle of the day.

TRAINING OF HIGHER COMMANDS THAN A REGIMENT.

The strategical and tactical training of the division is necessary and important, but in our service it can only be attempted at maneuvers, and not always then. Although nominally brigades of two regiments are formed at the maneuvers, the cavalry is usually split up and assigned to the opposing sides. Therefore no attempt is here made to suggest a scheme for this training. Should brigade or division be formed for any ma-

neuver camp, the officer to command it ought to be given ample notice of his assignment in order that he may work out a plan which will insure the maximum amount of instruction in the two important subjects of strategical reconnaissance and the use of cavalry masses on the battlefield.

The relative importance of training in mounted and dismounted work has not been touched upon. It is sufficient to say that the men must be well instructed in both. In our service, as is well known, we have heretofore paid too much attention relatively to dismounted training and foreign services have neglected it (except perhaps the Russian). Now, however, the indications are that we are paying more attention to mounted training while not slighting dismounted training, and that the foreign services, especially the English and German, are realizing the value of the latter and lay special stress on it in their drill regulations. So, in case of war with foreign troops, we may expect to find them well trained in dismounted action as well as mounted. As we can more than hold our own dismounted, it behooves us to put more time on mounted work, that we may be able to meet any emergency.

CONCLUSION.

In conclusion, it is suggested that the following changes, some of which have been already mentioned, would greatly improve our cavalry training:

1. The selection of men for this service who have a special aptitude for it, instead of the present rather haphazard system of assigning recruits.
2. A fixed date for each regiment at which *all* recruits to fill existing and prospective vacancies for the year shall be received. This would obviate the present nuisance of having recruits arrive at all seasons of the year, with the consequent disadvantage of having them at different stages of instruction at the same time.
3. A system of inspection of units by next higher commanders, already discussed.
4. Cavalry officers only to inspect for instruction and efficiency, already discussed.

5. Separate and suitable posts for cavalry training.
6. Some one authority in Washington, call him by what name you may, Inspector General of Cavalry, for instance, whose special duty it shall be to supervise and direct the instruction and training of the cavalry, and who shall have power to correct by appropriate remedies any defects found.
7. Opportunities for the training of cavalry commands larger than a regiment.

NOTE:—As was stated in the beginning of this paper the scheme suggested is not intended to cover every condition. It simply gives in progressive form a list of subjects which if covered will enable a command to take the field without being utterly ignorant of its duties. No claim to originality is made.

The training for succeeding years should be principally tactical and progressive until every phase of cavalry work is covered.

A fixed scheme of instruction for the hour, day, month and year is not advocated. Such a policy would soon destroy all interest and initiative in subordinates. "While leaders are held responsible for the efficiency of their commands, their choice of means for attaining efficiency should be restricted as little as possible."

FORAGE POISONING AMONGST ANIMALS OF THE FIFTEENTH UNITED STATES CAVALRY DURING THE ENCAMPMENT AT GETTYSBURG, PENNSYLVANIA, JULY, 1910.

BY CAPTAIN GEORGE C. BARNHARDT, ADJUTANT FIFTEENTH CAVALRY.

DURING the period of the Camp of Instruction held this year at Gettysburg, Pennsylvania, between July 1st and 31st, several cases of serious illness occurred amongst the horses of the Fifteenth Cavalry. Headquarters, Band, Troops "A," "B" and "D" were at the camp, and the sickness was confined mostly to Troops "A" and "B."

The first case was observed in Troop "A" on July 14th and ran its course, the animal dying on the 19th. Six additional cases quickly followed this first case, the animals affected belonging to the same Troop "A" and standing with the first on one end of the picket line. Other cases developed until July 26th the total numbered 38, distributed as follows: Band, 1; Troop "A," 27; Troop "B," 10; of which 19 had died or were shot.

The first case was the mount of the First Sergeant and stood at one end of the picket line. This was a fine animal, received from the Reno Remount Station, had been well trained and had taken first prize in a mounted contest on form. The symptoms, simply expressed, were as follows: Running out of the tongue in a listless sort of manner as though it had been bitten, much saliva with a dry brown deposit appearing on the lips, unusually long time in eating and drinking in first stages, which gradually became worse until the paralysis of the throat was so complete that the animal could neither eat nor drink. Urination and defecation also became impossible. No swelling appeared and little or no temperature or convulsions until the final stage. The horse moved with a staggering gait and weakened under the slightest exercise, and after once getting down

could arise only with great difficulty. The final stage found the animal possessed of his usual intelligence.

From the very beginning the disease was unknown to nearly every one in camp, and great interest was manifested by the officers of the regiment as well as by many officers throughout the Camp of Instruction. Veterinarian Williams, Fifteenth Cavalry, at first was at a loss for a definite diagnosis.

The symptoms observed almost coincided with those manifested in cerebro-spinal meningitis, and Veterinarian Williams, after consulting with a local veterinarian, was inclined to diagnose the disease as cerebro-spinal meningitis, although there were absent three symptoms that invariably accompany that disease; namely: high temperature, severe pain and convulsions.

From the fact that all the Troop "A" horses affected had been standing practically together at one end of the picket line and that they had not become affected at the same time, but on successive days, the indications were that the disease was contagious or that it even might be cerebro-spinal meningitis.

The outbreak was reported to the Live Stock Sanitary Board of Pennsylvania, with a request to send the State Veterinarian in order that the cause and nature of the disease might be positively ascertained. Doctor Graybill, Deputy State Veterinarian, and Doctor Marshall, of the University of Pennsylvania, were assigned to make an investigation of the disease. After an examination of the sick horses as well as the hay which was fed, they diagnosed the affection as forage poisoning, with which term cerebro-spinal meningitis is frequently used synonymously. A few days later upon the request of General Wotherspoon, made to the War Department, Doctor Adolph Eichorn, Bacteriologist in the Agricultural Department, visited the camp, and, after making a clinical examination of the sick horses, made a careful post mortem examination on two carcasses, the result of which is described by Doctor Eichorn as follows: The post mortem examination in the first case revealed a black gelding in good condition. The cutaneous and subcutaneous tissues showed nothing abnormal. The abdominal cavity showed a normal quantity of serous fluid; the serous membranes were normal, spleen, liver and kidneys of normal size and consistency. The stomach contained a small quantity

of liquid food intermixed with oil; a great number of bots were attached to the pyloric mucous membrane of the stomach; the membrane was markedly inflamed and hemorrhagic, showing all the indications of the action of an irritant. The small intestines and caecum were empty and appeared normal. The large colon was filled with a dry content; its mucous membrane was covered with a dirty, sticky deposit and disclosed numerous inflamed areas, erosions and hemorrhages. These lesions were most prominent in the post mortem examination and it appears that the deposit on the mucous membrane of the colon originated from the musty hay, causing the above described changes. The absorption of the toxin very likely occurred through these affected parts. The lungs showed an inhalation pneumonia, which resulted from drenching the animal when it was unable to swallow. The brain and a portion of the spinal cord were removed and showed nothing abnormal. The vessels of the meninges were slightly injected; the subarchnoid fluid was clear and of normal amount; this condition also applies to the fluid of the lateral ventricles. The substance of the brain appeared of normal consistency, sections showed no abnormality.

The post mortem examination of the second case revealed almost identical conditions as in the first case. The mucous membrane of the stomach showed a sub-acute inflammation, it being markedly swollen and reddened. The mucous membrane of the colon appeared as in Case 1. The lungs, as well as all of the other visceral organs, were apparently normal. The surface of the right hemisphere of the cerebrum in the frontal region, anterior to the motor region of the cortex, disclosed a distinct circumscribed congested area of the size of a ten cent piece; otherwise no other lesions were found in the brain and spinal cord.

Doctor Eichorn also examined specimens of hay that had been taken from a lot supplied to Troop "A" at about the time the first case appeared. This specimen was coarse and musty, the mold on the stems being distinctly visible to the eye. Indications were that the hay had been baled in an uncured state and that as a result the moldy condition developed. It is also probable that the bad hay was confined to one car and that in

examining the hay before feeding a portion of the bad was overlooked and fed.

All troops did not necessarily receive hay from the same car, which may account for Troop "A" having more cases than other organizations.

From the conditions of the hay, the "symptoms complex" of the animals, and the post mortem findings, the diagnosis of so-called "forage poisoning" was positively established by Doctor Eichorn.

The disease is described in a comprehensive manner in "Diseases of the Horse," Department of Agriculture, 1903 edition, pages 217 and 218. The description of the symptoms, as given therein, would indicate that the majority of the cases at Gettysburg corresponded more nearly to the "mildest form" of the disease. Every case where the animal developed pronounced typical symptoms ended in death. The mild cases only, or where the animal received but a small portion of the poison, recovered.

As stated under "Treatment," page 218 of the treatise named above, treatment in the worst class of cases was observed to be seldom successful.

Linseed oil was tried and seemed to be beneficial in mild cases. Hyposulphate of soda, in the proportion of two ounces to a bucketful of water, was given to all animals. Heat and exercise aggravate the sickness.

In order to provide shelter and better facilities for caring for the sick animals, the Fifteenth Cavalry was ordered to return to its station by railroad. The command left at 7:30 p. m., July 26th, 1910, and arrived at Rosslyn, Virginia, at 2:00 a. m. the following day. The night being cool, the 19 sick animals stood the trip well; the shaking up seemed to have benefited them. Most of the cases brought to the post were mild. Four new cases, also mild, developed a few days after arrival, and of these and those brought to the post all have recovered except 4, which died or were shot.

Summing up, there were a total of 42 cases, of which 19 recovered.

MOUNTED AND FOOT COMBAT IN AMERICAN AND EUROPEAN CAVALRY.

BY AN OFFICER ABROAD.

IN previous reports it has been frequently brought out that French cavalry, in common with all its European brethren, is primarily armed and trained to fight mounted. As indications of this fact it has been seen that there is no ammunition supply attached to cavalry columns, and that the entrenching tools consist of only a few picks, shovels, etc. A division of cavalry has a few thousand rounds of carbine ammunition in the chests of its horse batteries, but in general it may be said that all the carbine ammunition relied upon for battle is the sixty-six rounds carried in each man's belt.

There seems, happily, to be in our service a lively interest in the armament and methods of combat of European cavalry, though their tactics appear not to attract the same amount of study. Our military journals abound in papers, original and translated, evincing this interest. It has, therefore, seemed to me justifiable to suggest to those whose studies lead them in this direction, the wisdom of clearing the ground of such obstacles as would prevent their work from bearing fruit immediately assimilable in our system. For there can be little doubt that in cavalry matters, more than in others, we have needs on the one hand and resources on the other which separate us considerably from Europe. The object of this report is to offer some suggestions which may not have occurred to officers less closely acquainted with a typical cavalry of the old world.

All rational methods of combat are deduced from the terrain likely to be its scene. In a flat jungle country, long range artillery is no better than short range. Similarly for cavalry. In a country full of impassable obstacles, the charge, at least by large bodies of horsemen, cannot take place. The French

army is chiefly maintained and trained for the event of a war with Germany, which means a campaign over great open plains, offering almost no obstacles to the passage of whole brigades and divisions of cavalry. The charge, then, may readily be used in almost every part of the terrain, and the French educate their cavalry to fight opposing cavalry always, and opposing infantry and artillery sometimes, by the charge. They believe that the normal fighting for their cavalry, and the biggest part of it, will be against the enemy's cavalry, and for this work they prefer the lance and sabre to the carbine and revolver.

Therefore, before drawing any conclusions from European practice in this matter, it seems of prime importance to ask ourselves: Will the terrain over which our cavalry must operate be similar to that over which theirs operates? If yes, then their experience and ideas have a serious importance for us; if no, then we must go further and ask ourselves: What armament and equipment and what tactics will make our cavalry most formidable and most useful on the terrain of its probable action?

I, for one, believe that, considering the probable scene and nature of its work, the principles on which our cavalry is now armed and trained are correct. I say "principles" because the details of armament and equipment may frequently change. For example, I make bold to suggest that a light entrenching tool for each man, with a few pioneer tools and dynamite cartridges per troop, would be a paying addition to the equipment. But the best weapon our cavalry has, and the one which will bring the most results in war, is its superb spirit of readiness to meet any enemy on any ground, its splendid feeling of superiority to all comers at their own game.

This tone, I believe other cavalries do not possess and whence largely come their eternal and barren discussion of "*arme blanche ou arme a feu.*" Our cavalry says, "*arme blanche et arme a feu; combat a cheval et combat a pied.*" It has taken both modes of action to be its province and asks no favors from any comers. Nevertheless, it seems not unjust to say that our cavalry sometimes loses sight of the fact that

now, as in all history, the first, the best, instrument for mounted combat is a good horse and a man who knows how to ride him. Without that all other arms are useless. Until we have these, we might leave to Europeans the monopoly of all discussion as to whether lance, pistol or sabre is the best charging weapon. Old Seydlitz, among other cavalry leaders who have expressed themselves with rugged frankness on this point, once said that given a stout heart with the fierce determination to ride down the enemy and it mattered precious little whether charging cavalry carried a lance, saber or hickory stick.

A comprehension of European cavalry, its tactics, system of training, methods of reconnaissance and of combat, is profoundly useful to our officers. The very variety offers food adapted to every palate. But in this study it is important for us to remember that all European, certainly all Continental, cavalry is armed and trained to meet opposing cavalry first if not all the time, and each thinks itself better than his enemy. A fine enough spirit, it must be agreed, but put any of these organizations on foot against good infantry and they feel and act like ducks out of water. Such, fortunately, is not the case with us. A regiment of our cavalry fighting on foot considers itself the equal of any infantry regiment that ever marched, and as it generally would come into the fight fresher and keener than its foot enemy, these two factors—the one moral, the other physical—will most likely enable our troopers to make good their boast. All possible honor is due to our cavalry officers for nourishing this sentiment and for inculcating it into their men. Its existence has become a tradition and happily remains unchanged today. All the writings of their military students, all the prescriptions of high authority and the encouragement of respected chiefs, has never been able to instill this spirit into the rank and file of any European cavalry. They believe in it generally as an academic proposition, but they seem unable to practise what they believe. They hate to fight on foot, they feel degraded when made to fight on foot, they feel inferior when fighting on foot, hence they can easily be beaten when fighting on foot, for they have no stomach for the business.

I would not venture to be so positive in these statements if I had not, during many years, discussed this subject with French officers of high rank, of long experience and of all arms, as well as with cavalry soldiers of every grade. They all recognize their weakness, but they have an idea that it can not be helped. They fear that too much talk about fighting on foot, too much insistence upon its value and too much practice in it, tend to weaken the spirit of dash and confidence in cold steel characteristic of all good cavalry. They also take comfort in the thought that all their neighbors are in the same boat. But there is no possible doubt in my mind that any chief of staff in Europe would sell his head for a corps of cavalry which, knowing how to ride and loving it, knowing how to charge and confident of its efficacy, could nevertheless fight skillfully on foot and willingly practise the exercise and was proud of the accomplishment.

Such a cavalry we have. It is not perfect—in some things it is inferior to its European brethren. I do not believe it rides as well. Certainly the average of our cavalry officers do not ride as well as the average of French cavalry officers. Certainly all of our officers are very, very much worse mounted than French officers, while the amount of money spent by our government on officers' mounts is much greater than that spent by the French government on its officers' mounts. Our enlisted men, I believe, are not as good horsemen as the French, but the difference is not so glaring as with the officers, and this opinion may be combated. The French private only serves two years and ours serves three; the French horses are more carefully selected and much more carefully trained, but it is all done by the cavalry themselves. They spend more hours in the saddle per year than we do, and a certain ignomy attaches to the mounted officer who does not ride. Their colonels ride hard in order to get promoted to generals, and the generals ride hard, or they never get a higher command.

These comparisons may be disagreeable, but they ought to be faced. They disclose a condition not inherently difficult to correct. Indeed, I believe that the main point was gained the moment our cavalry recognized that it could not be, by mere

inheritance and without any effort of its own, quite the best in the world.

What *would* be difficult to create, if it did not exist, is that magnificent spirit which makes our cavalymen believe that, mounted, they are equal to any other horsemen, and on foot they are better than any footmen. They, alone in all the world, ask no odds of either enemy.

For these reasons it might seem to be regrettable that some scheme could not be found for accelerating cavalry promotion without changing its present organization; for upon the similarity of its organization with that of the infantry probably rests in part its feeling of equality with foot troops. A sentiment like this is too delicate as well as too precious a thing to be tampered with.

A PRACTICAL PRACTICE MARCH.

The following article is made up from extracts of the report of a practice march made by Troop "I," 8th Cavalry, in September last, under the command of Captain Geo. E. Stockle, 8th Cavalry, with Lieutenants E. C. Wells and Herbert H. White as his subalterns. Much of the report is necessarily omitted, owing to the fact that it is impracticable to reproduce the map that accompanied it and other details that do not refer to the practical side of the march.—*Editor.*

Advance Preparations:

The most important was the selection of a route and this was early taken in hand. Correspondence with Mr. John R. Brennan, the Superintendent of the Pine Ridge Agency, developed the fact that there would be no objection to the Troop going on the reservation, and this was decided on with the approval of the Post and Department Commanders. This route was selected since it was known that there was very little fenced land on the reservation and consequently that one great obstacle to proper tactical instruction of non-commissioned officers would not be met. A route via Chadron to the White River, in the southwest corner of the reservation, was determined on, later marches to depend on information gained of the country.

A dozen cheap compasses were procured and issued to non-commissioned officers. One blue print map, Surveyor General's Office, had been secured and this was retraced by Lieutenant White and Sergeant Buchwald and blue prints made by Lieutenant Wells for use of the Sergeants. Signal Corps message pads were issued to all non-commissioned officers, and several signal flags were taken. A supply of red bands was provided, to distinguish opposing forces in maneuvers. Each Sergeant was issued a machete, seven conical and one common tents for the men, two wall tents for officers, one wall tent for rations and one common

tent for latrine were carried, also tent stoves. This tentage was used in the rest camps. In five of the eleven camps shelter tents were used by officers and men.

Twenty-one days' rations were carried, three days' grain, and for each man a barrack bag containing the authorized surplus kit. Saddles were packed throughout the trip except one day in the Bad Lands. Two hundred rounds of blank rifle and twenty rounds of blank pistol were taken—no ball ammunition whatever.

Officers messed with the Troop. The lack of a light, compact cooking outfit was severely felt. Neither the new Field Range nor a complete Buzzacott could be procured at the Post and recourse was had to home-made grates and assorted utensils, packed as compactly as possible.

As will be seen from the above enumeration, the limit of capacity of three army wagons was pretty nearly reached during the first few marches. In addition, as no assurance could be had that grain could be purchased on the reservation, I arranged for eighteen days' supply to be sent by rail to Chadron, from which point I moved it to three successive camps by sending back my wagons and in one case by hiring Indian wagons. This, of course, limited my sphere of operations and involved delay.

The farrier constructed a very convenient and compact chest for a small quantity of supplies, and Lieutenant White had built a most convenient and serviceable mess chest.

Camps:

The camp site at Ash Creek was poor. A better one can be found about a mile up stream. The Agency camp, just on the edge of town, was dusty and objectionable from previous occupancy. All the other sites were good, most of them excellent. White River water is muddy after even a light rain, but either springs or wells were available at all camps. Some difficulty was experienced in picking up wood at some of the camps, as the Indians had gleaned the fallen timber, and cordwood was bought. With a large body of troops, the question of fuel supply would become important.

Character of Country:

Between the various tributaries of the White River the

country is rolling mesa land, growing rougher as one descends the stream. In the northwest part of the reservation much of the country is Bad Lands, in places impassable. The Porcupine, Wounded Knee, White Clay and other streams head near the South Dakota-Nebraska state line and here the hills merge into broad valleys and sand hills, with numerous small lakes. Hills are rounded (except where the characteristic table formation of the Bad Lands appears), grassy and with very little timber. Elm, cottonwood, willow and other trees along the streams. In an average season and earlier in the year I was told that there are many springs in the hills. Meadows along the streams are generally fenced, but away from them there are practically no fences and travel across country would be easy except for heavy wagons. The roads and bridges are uniformly excellent at this season and are kept in good repair by the Indians, under the officials of the Interior Department. I found all the watering places I needed on all my marches. Creeks have generally steep banks, but the numerous horses and cattle have broken down approaches at frequent intervals.

We found small game in great abundance. The camp was seldom without grouse or sage hen, and there were literally thousands of ducks in the lake country. I was told that there are a few antelope and bighorn sheep on the reservation, but saw none. The magnificent scenery in the Bad Lands would well repay one for the trip.

Forage Supply:

There are traders at the Agency, Mr. J. C. Corder; at Manderson, Mr. H. P. Simmons; at Porcupine and other points, who would lay in a supply of grain on sufficient notice. Through a combination of circumstances, I did not learn this until too late to take advantage of it.

The Indians cut a great deal of excellent hay, upland white gramma, and the average price I paid was \$7. Outside the reservation the best I could do was \$12,

Ration Supply:

The Indians have many fine cattle, and by arrangement with the supervising farmers I purchased sufficient fresh beef to keep

the camp quite well supplied, in addition to the game and fish. Fresh vegetables are scarce. I made one purchase of cabbage, turnips and tomatoes.

Improvised ovens of two types, one excavated in a clay bank, the other of clay plastered over a barrel, were constructed in three camps and the command supplied with excellent fresh bread. All the flour but one sack was used, while three cases of hard bread, about half of that taken out, was brought back.

I took along a canvas water bag, the design of Mora Smith, formerly Chief Packer, Philippines Division, described in the October, 1907, CAVALRY JOURNAL, and found it extremely useful in bringing water from springs and wells at a distance from the camp.

On September 19, on reaching the camp at Beaver Creek shortly after 11 a. m., I ordered the mess closed for the day, except for the issue of bread and uncooked bacon, potatoes, onions, coffee and sugar. Both men and officers prepared their meals individually. This was done cheerfully by the men and many of them got up quite tasty meals.

Health of Command:

In policing camp, September 12, just before "Boots and Saddles," some rubbish and straw from the tents was being burned. A couple of blank cartridges had been gathered up with it and these exploded. One man was slightly cut on the hand and another received a slight cut on the foreskin. This man was taken on the wagon to Manderson and from there, on the advice of the Hospital Corps Sergeant, was sent to the Post, as his injury would prevent his riding for several days and there was a chance of infection. His injury proved to be slight. On September 18 and 19, two enlisted men and myself were sick with diarrhoea and cramps, cause not known. It did not interfere with marching and yielded to simple remedies. No other sickness.

Two horses sprained tendons on the trails leading down from the Bad Lands. They were brought to Manderson, where one was left behind in charge of Mr. Simmons, the trader, as it was deemed best to give him a few days' rest. The other was brought with the command and has recovered. Several horses

had kicks, but none of the wounds became infected and all healed promptly. The first few days out there were a number of puffs and a few small chafes, the horses being soft, but, except the two sprains mentioned and one of the kicks, no horse was off duty. After the first few days there was no trouble with the backs. It was especially gratifying to note the care the men took of their horses and the intelligent treatment they gave them. Since the Troop's return to Post there have been only two horses on sick report, one of these not being on the trip, the other a kick.

Officials and Indians:

Nothing could exceed the courteous treatment and helpful attitude of all the officials, notably Mr. J. R. Brennan, the Superintendent, and Captain B. J. Gleason, farmer. Our coming excited no alarm among the Indians, but much friendly interest. A committee invited the Troop, through Mr. Brennan, to visit the Fair at Porcupine, and also, through Captain Gleason, an elaborate "Omaha," or dance, was gotten up at Manderson September 16th.

Tactical Instruction:

The first maneuver was on September 8th, on the march from Agency to Spring Creek. Lieutenant White, with half the Troop as Reds, was sent ahead; Lieutenant Wells, with the remainder as Blues, escorted the train. The Blue mission was to bring the train through; the Red, in hostile territory, to destroy it or at least delay its march. The Blue advance guard permitted the first contact to occur within long range of the convoy, but this was promptly moved to the flank out of danger. A running fight of a mile or more developed, one incident being the Red force's getting involved in a *cul-de-sac*, from which it was only extricated in time by quick action of the Red commander, helped by the Blue commander's failure to quickly size up the situation. The decision was that the Blues had been delayed one hour.

The second maneuver was an exercise in patrolling. Lieutenant Wells, with eleven men (Red), was sent to Wakapamine Lake to outline the position of a Company of Infantry covering the road. Lieutenant White, with the remainder of the Troop

(Blue), representing a Troop of Cavalry, was given the mission to locate the enemy, determine his approximate strength (by front covered) and send in sketch of his position. Lieutenant White used a widely extended system of patrols, with a support on the road. The deployment and patrol leading was at first excellent, reports numerous and intelligent. Shortly before the Red position was discovered, however, three of the patrols lost touch with the support in rough country and at the moment of contact were not available. The patrol leaders were later disciplined. The First Sergeant, with the remaining men, did some crafty work in the reconnaissance of the position. The decision was that the Blue force had fulfilled its mission of gaining information, but through lack of support might have been cut off and the information gained made unavailable.

The third maneuver, September 13th, was a simple encounter, troops on the march. The Red force marching south and the Blue force marching north, the Red superior, were started about two miles apart and the first contact timed so as to permit the Blues to seize a commanding mound. This plan worked out and the Blues held their position against the Red dismounted line, until a small party of Reds, mounted, moved through a deep ravine under cover to the left flank of the hill and charged as foragers from within 150 yards and completely surprised the Blue line, also capturing the led horses. The flank movement, under a Sergeant, was well timed and a complete success. Decision was that the Blues were driven off the field.

The fourth maneuver, September 17th, was an outpost affair after dark. The camp lay near the toe of a deep horseshoe bend of Wounded Knee Creek, which was declared impassible. The neck of the horseshoe was about 150 yards wide. Lieutenant White, with twenty men, Red, left camp before dark and went about two miles from camp. Lieutenant Wells, with twenty-five men, protected the camp. He used two Cossack posts near the stream at either side of the neck and a patrol between, the line about 300 yards from camp. The attack began at 7:45 P. M. and was at first a feint on the left, then the whole line was engaged by a few men in front firing rapidly, while the main Red force endeavored to rush the right flank. The ruse succeeded partially, as the Blue support was hurried forward rather too soon

and got somewhat out of hand, but the Red assaulting force stayed too long under shelter of some buildings which covered their movements and did not attack till the Blue support had again fallen back. A few Reds penetrated to the horses, but met the camp guard, and their attack failed. Decision was that the Reds had failed to break the line.

On September 22d, at sharp midnight, I had "Call to Arms" sounded without previous warning. All men were in ranks under arms and the First Sergeant had reported at 12:05. I then had camp struck, wagons loaded and at 1 A. M sharp started for Fort Robinson, where the Troop arrived as first call for reveille was being sounded.

Cost of Trip:

The total amount allotted was \$585.00. The total amount expended was \$177.40. This does not include the items of transportation of wounded man, expense of shipping the grain by rail to Chadron and expense of feeding and returning the lame horse to the Post. These three items will probably amount to \$50.00 more.

Recommendations:

1—That a canvas water bag be issued. Its advantages over bulky, perishable cans is obvious, its utility has been demonstrated and it is of almost daily need in the field.

2—That the heavy and bulky old style field ranges be called in and the new pattern, such as now used at Fort Riley, be substituted, or, in lieu thereof, a nesting mess outfit along the lines of the ones I advocated in the October, 1907, CAVALRY JOURNAL, which has received very favorable report from the Cavalry Board.

3—I suggest that the question of making the reservation a source of supply for hay for this Post be considered. The hay is excellent, far superior to the sandhill hay the Post is receiving; the Indians cut and cure considerable now, and I was told by Captain Gleason that they could easily be induced to make more if they had a market; there is plenty of grass; it is close to the N. W. R. R. and the Post, and the price paid the Indians, from \$6 to \$7, is a consideration.

4—The old pony stock, while not extinct on the reservation, is disappearing and is being replaced by high grade mares, furnished by the Interior Department, and their progeny by good stallions. These Ogallala Sioux still regard horses and cattle as their principal wealth, and they have learned to be discriminating. I saw, at the Fair at Porcupine, several thoroughbreds of a very high class, imported from the East as racing stock. I believe that if these Indians and their advisers understood that there was a perpetual market at a good price for cavalry horses they would breed for that market. The Indian, unlike the farmer of today, wants a saddle horse, just as the cavalry service does, and he would take very kindly to the idea of breeding for the service. A Board, buying in open market on the reservation, could soon demonstrate the present possibilities and consultation with the authorities of the Indian Bureau would determine future expectations.

5—I am informed by Mr. Brennan there are between 5,000 and 6,000 Indians on his allotment rolls. The basis of allotment is a section to a husband, a half section to a wife and a quarter section to each child born up to the date of final allotment. These allotments will take up practically all the land on the reservation of any value, excluding the sandhills and Bad Lands, and the Indians will remain under tutelage for, I believe, twenty-five years more. Consequently, the condition as to enclosed land are not very likely to change materially, especially if the Indians find it to their advantage to use their own pastures rather than to lease. These considerations suggest the use of the reservation as a maneuver ground, by arrangement with the Interior Department. The advantages, besides the economy, would be: extensive territory, permitting operations of several days' duration; railroads paralleling the border on the north, west and south, affording bases for independent camps; good roads and some local resources; diversified country, presenting most of the important military features except forests and, at present at least, freedom from the annoyance of liquor.

NOTES ON THE PROGENITORS OF CERTAIN STRAINS OF THE MODERN AMERICAN HORSE.

BY VETERINARIAN COLEMAN NOCKOLDS, FIRST CAVALRY.

(Continued from the November, 1910, Journal of the U. S. Cavalry Assn.)

THE supposition that the horse is indigenous to Great Britain seems to be substantiated by a plentitude of conclusions arrived at by the paleozoologist and hippogonist.

Since the days of Cuvier (1769-1832) naturalists have been speculating about the origin of the domestic horses; they have failed to detect any characters in the bones or teeth by which the domestic breeds could be distinguished from each other, or from the fossil horses of the Pliocene and later deposits.

Zoologists, up to the last century, took for granted that all the horses living under domestication are descended from one species, and that no breed of horses possesses any distinctive characteristics which serve to distinguish it from other breeds.

Hayes' "Points of the Horse," page 432, says: "Breeds, though possessing no distinctive points, may have had a multiple origin." Some naturalists, though deriving all domestic horses from one species (*Equus fossilis*), admit that in prehistoric times, say in the Bronze Age, there were three distinct varieties—the Steppe, Desert, and Forest types.

But some zoologists go further and assert that the domestic horses include three or four wild species amongst their ancestors, and that fairly typical representatives of the wild species domesticated in prehistoric times may still be found amongst the unimproved native races of Europe and Asia.

Believers in the single origin of horses living under domestication, as a rule, say that the original horse—the horse tamed during the Stone Age—is now represented by *Equus przewalskii*, the wild horse, which still survives in Mongolia.

Believers in the multiple origin of domestic horses admit that a species (*E. fossilis*) allied to the Steppe horse (*E. przewalskii*) took part in making modern breeds; but, in addition to an ancestor of the Steppe type, they mention as possible ancestors: (1) *E. sivalensis*, a 15-hands horse, which in Pliocene times lived amongst the foothills of the Himalayas; (2) *E. robustus*, common in Europe during the Solutrian period of the Early Stone Age; and (3) *E. agilis*, which at the beginning of the Quaternary epoch ranged from North Africa to England.

To the *E. fossilis*, commonly regarded as the ancestor of all horses now living, Owen directs attention in his work on "British Fossil Mammals." He says: "The best authenticated associations of the bones of the extremities and teeth clearly indicate that the fossil horse had a larger head than the domesticated races, resembling the wild horses of Asia."

Assuming that all the true horses living in England during the early part of the Pleistocene period had large teeth, it is reasonable to surmise that the relatively smaller jaws, and the teeth of the modern breeds, have been modified by domestication.

That small Equidae lived in the south of England along with the mammoth is made evident by teeth and limb-bones in the British and other museums. Doubtless the teeth and limb-bones, which were found in a super-cretaneous drift at Brighton, belonged to a small horse built on the lines of, and but little taller than, long, thickest, short-legged modern Shetland ponies; and that the teeth from Chatham and Oreston and the cannon bone from Kent's Cave, Torquay, belonged to a slender-limbed horse, about twelve hands high, which in make closely resembled an Exmoor pony.

The drift at Brighton is known as the "Elephant Bed," on account of the abundance of mammoth remains found there; it also contained the remains of horses which belong to the thick-set, broad-browed species (*E. robustus*), so largely represented in the bone mounds left by Palaeolithic man at Solutre; the Oreston horse as clearly belongs to a slender-limbed, fine-headed northern variety, to which ponies of the Celtic type belong.

The skeleton of a horse discovered during the exploration of the Roman Fort at Newstead belonged to a fine-boned twelve hands horse, with molars which in size and pattern agree with

the molars of the horse from the Oreston fissure, the metacarpal measures 214.5 mm. by 29 mm., thus differing but little from the Kent's Cave metacarpal, which has a length of 220 mm. and a width of 30.5 mm.

In the Newstead horse the length of the metacarpal is 7.21 times the width; in the horses of the "Elephant's Bed" type the length of the metacarpal is from 5.5 to 5.8 times the width. The slender-limbed twelve hands Newstead horse, with molars like those from Oreston, and cannon bones like one from Kent's Cave, has a skull which, except in size, agrees with the skull of the smaller kinds of Arabs, as in the Newstead horse the skull is narrow, and the face forms an angle of about 8 degrees with the cranium; in the horses of the "Elephant Bed" type the face is short and broad, and in line with the cranium. If the smaller Pleistocene species survived, as is likely, in nearly a pure state, up to the end of the first century, it is plausible that nearly pure ponies of the Oreston type (*E. agilis*) may still occur amongst the unimproved native horses of the Outer Hebrides, Wales, Faroe Islands, Iceland, Shetland, Norway, Exmoor and the New Forest.

The modern Welsh ponies may be regarded as the modified and somewhat mixed descendants of the slender limbed race, which in prehistoric times occurred in the south of England, along with the mammoth and other large ungulates. By crossing Exmoor, Welsh, Connemara, Hebridean, Shetland, Iceland and other northern ponies with each other, and with Arab, Java and Battak ponies, to the extent of somewhat forty crosses, Prof. J. Ewart Cossar has succeeded in obtaining a type of ponies which have reverted either towards the "Forest" or "Steppe" ancestors, or in the desired direction, *i.e.*, to the ancient type represented by the small horse from the Roman Fort at Newstead—the horse with molars like those from the Oreston Cavern and metacarpals like the one from Kent's Cave. Of the forty crosses, three in make and color, all but realize one's conception of the slender-limbed species of the late Pliocene and early Pleistocene deposits. Of these three, one, a yellow-dun colt, looks as if it belonged to a pure and ancient race. This colt was obtained by crossing Connemara, Welsh, Iceland, Bara, Shetland and Arab ponies.

A bay Connemara was first crossed with a black Welsh cob (Express IV). The Connemara-Welsh cross (black) put to a flea-bitten grey Connemara produced a brown colt. This brown Connemara-Welsh mixture was put to a cross (bay dun) between a yellow-dun Iceland mare and a brown Barra stallion. The Connemara-Welsh-Iceland-Barra mixture (brown) was put to a cross (black) between a bay Arab and a dark brown Shetland pony. This animal is thought to be a very accurate restoration in color, and habits of a remote ancestor; in its habits it has always differed from its companions; it has always been alert and active, and carries the tail high like Arabs, and moves the head from side to side like zebras and other wild equidae when escaping from an enemy. After it was weaned this colt often wandered about by itself, and regardless of fences, periodically visited fields around, in which the grass was more plentiful. Further evidences of reversion are found in the callosities; the dam has six, the sire eight, but the colt has only two.

It is of interest to observe that by those who adhere to the single origin, of all domestic breeds, the pony is regarded as a dwarfed horse, and the horse as an enlarged pony. But the more ponies are studied the more evident it becomes that they have little or no connection with either the wild horse of Mongolia or the *E. sivalensis*, the fifteen hands horse, which in the Pliocene times lived amongst the foothills of the Himalayas.

At the beginning of the Miocene Period there were no horses over six hands, and even at the beginning of the Pliocene Period the largest horse known was only eleven hands. During Pliocene times several large horses were evolved, but even at the beginning of the Quarternary Period—after man had appeared on the scene—there were several species which probably never measured more than twelve hands. The descendants of wild ancestors which never exceeded, say, thirteen hands may be regarded as true ponies.

If the progeny of wild species under thirteen hands are regarded as true ponies, it follows that in prehistoric times there were two true species of ponies in the south of England, a species (not unlike the modern Exmoor pony) represented by the Oreston teeth and the Kent's Cave cannon bone, and a species (not unlike the stout, broad-browed modern variety of the Shetland

pony, and the long-backed, elk-nosed, thick-set Iceland ponies) represented by the teeth and limb bones from the "Elephant Bed."

In addition to the "Forest," the "Oreston" and the "Prejvalensis" types, which have taken part in making the present breeds of horses, there is no doubt that the *E. sivalensis* from the Siwalik Hills of India, and the *E. namadicus* from the Narababda Valley, India, have also contributed their share, the former having been mainly concerned in giving size to the English race horse, while probably the latter helped to produce the huge, coarse-headed shires and other heavy breeds.

The facts are established by the testimony of many Roman historians and others that when Caesar invaded Great Britain, B. C. 55, the landing of the Roman troops was opposed by bodies of horsemen, besides chariots and infantry; it is also certain that the inhabitants of the British Islands had horses which served as beasts of burden before the Roman invasion. Taking into consideration the condition of the country at that time, the bad state of almost non-existent roads, and that vehicles used were of a cumbrous structure and driven at furious rates, it is reasonable to conclude that the horse of this period must have been both active and powerful.

In the ancient British language Rhediad is the word for race—rheder, to run—and rhedecfa, a race. These spring from the Gaulish rheda, a chariot. It seems by this as if chariot racing was introduced from Gaul at a very early period, and there are reasons for believing that horses were introduced into Great Britain by the Gauls and crossed with the native animals. It is an historical fact that the Gauls occupied and overran, partly or wholly, France, Spain, Northern Italy and the western part of Germany as well as the British Islands. Perhaps those Gauls who ravaged Upper Greece and Northern Italy, almost before the existence of authentic history, or their ancestors, brought horses that had come from the inland to the northward of the Alps.

Even without other strains, the native animals at the time of the Roman invasion were as large as the Welsh pony of today, and quite able to act as chargers for the warriors of that period.

In his larger works on the horse, Youatt states "Caesar

thought them so valuable that he carried many of them to Rome; and the British horses were, for a considerable time afterwards, in great demand in various parts of the Roman empire."

There is no doubt, that during the occupation of England by the Romans, the British horse was crossed to a considerable extent, by the foreign horses of the Roman mercenary or allied cavalry. It has generally been stated by writers on this subject that the British horse was crossed by the Roman horse. This is a mistake, as the cavalry employed by Caesar were mounted chiefly on pure barbs, certainly not on Roman or Italian horses, which records show to have been very inferior kind of animals.

After the Roman evacuation of England, and its conquest by the Saxons, considerable attention was paid to the English breed of horses, and during the reign of Alfred running horses were imported from Germany; by this is meant light horses, for the road and chase and not those kept especially for racing. It was not until the reign of the first Charles that horses were kept exclusively for racing.

About this time and after English horses were highly prized on the continent, which shows that the horses presented to Athelstan, sent from Germany by Hugh Capet, had been turned to good account.

The English themselves were, however, anxious to preserve the monopoly of the breed, for in 930 A. D. a law was passed prohibiting the exportation of horses.

During Athelstan's reign horses were held in high estimation, and those bred in England were supposed to be much superior to those of other countries. Many animals were imported at this time, chiefly Spanish, which shows the desire of the English, even at that early period, to improve the breed.

"Shortly before the Norman conquest a horse was valued at thirty shillings, a mare or colt at twenty shillings, an ox at thirty pence, a cow at twenty-four pence and a *man* at a pound." Money, it should be noted, then being equivalent to at least eighteen times its present value.

William the Conqueror took great pains to improve the English breed, introducing many fine animals from Normandy, Flanders and Spain. This monarch owed his success at Hastings chiefly to his cavalry; his own horse was a Spanish one.

In this reign we have the first notice of horses being employed in agriculture.

The first Arab horse was imported to England during the reign of Henry I. It was presented by Alexander I, King of Scotland, to the church of St. Andrew's with many valuable accoutrements, and a considerable estate. What ultimately became of this animal or for what purposes used there are no records to show.

It is to be regretted that the ancient historians were exclusively monks and churchmen, as they naturally paid little attention to the breeding of horses, which were held to belong to war rather than agriculture, and were forbidden to their order. Also until, comparatively speaking, very recent times, no heed has been given to the statistics of agricultural or animal improvement, and nothing, beyond a casual and passing notice, is mentioned of such matters, even by the best historians.

The first race course was established in London during the Twelfth century. It was called Smithfield, and was both a horse market and race course.

Fitz-Stephen, the chronicler of this period, says:

"When a race is to be run by this sort of horses and perhaps by others which in their kind are also strong and fleet, a shout is immediately raised, and the common horses are ordered to withdraw out of the way. Three jockeys, or sometimes two, as the match is made, prepare themselves for the contest, such as are used to ride, and know how to manage their horses with judgment, the grand point being to prevent a competitor from getting before them. The horses, on their part, are not without emulation; they tremble and are impatient, and continually in motion. At last, the signal once given, they hurry along with unremitting velocity. The jockeys, inspired by the thought of applause and the hope of victory, clap spurs to their willing steeds, brandishing their whips, and cheering them on with their cries."

During the reign of Richard I many horses were imported by the crusaders, but not with the idea of improving the breed, the system of interbreeding animals being a matter, then, entirely uncomprehended. Also the superiority of the oriental breed was not acknowledged, as the Arab horse of that or any other day

was and is utterly incompetent to support the weight of steel-sheathed men-at-arms, who, during the feudal ages, constituted the real force of European armies. It is on record that the light cavalry of Asia and Arabia never once stood the shock of the barbed chivalry of the West, while on one occasion, before the walls of Jaffa, the English Richard, with seventeen knights, rode furiously along the front of sixty thousand Turkish horse, from right to left wing, without meeting an adversary who dared to encounter his career.

The Eastern horses, imported by the crusaders, were used for the chase, falconry, procession and other kinds of pomp and pleasures.

As it was, in those days, considered a reproach for a gentleman to ride a mare, they were doubtless stallions which were introduced and as such, no doubt were crossed with the native horse.

King John paid great attention to the improvement of horses for agricultural purposes. He chiefly imported Flemish horses, and on a single occasion one hundred chosen stallions were imported.

Although from time to time horses were imported either with the idea of improving their size, shape or speed, there are no reliable records of such importations. It is known that about a hundred years later King Edward II, who was particularly fond of horses, purchased thirty war horses and twelve heavy draught horses, and Edward III devoted one thousand marks to the purchase of fifty Spanish horses. Of such importance did he conceive this addition to the English, or mingled blood then existing, that formal application was made to the Kings of France and Spain to grant a safe-conduct to the troop.

When they safely arrived at the royal stud, it was computed that they cost the monarch no less than thirteen pounds six shillings and eight pence per horse, equal in value to one hundred and sixty pounds at the present day. This monarch received a present of two fencing horses from the King of Navarre, and gave 100 shillings to the person who brought them.

In the reign of Richard II, horse-jockeyship and the tricks of dealers had increased to such an extent that a special procla-

mation was issued, regulating the price of animals of various kinds, and fixing a maximum value. Like all other sumptuary laws and prohibitory statutes affecting to regulate trade, this proclamation proved wholly useless and fell dead. It is curious, however, as proving the great increase in the value of horses, since the preceding reign, and showing what were five hundred years ago, and what still are, the chief breeding districts. It was ordered to be published in the counties of Lincoln and Cambridge, and in the north and east ridings of York. The price was restricted to that determined by former sovereigns. Exportation was strictly forbidden, especially to Scotland, as a kingdom with which England was constantly at war; and it is remarkable that, even in the time of Elizabeth, it was felony to export a horse to Scotland.

These prohibitions prove two things. First, that the people and monarchs of England had now become fully awake to the value of race and breed in horses; and second, that the superior quality of English horses was thus early acknowledged abroad, and that the demand for them was supposed to be greater than the superfluity.

During the reign of Henry VII at the close of the Fifteenth century, the exportation of stallions was prohibited, but mares more than two years old, under the value of six shillings and eight pence, could be sold to go abroad. At this time the English had large herds of horses in their pastures and common fields, and when the harvest was gathered in, the cattle of different proprietors fed promiscuously together, on which account the horses were castrated.

This was, therefore, the age of geldings, for the entire horses which were kept for breedings were confined in stables or on lands which were enclosed.

Under the succeeding sovereign particular attention was paid to the raising of a strong breed of horses, and laws were instituted to enforce the carrying out of that design.

To secure size and strength in the progeny, it was thought necessary to select the sires and dams of certain proportion, size and mould, and not to permit any stallion or mare to breed except under these restrictions. A law was accordingly promulgated for that purpose.

It was decreed: "That no person should put in any forest, chase, moor, heath, common or waste any stoned horse above the age of two years, not being fifteen hands high, on pain of forfeiture; and that all foals, fillies or mares likely to breed undersized or ill-shaped produce, should be killed and buried." By this statute of Henry VIII, any person might seize any horse of under-size, by going to the constable of the nearest town, and require him to go with him to bring such horse to the nearest pound, there to be measured by such officer, in the presence of three honest men, appointed by the officer, and if the animal was not up to the standard required by law, such person might take it for his own. Infected horses were required to be kept away from others, and by this same act it was provided: "That no person shall have or put to pasture any horse, gelding, or mare, suffering from mange, scab or other infecting diseases, on pain of ten shillings, and such offense, as other common annoyances, shall be punished by forfeiture to the Lord of the Leet."

Henry also compelled, by an act, men of rank, archbishop, and every duke to keep seven trotting stone horses for the saddle, each of which had to be over fourteen hands high. Every clergyman possessing a benefice to the amount of one hundred pounds per annum, or a layman whose wife wore a French hood or a bonnet of velvet, had to keep one trotting stone horse, under the penalty of twenty pounds; and there were other regulations equally singular and unique.

This monarch did not confine his attention merely to the establishment of a generous and serviceable breed of horses; he also had provided from different countries skillful and experienced persons to preside in his stables, in order that through them the principles and elements of horsemanship might be disseminated throughout the nation. He compelled the maintenance of so great a number of full-sized mares and stallions, in every deer park, and in every rural parish of the realm, as must have tended to bring about an increase of animals, bred of powerful and well-formed parents, which were no doubt very superior to the worthless jades destroyed by the existing laws.

It was in this reign that horse-racing became an acknowledged sport, and part of a series of regular and pre-devised entertainments. Annual meetings and fixed prizes were first es-

tablished, showing that horse racing in its proper form is closely, almost indivisibly connected with the improvement of the horse.

During the reign of Edward VI horse stealing was first made a capital offence, as a result of the advisers of the youthful monarch, becoming convinced that horses had become more valuable than ever before.

The term *Great Horse*, used by writers when describing events of this period, means no more than war horse, as opposed to palfrey or running horse, and has no especial reference to the size, bulk or breed of the animal, though doubtless the war horse was a larger and heavier animal than that used for mere amusement.

It is a term familiar to any one acquainted with the old English writers, to say of a young gentleman, who had finished his physical education, that he could fence and "ride the great horse," meaning that he could perfectly ride the manege.

It is true that the inferior men-at-arms, at this time, were mounted on Flemish horses, but the princes and nobles and other knights of renown rode Spanish or English horses, with a considerable strain of desert blood, possessing, through Flemish and other strains, bone and bulk sufficient to carry warriors in their panoply.

The Flemish horse of that day bore no resemblance whatever to the dray horse of today, though he be also of Flanders descent, any more than did the "Flanders mares," which were the highest aspiration of the extravagant court beauty in the days of Pope, or the animals upon which the Dutch and English troopers were mounted, when with Marlborough at their head, they rode over the superb French gendarmerie of Maison Roi at Malplaquet.

An annual race was run at Chester during Henry's occupancy of the throne; the prize was a wooden ball embellished with flowers, fixed upon the point of a lance. This diversion was repeated in the presence of the mayor of the city, and was celebrated on the Roodee, the identical spot where races are held at this day. These trophies were provided by the company of saddlers. In the year 1540 a silver bell was substituted for the former prize, under the title of St. George's Bell. Hence comes the common phrase to "bear the bell," as equivalent to be the victor.

It seems that during Elizabeth's time, for some reason not clearly explained, both the number and breed of horses in England appeared to have degenerated, for it is stated that when she mustered the whole of the militia of her realm to resist the invasion of Don Phillip, she could collect but three thousand horse. Saddle horses and carts were then used as means of conveying persons of all distinctions. The apparent scarcity of horses at this time may have been the result of the prohibition, enforced during the Tudor reigns, of the keeping of bodies of armed retainers by the great nobles. This might be the result of the decline of feudal militia, and the absence as yet of a regular cavalry force, rather than to the decay, to so enormous an extent in so short a time of the equestrian resources of England. The people of England in their habits continued, both high and low, and still to this day continue, to be singularly equestrian, using the saddle infinitely more, and light vehicles immeasurably less, than the corresponding classes of people of the United States. Only a few years earlier than this time, at the period of the usurpation of Jane Gray and Dudley, the protector of Northumberland was at the head of two thousand horse, and Queen Mary of a yet larger body, while the Princess Elizabeth, at a few days' notice, levied a thousand horse to defend her own and her sister's rights.

With the accession of James I a great improvement was systematically wrought in the English breed, and from this period breeding was constantly and progressively attended to. Horsemanship was still more practiced and encouraged, and many improvements and refinements in the art were introduced by the different masters, who now taught it throughout Europe. James purchased Markam's Arabian horse at the then extraordinary price of five hundred pounds. He, however, was found to be deficient in speed, and the Duke of Newcastle, who then managed the King's hunting and racing stables, having taken a dislike to the horse, his breed does not seem to have been tested, and for a time Arabians fell into disrepute.

However, from this reign the history of English racing and of the English race horse may be held to commence, although no existing pedigrees trace so far back.

Race meetings were regularly held at Newmarket, Croydon,

Theobald's on Epping chase, Stamford, various places in Yorkshire, and, as of old, at Chester. A regular system of training the horses, and of running according to weight, age and distance, was now introduced. Pedigrees were kept, the best and stoutest horses and mares being kept for breeding, and their progeny being for the most part set aside for racing purposes.

The races of King James were in great part matches against time, or trials of speed or bottom for absurdly long and cruel distances.

There was at first no course marked out for the race, but the contest generally consisted in running across the country, and sometimes the most difficult and dangerous part of the country was selected for the exhibition. Occasionally the present steeple-chase was adopted with all its dangers and persons were appointed to cruelly flog along the exhausted and jaded horses.

Mission, in his travels in England, date about 1641, says: "The English nobility take great delight in horse races. The most famous are usually at Newmarket, and there you are sure to see a great many persons of the first quality, and almost all the gentlemen of the neighborhood. It is pretty common for them to lay wagers of two thousand pounds sterling upon one race. I have seen a horse, after having run twenty miles in fifty-five minutes, upon ground less even than that where the races are run at Newmarket, and having won the wager for his master, that would have been able to run anew without taking breath, if he, that had lost, had ventured to run again."

In Hinde's Life of Master John Bruen, a Puritan of great celebrity, 1641, p. 104, the author recommends "unto many of our gentlemen, and to many of inferior rank, that they would give over their foot races, horse races, etc."

A proclamation was issued by the Protector Cromwell, 8th April, 1658, "prohibiting horse races in England and Wales for eight months."

The prejudice of the Puritans compelled the Protector to issue this proclamation, at the same time he was an ardent lover of the horse, and an earnest promoter and patron of all that belongs to horsemanship. He purchased of Mr. Place, afterwards his studmaster, the celebrated "White Turk," still recorded as the most beautiful southeastern horse ever brought into England,

and the oldest to which our present strain refers. To him succeeded Villiers (Duke of Buckingham), Helmsley Turk, and to him Fairfax's Morocco Barb.

It is to these three horses that the English race horse of the old time chiefly owes its purity of blood, if we except the Royal mares specially imported by Charles II, to which it is—mythically, rather than justly—held that all English blood should be traced.

Of all the succeeding importations, those which are principally known and referred to, as having notoriously amended the horse—by proof of stock begotten of superior qualities, and victories on the turf through long generations—but few are true Arabians.

There were, it is true, the Darley Arabian, the Leeds Arabian, Honeywood's White, the Oglethorpe, the Newcome Bay Mountain, Combe's Gray, the Damascus, Cullen's Brown, the Chestnut, the Lonsdale Bay, and Bell's Gray Arabians; but what is generally called the Godolphin Arabian was a Barb, not an Arab from Arabia proper. Against these we find Place's White Turk, D'Arsey's Turk, the Yellow Turk, Lister's or the Stradling Turk, the Byerly Turk, the Selaby Turk, the Acaster Turk, Curwen's Bay Barb, Compton's Barb, the Toulouse Barb, Layton's Barb mare, the Royal mares, which were Barbs from Tangier, and many other Barb horses, not from the Eastern desert, heading the pedigrees of our best horses.

It was during his exile, in 1658, at Antwerp, that the Duke of Newcastle wrote his "Methode et Invention Nouvelle de Dresser les Chevaux," giving his views on various breeds of horses which he knew.

He praised the Barbs, and mentions that they often upset the Flemish horse in the tilt. He also writes of the solidness of the bone of the Barb as compared with all others: "Having a hollow scarcely large enough to insert a straw, while on the other hand in the same bone of a Flanders horse you may almost insert your finger." This is a fact as regards our thoroughbreds as compared with all other breeds in this country.

Of the Barbs, he says: "They cannot run against the English horse." They have not the size, the bone, the muscle, or the shape, if we except the beautiful head, the fine neck, thin withers, and admirable long, deep and sloping shoulders, which are the

inevitable characteristics of the race. Therefore, all men who breed with an eye to profit, prefer to put their mares to known English winning horses, proved getters of winners, of unquestioned bottom and stoutness, rather than to try stallions of the desert blood, concerning which nothing is known beyond the attested pedigree, and the visible shapes.

This opinion has been held by horsemen, who have had the least experience with horses of oriental blood, such as true Arabians, Barbs, Turks, Persians and others, from the time of the first James to this day; although the fact is universally admitted that the whole original excellence of the British thoroughbred is attributable to the blood of the desert, and that no horse is held to be thoroughbred unless he can trace in both lines, paternal and maternal, to that blood. Although many horses of various Eastern and African breeds have been constantly imported both into England and America during the last two hundred years, no one of them has improved the breed of race horses within the last century, or perhaps two centuries. So low at present does the modern Arabian blood stand in the estimate of English turfmen that a horse begotten by a Turkish Arab, Barb, or Persian stallion, on an English thoroughbred mare, receives in the Goodwood Cup and other races in which allowances are given, 24 pounds from all English bred racers; and a horse begotten by such a stallion on a mare of any one of the same races, receives an enormous advantage of 48 pounds. The fact that even with this enormous advantage, no horse so bred ever wins any race or plate of consideration, shows that the distate of blood is not a prejudice, but is founded on valid reasons.

Why this should be so is not clear. It appears, however, to be a certain and fixed rule of breeding, that in order to improve any race the higher and pure blood must be on the sire's side, not on the dam's; and that he must be the superior animal. It is indisputable that the English and American thoroughbred horse is, in all respects, but especially in size, bone, power and beauty, a superior animal to any of the oriental races, and consequently that his blood cannot be improved by any further mixture of that strain. These facts are no doubt the result of intelligent selection of sires and dams, more generous nutriment, better housing and clothing, and greater care given them by English and American horsemen.

No intelligent sportsman doubts that the English or American thoroughbred horse can beat the Oriental horse anywhere and everywhere, and in all respects. In Hindustan, at the European races, the whole-bred and even the half-bred English horses invariably beat the Arabs. In comparatively recent years an Irish mare, named "Fair Nell," disgracefully beat all the Egyptian Barbs of Ali Pasha, who had challenged the English Jockey Club to a trial match between English and Oriental horses for a prize of \$50,000.00. Although the Irish mare "Fair Nell" was selected, she was not a racer of any note or distinction, and there is some dispute whether she was or was not actually thoroughbred. The result was, however, that vastly to the disgust and disappointment of the Egyptians, she defeated all the best Arabs of the Pasha's stud with the greatest ease and this in a race of eight miles over a rough, stony and sandy desert course.

Usually when one imports an Arabian he asserts that his horse, and his only, is a real and superior blooded animal. But of all the animals imported of late years, which have been gifts of Oriental potentates to crowned heads or presidents, not one has been a valuable creature.

On the restoration, the improvement of the breeds of horses was encouraged and advanced with renewed spirit. The Stuarts were a horse loving and sport encouraging race, and England, and through her, America, owe to them in great part the blood of matchless steeds.

In the reign of Queen Anne, the last of that house who sat on the royal throne of England, the English thoroughbred horse may be regarded as fully established. During this reign the first racing calendar was published in England, with nearly seven hundred subscribers.

During this period the American colonies were planted, and English horses of pure blood were at a very early date introduced. In those regions, where the settlements were principally made by men of birth, attached to the cavalier party, race horses were kept and trained, and race courses were established. A well authenticated stock of thoroughbred animals, tracing to the most celebrated English sires, many of which were imported in the early part of the Eighteenth century, were in existence considerably before the outbreak of the old French war.

LONG DISTANCE RIDES AND RAIDS.

BY LIEUTENANT COLONEL EZRA B. FULLER, U. S. ARMY RETIRED.

LONG distance rides, as one writer has said, have always been a favorite topic for poets and writers of romance. Numerous accounts of such rides, more or less incomplete and unsatisfactory as to details, are given in many books and periodicals. A careful examination of over two hundred of these accounts of notable rides that the writer has accumulated shows that but very few of them are of any practical value to the cavalry student. So many of these recitals fail to give any particulars whatever as to the gaits used, the halts made, the weather conditions, the condition of the roads or trails, the quantity and quality of forage obtainable, the care of the horses, etc., etc., that no practical deductions can be made from them as a guide to those cavalymen who may be required to cover long distances in a short time in future campaigns.

This same remark applies also to the published and official accounts of many of the great raids that have been made in time of war and it is only by tracing the routes on maps, to ascertain the distance, and by an examination of many reports, to discover the time taken in making the raid, that the particulars as to these points may be determined. Also, so many of these official accounts fail to report the forage carried or obtainable, the gaits used or the condition of the horses and men on their return that it is difficult to judge as to the success or failure of the raid in these respects, although in other regards, especially as to the results of engagement, the property destroyed or captured, etc., the reports are generally complete, if not exaggerated.

There are some notable exceptions as regards this failure to report particulars of rides and raids and to these especial attention will be paid in what follows in order that we may deduce

the best practical methods for marching detachments or larger commands over long distances in the shortest practicable time and at the same time bring in the stock in good or fair condition for future service.

Of course, it often happens in time of war that the conditions under which a hard ride or raid is made are such that horses and men must be pushed to the utmost limit of their endurance and that the question of their serviceability after the duty has been successfully performed must be neglected. At the same time, in all but the most extraordinary cases, it should be borne in mind that generally the condition of the command for immediate service after completing the ride, raid or forced march is an important factor to be considered. It is said that Mr. Lincoln, in commenting upon the extraordinary loss of horses during the Civil War, remarked that generals could be supplied by the stroke of the pen, but that horses cost money and were hard to procure.

The subject of long distance rides, either by individuals, squads, detachments or larger commands—including forced marches—will be first discussed and later that of raids.

The data for that part of this paper relating to rides has been gathered from various sources, but principally from the following books and periodicals: *The Cosmopolitan* for January, 1894, an article by Captain Charles King, U. S. A.; *Outing* for April, 1893, by Major Henry Romeyn, U. S. A.; a recent number of *Bailey's Magazine*; *The Spectator*, London, for October 8, 1892; *Chambers Journal* of November 26, 1892; *Militar Spectator* for March, April and May, 1906; *Allgemeine Schweizerische Militar Zeitung* of April 14, 1906, from "Riders of Many Lands," by the late Colonel Theo. A. Dodge, U. S. A., and last but by no means least, former numbers of the U. S. CAVALRY JOURNAL.

It is remarked that this last source of information is not the least important of those mentioned for many of the earlier numbers of the CAVALRY JOURNAL, commencing with the very first, contain several important accounts of rides and forced marches, how they were made and how cavalry should be handled in such cases. These articles were by old and experienced officers who had participated in many rides and raids during our Civil War and on the plains since that war, and who knew how cavalry

should be marched not only in making forced marches but ordinarily.

Those of our readers who have not read that delightful book by Colonel Dodge, "Riders of Many Lands," should avail themselves of the first opportunity to do so as it not only contains accounts of numerous exploits of the American cavalry, but also gives many intensely interesting descriptions of horses and horsemen of many countries.

Of these rides of which there are reliable accounts, a large majority were made by officers of various foreign armies, either as races or for the purpose of testing the staying qualities of the different breeds of horses. These generally had the approval and encouragement of the higher authorities of their War Departments, and, in some cases, of the Emperors of the respective countries to which the officers belonged.

Many of these endurance races, three of the most important ones in particular, were dismal failures as regards the purpose for which intended and degenerated into brutal tests of showing how played-out horses could be kept going under whip and spur as well as under the influence of stimulating foods and drugs. The result has been that these higher authorities have withdrawn their approval of such races and have refused permission, in at least two instances, to permit their officers to participate in them.

The three endurance races mentioned are those from Berlin to Vienna and from Vienna to Berlin, participated in by nearly two hundred officers of the German and Austrian armies, in 1892; that from Brussels to Ostende, in 1902, in which sixty-one officers took part and that from Paris to Deauville, in 1903, with thirty-two officers as participants.

In the Berlin-Vienna race, the German officers started from Berlin and the Austrians from Vienna, those from each starting point leaving in pairs every fifteen minutes until all were on the road. Each officer was free to choose his own route, take his own gaits and make such stops as he chose, the only stipulation being that he must make the trip in eighty-five hours on one horse or drop out. The weather was fine, the month being October, and the roads all good. The distance over the shortest route between the two places is given as being about 360 miles, the published accounts varying from 356 $\frac{1}{4}$ to 362 $\frac{1}{2}$ miles.

The winner, Count Starhemberg, an Austrian lieutenant, riding an English half-breed horse, 9 years old, made the distance in seventy-one hours and twenty-six minutes, a little under three days. Lieutenant V. Reitzenstein of the German army made the ride in seventy-three hours and six minutes and was second in the race. Lieutenant v. Miklos, Austrian, came in third in seventy-four hours and twenty-four minutes. All three of these horses died within a day or two after finishing the race. Lieutenant Hofer of the Austrian army, riding a Hungarian half-breed mare, eight years old, was fourth in the race and his horse is reported to have been in good condition after having made the distance in seventy-four hours and forty-two minutes. Of the 199 horses that started in this contest, fifty-four failed to come in, they either having been distanced or played out. Twenty-seven horses died from the effects of the race and many others were injured.

One writer has said of this endurance test: "In a majority of cases the German and Austrian officers proved themselves hard riders but poor horsemen. The disasters, so repugnant to feelings of humanity, indicate the inability of the riders to measure the endurance of their mounts. Any man who can keep in the saddle can ride a horse to death. His sole requirements for the feat are a hard heart and a strong whip, but it requires a horseman in the highest sense of the word to get out of his animal in a given time the maximum quantity of work that it can safely perform." Another writer says: "The large number of horses killed or foundered in this race distresses our sense of pure sport."

The race from Brussels to Ostende was won by Lieutenant Madamet of the French Dragoons in six hours and fifty-five minutes, the distance being eighty-two and one-half miles. There were sixty-one entries in this contest, of whom twenty-nine finished. Four horses died on the way or later and others were permanently injured. The horse of the winner was reported by one authority as having been in excellent condition at the end of the race. He rode a twelve-year-old full blood horse. The horse that came in sixth in this race is reported to have made 765 miles in ten days eight months later, but this is improbable. He was an English half-breed, seven years old, and was ridden

by a lieutenant of the army of Holland. Another writer, in speaking of this race, says: "After the results of the Brussels-Ostende rides were known, it was hoped that such revolting spectacles would never be repeated."

The third of these contests in which a large number of officers took part was that from Paris to Deauville, a distance of 135 miles, which was made by the winner in nineteen hours and fifteen minutes. This was made in two stages, the first being from Paris to Rouen, 81 miles, and the second from Rouen to Deauville, 54 miles. A rest of three hours was allowed at Rouen which, however, was not counted in the time of making the ride. The first stage was made in fifteen hours and the second in four hours and fifteen minutes. Of the thirty-two horses that started, all made the first stage, but four dropped out during the second. The winning horse, ridden by Lieutenant Beausil of the French army, was eleven years old, breed not given, and was reported as having arrived in very good condition. Of this race Major T. B. Mott, in an account of it published in the *CAVALRY JOURNAL* of January, 1904, says: "The judging of this race the first day was easy, as it was only necessary to note who came in first, but that of the second was more delicate—to report upon the condition of the horses. Two had died, some had arrived in good condition and did honor to their riders, whose first care evidently had been to spare their mounts as much as possible. The horse running first was tired but not exhausted, and showed wonderful resistance. The great majority were in a pitiable condition and demonstrated the brutality of the trial."

Of the other recorded rides, or, more properly speaking, races, in which two or more officers participated, the following are given as the most notable examples:

In February, 1894, nine Russian officers rode from the Moscow gate a distance of one hundred yersts ($66 \frac{2}{3}$ miles), the route being through several villages and return to the point of starting. The weather was fine and the roads in good condition except for a short distance, where they were cut up by ruts and there was deep snow. The horses were in fine condition for the race, having been well trained for the work, and had been fed twenty quarts of oats per day. The winning horse,

Georgetta, was a half-bred mare from the government breeding farm, eight years old, and made the race in seven hours, seventeen minutes and ten seconds. Grad, the second horse, was an Anglo-Arabian stallion from the government stud, eight years old, and made it in seven hours and nineteen minutes. This horse had made forty-six and one-half miles in six hours only two days before this race. The slowest time of any horse that came in was nine hours and nineteen minutes.

Georgetta and Grad came in the freshest and finished the last 1,200 yards of the race at full speed. Regarding this contest the following particulars are given as to the gaits, etc., used by the winner: The rider dismounted and walked up all hills. A fast trot was taken for the first and two-thirds miles, then a walk for about 1,200 yards, then a fast trot for about three and one-third miles, and then the walk was again taken for about 1,200 yards. Although varied a little, as, for instance, over the six and one-half miles of bad road, where a slow trot was taken, this order was kept up throughout the race, except that a field gallop was taken for about six miles over a good stretch of road and after the ten-minute rest which was taken at the middle of the distance. One horse, a thoroughbred, gave out and failed to complete the entire distance.

In April, 1889, a party of Australian Mounted Infantry arranged a race from a maneuver camp to their home station, a distance of 116 miles, over roads heavy from continuous rains and crossing a range of hills which threw out a number of the contestants. Eleven started and the winner made the distance in twenty-three hours and twenty minutes, the second being only a few yards behind him. The second man actually made the better race, as his horse carried over twenty pounds more weight. No particulars of this race are given except the condition that the horses should arrive not distressed and be capable of doing a further ten miles. They rode in full marching order, and the one that came in second carried 199 pounds.

In August, 1895, two German officers and nine non-commissioned officers made a service ride, in full marching order, from Ludwigslust to Berlin, a distance of 220 miles in 79 hours and 15 minutes. All the horses arrived in very good condition.

In that same month a party of eight Norwegian officers rode $93\frac{3}{4}$ miles in nine hours and twenty minutes. One horse succumbed and two others dropped out.

In June, 1896, eleven French officers raced from Paray to Vichy, a distance of 113 miles, the winner, Lieutenant de St. Geraud, making it in twenty hours and thirty-five minutes. All eleven made the entire distance and the horses were all reported as having been in very good condition. The winner was awarded the prize for the best long-distance ride of the year.

In August, 1898, ten German officers rode practically the same distance as that of the last-mentioned race— $112\frac{1}{2}$ miles—the winner, Lieutenant Bleibtreu, covering it in even twenty hours. All the riders covered the entire distance and all horses were reported as being in good condition at the end of the race. The winner rode a sixteen-year-old service horse of the Hanover riding school, and won the honor prize for the best ride of the year.

In July of that year twelve Italian officers contested in a race of $222\frac{1}{2}$ miles. Lieutenant Aloisi, riding an English full blood mare, won in forty-one hours and forty-nine minutes. His horse was in good shape at the end of the race. Six of the twelve horses succumbed and dropped out of the race.

In October of this year eighteen Italian officers entered a race from Florence to Pisa and return, a distance of 194 miles. Nine only made the entire distance, and four horses—English horses—succumbed. The winner, name not given, rode a full blood Italian horse and won in thirty-one hours and fifteen minutes. A condition ride was made on the following day of about twenty miles.

In this same month sixteen Swiss officers started in a race from Lausanne to Bern and back, 125 miles, with an obligatory rest of ten hours at Bern. Only eight finished, and the winner, Lieutenant Blancpain, came in with his horse in very good condition, in fifteen hours and one minute. The riders were all heavy weight, eight of them weighing over 165 pounds.

In January, 1894, detachment of eleven officers and two non-commissioned officers of the Saxony Riding School rode from Dresden to Leipzig and back, a distance of $173\frac{3}{4}$ miles, in thirty-seven hours and twenty-three minutes. They rode

East Prussian government bred service horses, and all were reported in good condition at the conclusion of the ride.

A party of thirteen Swedish officers rode a distance of seventy-five miles in February, 1895. The winner, Baron v. Cederstrom, made it in eight hours and seven minutes on an English full blood mare—milk teeth out—the horse being in "satisfactory" condition on arriving. The ride was made in very cold weather and there was much snow on the ground.

In May of this same year twenty-two German cavalry officers rode from Dresden to Leipzig, eighty-four and one-half miles, the winner, Lieutenant Zurn, making it in five hours and fifty-seven minutes. His horse, an East Prussian half blood six years old, coming in in good shape. In this race six horses played out en-route and ten of the twenty-two succumbed either during or after the race. The report states that the temperature was very high when this ride was made.

In June, 1896, twenty-two Italian officers started in a race of ninety-seven and one-half miles. Lieutenant Vital came in first in twelve hours, with his horse in good shape. Six horses failed to make the entire distance.

In October, 1897, Lieutenant Garacciola of the Italian Cavalry won in a race from Milan to Brescia and back— $197\frac{1}{2}$ miles—against seventeen competitors. His time, thirty-nine hours and forty-eight minutes. The condition of his horse on arrival was reported as "pretty good." Three of the eighteen horses failed to cover the entire distance. A condition ride of twenty miles was made before and after this race, time not given.

In April, 1903, a party of five French lieutenants raced from Sedan to St. Menehould and back, a distance of $113\frac{3}{4}$ miles. They rode service horses from eight to eighteen years old, reported as half bloods and full bloods, and all arrived in good condition. The winner was Lieutenant de Lavangyor, who made it in nineteen hours.

The foregoing are but a few of the many endurance rides made by parties of foreign officers within the last ten or fifteen years of which accounts are given, but these are among the longest and hardest rides of which there is any reliable data given.

In comparing these rides with those made by some of our

officers and detachments, accounts of which will be given later, it must be remembered that in all of the above noted cases the rides were generally made over good roads, in thickly populated countries, where stopping places were frequent, and where every care could be given the horses; that the horses were of the best; that they could be fed and watered regularly, and that often grooms were sent ahead to the various resting places.

On the other hand, it will be observed that the noted rides made in this country were generally over country with no or poor roads; that oftentimes but little grain could be obtained; that water was scarce and often bad, and that the horses ridden were frequently the ordinary troop horse.

Having noted the more important of the semi-official rides in foreign countries in which several officers participated, a few of the most remarkable individual rides will now be noticed.

Without doubt there has been no individual ride, of which there is any reliable record, made on one horse, that equals that made by Lieutenant Peschkof of the Russian cavalry, in 1892. He rode from his station in distant Siberia, a place with an unpronounceable name and which is variously spelled in the different accounts of this ride, to St. Petersburg, a distance that is also differently stated in the accounts. Accepting, however, the lowest of the distances given, this officer rode over *five thousand miles* in a period of *one hundred and ninety-three* days, and that his average for the actual marching days was over *thirty-seven* miles per day. On many days he exceeded this distance, and one day made over fifty-six miles.

It must be remembered that much of this distance was "over a trackless waste," with only here and there any village, hamlet or other stopping place, and that the part through Siberia was made in the winter with the thermometer often many degrees below zero and the roads and trails covered with snow.

He rode a horse of the local Siberian breed, nine years old, and but twelve and three-quarters hands high—a mere pony. He was a clumsy looking animal, as can be seen from the cut showing horse and rider that appeared in the September, 1890, number of the CAVALRY JOURNAL, in which a full account of this remarkable ride is given. It is said that the Lieutenant paid the equivalent of forty-five dollars for this horse. His gait

was an ambling trot which, it is stated, he could keep up for mile after mile.

This officer carried no baggage or provisions and rode a heavy Cossack saddle, much heavier than the military saddles of any other country, and he was necessarily burdened with heavy clothing to withstand the extreme cold weather of the first part of his journey. He was light but of athletic build, and during the entire trip cared for his horse himself and never trusted anyone to feed, water or groom him.

He carefully planned his route, and whenever practicable stopped at villages where forage could be obtained and where his horse could be sheltered. It is said that he spent at least two hours every night in caring for his horse. Although the usual allowance of feed for this horse was nine pounds of oats and a small amount of hay, towards the last of the ride he consumed *thirty* pounds of oats and fifteen pounds of hay each day, showing that he had a voracious appetite and good digestion.

The gait used was ordinarily the trot, which would be kept up for four or five miles, when the Lieutenant would dismount and run by his side for about two-thirds of a mile or more, when he would mount and take up the trot again. Dodge, in his account of this ride, states that the horse had a running walk at which he could cover seven miles an hour. Probably this is the same gait that another writer calls an ambling trot.

He usually rose at seven and took the road after he had cared for his horse and had breakfasted, and whenever practicable retired at nine. He generally made but one stop for rest during the day, and simply loosened the girth of his saddle while resting. His horse was officially examined at the several military posts through which he passed, and was reported as being in good condition at all. There was but one day in which the horse showed signs of being tired, but after a day's rest he seemed as fresh as at the start.

As he approached St. Petersburg a Life Guard regiment with two bands met him and he was escorted into the city, where he was shown great attention by the military authorities, received by the Emperor, and finally was knighted and promoted.

The previous year—1889—a Cornet of Russian cavalry named Asseef rode from Louby to Paris, a distance of 1,650

miles, in thirty-two days, using, however, two horses, both of which arrived in good condition. It was during a discussion as to the merits of this ride by the Russian officers at the far-distant station in Siberia, that Lieutenant Sotnik Peschkof asserted that there was no glory in making such a ride and that he could beat it on his horse "Seri" to St. Petersburg.

Nearly every horseman has heard of the celebrated ride of "Dick Turpin," the English highwayman, from London to York on his mare "Black Bess," and probably many have believed that the rider and horse were myths and that the accounts of that famous ride were the products of the facile pen of some romancer. Both the *London Spectator* and *Chamber's Journal* mention this among other noted rides, and state: "Nevertheless, it was actually made, and it stands as a record of its kind. The highwayman, riding with the best reason in the world—the safety of his neck—covered the distance of over two hundred miles in a little under twelve hours. This ride stands alone as the longest and fastest ride ever made on the same horse."

The *Spectator Militar*, in its account of this ride, gives the distance as eighty-two and one-half miles and the time as eleven hours. This latter account would appear more probable as to the distance a single horse could be ridden in the time given, but this cannot be correct, as the distance in an air line between these two places, as measured on the map, is about 180 miles.

There is a report of a ride made in 1820 by an English captain named Mulcarter, from London to York, in which the distance is given as 204¼ miles, which is probably correct as the roads ran. He rode a full blood English mare, and covered the distance in forty hours and thirty-five minutes. This is making good time and was a hard ride, yet in the report of Turpin's ride he is credited with covering this same distance in a little over one-fourth the time. The account of his ride is unbelievable.

There is a reliable account of an Englishman, Squire Osboldstone, having ridden, in 1831, 200 miles in ten hours. In doing this, however, he rode sixteen horses and changed every four miles. This was a test of the man's endurance rather than of that of his horses. Another account of this ride gives the time as eight hours and forty minutes and that he used twenty horses.

In 1849 a Captain Charles Townley rode with dispatches from Belgrade to Constantinople—820 miles. He was in the saddle for five days and eleven hours without rest except on one occasion for six hours and the time necessarily consumed in procuring and changing to fresh horses, which he did whenever and wherever he could. The roads, never at any time good, were in places deep with mud and he had to cross the Balkans at night in utter darkness. Twice the horse which he rode fell with him and before he had covered half the distance an old wound had reopened and drenched him with blood. He arrived at Constantinople at half past five one morning and delivered the dispatches ahead of other couriers from other countries and thus averted a war.

This was indeed a wonderful test of the endurance and pluck of the rider, but being without data as to the frequency with which changes of horses were obtained, it is impossible to judge as to the endurance of them or as to the rider's horsemanship in getting the best results from his mounts.

A Mr. Wilde, an Englishman, rode 127 miles in six hours, and a Mexican named Leon is reported to have made 505 miles in less than fifty hours, but in both of these cases the number of horses used or other data is not reported.

There is an account of a ride made by the "American Rough Rider, Major Barbour," in the *Allegemeine Scheitzerische Militar Zeitung* of April 14, 1906, which is not mentioned in any of the other accounts of famous rides, and which, insofar as the writer knows, is not authentic. It states that he rode from New York to Paris by the way of Vancouver, Alaska and Siberia, a distance of 16,000 miles, which he made on a single horse in one thousand days. No particulars are given as to his route other than that mentioned above, or as to how he crossed from Alaska to Siberia.

This same periodical also gives accounts of the rides of Robert Carey from Whitehall to Edinburg, 400 miles, in three days, when he carried the news of the death of Queen Elizabeth to James VI, and that of Thomas Wolsey, afterwards Cardinal Wolsey, from London to Neiderland, Holland, with a message to the Emperor Maximilian, traveling by boat from London to Gravesend and again from Dover to Calais, and riding the inter-

mediate distances. He left London at four one afternoon and was back in London at sunset the second day thereafter. In neither of these accounts are the number of horses used stated. This same journal has other accounts of some remarkable, and in a few instances unbelievable, rides which are not elsewhere reported and which are without particulars.

During the years 1881 and 1882 Lieutenant de la Comble of the French Dragoons rode his mare, La Mascotte, in six different long-distance tests from Sedan through the surrounding country, as follows: The first was 107 miles in fourteen hours; the second 92 miles in eleven hours and fifteen minutes; the third 157 miles in twenty-one hours; the fourth 105 miles in fifteen hours; the fifth 165 miles in twenty-one hours, and the last 218¾ miles in seventy-two hours. The horse was reported as in good shape after all six of these rides except the fifth, in which the report as to her condition was "poor." That she was not permanently injured is shown by the fact that a few months later she made over 200 miles in three days.

Lieutenant Roeder of the German cavalry rode, in 1881, accompanied by a servant, from Strassburg to Spain, 1,312 miles in fifty-three days, an average of about twenty-five miles per day, using an East Prussian bred horse, which he sold for a good price at the end of the ride.

In October, 1874, a Hungarian officer, Lieutenant von Zubovics, rode a Hungarian horse from Vienna to Paris, 781 miles, in fourteen days and five hours, the condition of the horse being reported as "satisfactory" at the conclusion of the ride.

Lieutenant Salvi, an Italian cavalry officer, is reported to have ridden from Bergamo to Naples and back, in 1882, a distance of 687 miles, in ten days, the horse being in good condition at the end.

In 1893, Lieutenant von Sandart of the German Field Artillery rode an East Prussian mare from Saarlouis to Trakhenen, without any preparatory training of his horse, 1,018 miles in fifteen days. He had a helper that traveled in advance by rail, and he rested one entire day while en route.

In August, 1894, Lieutenant Henrich von Henneberg, German Cavalry, rode a Hanover Riding School horse 325 miles in three

days. This same horse was ridden practically the same distance two years later in the same time, seventy-two hours, and again a year later, in 1897, he made 309 miles in seventy hours, the horse being in *very good* condition at the end of each ride.

There are many other reports of notable rides that have been made by foreign officers during the last fifteen or twenty years, but those given above will give a fair idea of these test rides or races.

There are also a few reports of some remarkable rides made by Arabians, but of these Colonel Dodge, in the book mentioned above, says: "If one were to believe the Arab when he is boasting of his pet's ability to travel, one would have to set down the average Arabian horse as being equal to or a trifle better than a Baldwin locomotive. One is permitted to prevaricate when narrating successful tramps after fish, but it is a curious fact that the larger the game the smaller is the prevarication. Horse talk is often interlarded with occasional suspicious statements, and the Arabian is no exception to the rule." He (Dodge) visited Arabia and rode some of their horses, but he states that he could find but one well-authenticated account of their much-boasted rides and that was of a horse having been ridden eighty measured miles in a day.

In comparing the foregoing reported rides with the accounts which follow of those made in this country, it should be remembered that, in addition to the differences heretofore noted, these foreign officers, as a rule, rode their own mounts, and no one not owning a horse with unusual endurance would have been foolish enough to enter such races; that the horses had all been carefully hardened for the work before them, and that they carried the least possible weight.

On the other hand, the rides noted below were generally made by officers, scouts or enlisted men of the regular army while on service on the plains; that, as a rule, they rode with packed saddles, carrying their arms, equipments and rations, and that in many cases they rode the ordinary troop horses, which although at times hardened by campaign, were frequently without any previous training for the ride.

"In June, 1868, a man named Morris rode from Seguache, then a small settlement at the head of the San Luis Park, Colo-

rado, to Fort Garland, nearly 100 miles, in ten and one-half hours. His horse was a southern California broncho, about fourteen and one-half hands high and weighing about 750 pounds. He carried, including saddle, about 165 pounds. He was brought in from the range for this ride and had no previous training."

The cause of this ride was to report a threatened outbreak of Indians, and this man, on the same horse, accompanied the infantry command that marched to the scene of the outbreak the following morning, covering fifty miles that day, and on the third day he rode eighty miles on this horse, warning settlers of the threatened attack. The horse was not at all injured by these rides.

"Tom Tobin, whom every officer who served in Southern Colorado or Northern New Mexico knew, when a mere lad carried dispatches for General Kearney, during the Mexican War to Fort Leavenworth, over 800 miles, in less than eleven days, using six horses, Indian ponies, and procuring his remounts from Indian camps en-route."

"John Kirley performed a similar service from the army camp near Salt Lake during the Mormon troubles, to Fort Leavenworth, nearly 1,100 miles in seventeen days, using four horses. He abandoned his last mount a few miles out from his destination and packed his saddle in."

"In 1874, one of the since notorious Dalton boys repeatedly rode from the writer's camp near Caldwell, Kansas, to the Cheyenne Agency, 110 miles, in twenty-three hours, and on some of these trips was compelled to swim unfordable streams, hanging on to his horse's tail and carrying his dispatches in his hat."

"In January, 1875, the writer with one scout rode from a camp on the Washita in the Panhandle of Texas to Fort Supply, 110 miles, in about thirty hours, six of which were spent under the lee of a bluff to escape the fury of a 'norther.' Snow was on the ground which 'balled' badly."

"In 1877, Company F of the Fifth Infantry, mounted on captured Indian ponies, marched from the mouth of Tongue River, Montana, sixty miles, without a halt, covering the distance in less than twelve hours. Most of the men and some of the officers were new to the mounted service."

"In 1866, a chestnut mare belonging to a troop of the Third Cavalry was ridden from the Cimarron Agency to Fort Union, New Mexico, fifty-five miles, in four and one-half hours."

The six foregoing accounts are taken from Major Romeyn's article in the April, 1893, *Outing*.

In his article in the *Cosmopolitan* for January, 1894, Captain King, in commenting upon the endurance races in foreign countries, says:

"Contests for supremacy that result in collapse are, or should be, things of the past, and it is one of the glories of the American cavalry that, however often it may have been called upon to make long-distance rides—frequently, indeed, to the rescue of beleaguered and imperiled humanity—the trooper and his mount have generally come in at the home stretch fit for business and full of fight.

"Illustrations of long-distance racing are few in our annals. Illustrations of rapid and scientific marching are many. These were long-distance cavalry rides in the best sense of the term—dashes to the rescue of comrades surrounded by Indians, of detachments besieged, sometimes of captured women, sometimes to head off and overthrow a hostile force. In each and every one of these cases the problem was not only to make the best of every minute, to get to the scene of action in the shortest possible time, but to bring thither the bulk of the command fit for anything it might find at the finish. Compared with a problem of this character, the question of how to train and ride a single horse so that he may carry his rider over a given distance in the shortest time sinks into insignificance."

The following four accounts of noted rides are from the above mentioned article by Captain King:

"Another famous ride, on a somewhat smaller scale, but one of the traditions of the old army, was that made by Lieutenant Samuel D. Sturgis* of the Third Dragoons, when, in January, 1855, a party of Mescalero Apache Indians raided within twenty miles of Santa Fe, killing several settlers and running off some sixty head of stock. Sturgis, with only fifteen

*Later Colonel of the Seventh Cavalry and Brevet Major General, U. S. Army.

men, was sent in pursuit after the Indians had about eighteen hours' start. He followed them for sixty hours, overtaking the Indians one hundred and seventy-five miles from Santa Fe. In the fight that ensued three Indians were killed, several wounded and all the stock recovered."

"One of the best on record of individual rides or long dashes with dispatches was the exploit of Captain Charles F. Roe, Troop 'A,' National Guard of New York,* but then a lieutenant of the First U. S. Cavalry.

"In the summer of 1869 he carried dispatches from old Camp Harney, Oregon, to Camp Warner, Oregon, a distance of one hundred and fifty miles, accompanied by a sergeant and a private and provided with two days' cooked rations.

"It was just eight when they jogged out of Camp Harney. The first twenty-five miles lay along the valley of Silver Creek. Then came fifty miles more of sage brush and alkali. When once clear of the garrison they struck a trot and, maintaining this gait whenever possible, went all night long until after five the next morning, when they halted, unsaddled and fed from the nose-bags in the middle of the desert.

"A cup of coffee and a bit of bacon was enough for him and his men. An hour later they were away again with the worst stretch of road ahead of them; the sand fetlock deep; Warner Lake water densely alkaline, burning the skin from the lips and mouth. Yet on they went, seven miles an hour, and at 8:00 P. M., just twenty-four hours after leaving, they rode into Camp Warner, the actual riding being twenty-two and one-half hours."

"Another plucky ride was that of Lieutenant J. Franklin Bell,† now adjutant of the Seventh Cavalry, through the Bad Lands of Dakota. Going into Medora, a little town at the crossing of the Little Missouri, by the Northern Pacific Railway, he found important dispatches for his brother officer, Lieutenant Garlington,‡ then in the field and all alone. Bell rode away from Medora at sunrise on an August morning, covered

*Now Major General Commanding the National Guard of New York.

†Now Major General J. Franklin Bell, late Chief of Staff, U. S. Army.

‡Now Brigadier General and Inspector General, U. S. Army.

fifty-five miles through the roughest country in the Northwest by noon, got a mount in Captain Varnum's* camp and just at sunset reached Garlington. The distance covered was over one hundred miles and the gait was a trot or gallop.

"The annals of the great war have many more, perhaps the most remarkable being that of Henry Kyd Douglas, now Adjutant General of Maryland, but at the time a young officer selected to bear dispatches for Stonewall Jackson, through pitchy darkness, over river and mountain, from Harrisonburg in the Shenandoah valley over the Blue Ridge, through Swift Run Gap, then by the way of Stannardsville, Madison C. H., Culpepper and Brandy Station, to General Ewell, then in the field. Douglas started just after sundown of an April evening and in a pouring rain splashed through mud and mire and the blackness of Erebus over the mountain trail; exchanged his gallant blooded mare for a big raw-boned racer some forty miles from the starting point; used up mount number two in a fifteen-mile spurt for Madison C. H., where he swapped him for a little gray which stumbled in the mire and darkness after a run of barely a mile and could not be induced to rise. The magic name of Jackson won him mount No. 4, who carried him nine miles and gave place to a gaunt roan. The next stage was the eleven-mile dash to Culpepper, where in the faint, cold glimmer of dawn the young officer reached General Dick Taylor, who steered him on to Brandy Station and beyond. Just twenty hours from the start, Douglas found General Ewell and delivered his rain-soaked dispatches. He had covered the entire distance of one hundred and five miles in less than twenty hours and the worst eighty of it in less than ten. Delays due to losing the road in one place and of the little gray in another had made havoc with the record after an admirable start. Douglas used five horses in all, Bell two, Rose one."

The following reports of rides have been gleaned from so many different sources that it is impracticable to give credit in all cases:

During the cholera epidemic at Fort Riley, in 1855, an employee of the quartermaster's department named Orton, carried dispatches announcing the death of Major Ogden from that

*Now Lieutenant Colonel, Retired, U. S. Army.

post to Fort Leavenworth, distant 130 miles, in forty hours, riding one mule the entire distance.

A mail rider, in the early days on the frontier, carried the mail from El Paso to Chihuahua once a week and back the next. He rode the distance of three hundred miles in three consecutive nights. He had to ride by night and hide by day, as the country was infested by Apaches. He rested his pony four days between trips. "Six months of this work had not diminished the fire or flesh of that wonderful pony." He carried at least two hundred pounds of rider, mail and trappings.

In 1891, two troopers of the Eighth Cavalry rode with dispatches one hundred and ten miles in twenty hours.

Captain Fountain,* Eighth Cavalry, once rode on the frontier eighty-four miles in eight hours and again one hundred and ten miles in twenty-three hours.

In 1876, Colonel Lawton rode from Red Cloud Agency to Sidney, Nebraska, one hundred and twenty-five miles, in twenty-six hours.

In 1880, Captain A. E. Wood, Fourth Cavalry, rode with eight men, in pursuit of deserters, one hundred and forty miles in thirty-one hours. The gaits used on this ride were as follows: Walked thirty minutes, then a trot for fifty minutes, rested and adjusted saddles for ten minutes. Then trotted for fifty minutes and walked for ten minutes, alternating these gaits. They made but two long halts of one hour each, one for breakfast and one for supper, when they unsaddled, made coffee and grazed their horses. At the end the horses were very tired and one was lame, but otherwise in good condition.

In 1870, four men of Troop "H," Fourth Cavalry, carried dispatches one hundred and forty miles, over bad roads and with little or bad water, twenty miles of which was through sand, in twenty-two hours and arrived with their horses in good condition. After a day's rest they returned to their station in three days.

In 1879, Captain Dodge with his troop marched eighty miles

*Now Brigadier General, Retired, U. S. Army.

in sixteen hours and Lieutenant Wood with his troop rode seventy miles in twelve hours.*

In January, 1880, Lieutenant Robertson, First Cavalry, and two non-commissioned officers rode one hundred and two miles in pursuit of deserters, between 10:00 P. M. one night and 9:30 P. M. the next night. Snow was on the ground and in places a foot deep. They made thirty-two miles in the first four hours, when they halted and rested until daylight. They halted and fed at noon and then made the remainder of the distance without a halt. The horses of the non-commissioned officers were in good condition, but that of Lieutenant Robertson was lame. This horse had been previously foundered.

In April, 1894, Captain James Parker, Fourth Cavalry,† with a detachment of twenty men, rode from Gilroy to the Presidio of San Francisco, California, ninety-two miles, in twenty-three and one-half hours, but, deducting the time of halts, the actual marching time was fifteen and one-half hours. For the particulars of this ride, see the CAVALRY JOURNAL for June, 1894.

The writer rode, in pursuit of deserters, in 1875, from Fort Wingate to San Mateo, New Mexico, a distance of sixty-six miles by the wagon road, in nine hours. He was accompanied by two enlisted men and an Indian trailer. The route actually taken was off the road, as the deserters, who were riding a mule, had avoided that, and over very broken country where at times the trail was very indistinct, insomuch so that it was lost on two or three occasions. This Indian was the best trailer that the writer ever knew, and ordinarily he would jog along with his eyes fixed on the ground and scarcely ever lose a trail where the ground was at all fair and where others could see no signs of it. He accompanied me on many similar trips and on the campaign of 1874 during the three years I was stationed at Fort Wingate, and we became fast friends.

Again, in the winter of 1876-7, the writer pursued a couple

*This report fails to give the regiments to which these officers belonged, but the first named officer was undoubtedly Captain Francis S. Dodge, Ninth Cavalry (afterwards Paymaster General, U. S. Army), as he was the only cavalry officer of that name in the army at that time. There were two lieutenants named Wood in the Cavalry service then.

†Now Colonel Eleventh Cavalry, U. S. Army.

of deserters from old Fort Rice through Bismarck to Painted Woods, Dakota, now North Dakota, a distance of from sixty-five to seventy miles, in about twenty-six hours. While this would ordinarily not be called a fast ride, yet it was made over ground covered with snow, from six inches to a foot in places, and the weather was bitter cold. On this occasion, also, he was accompanied by two soldiers and an Indian trailer.

To digress a moment, it may be of interest to note that one of the two men captured on this last mentioned trip had an eventful career with which the writer was connected on three different occasions. He was a man named White that originally served in the Seventh Cavalry and was "striker" for General Custer on the Washita campaign of 1868. Some time later he deserted and was absent in desertion for some two or three years, possibly more. One day in the summer of 1876 Captain Owen Hale, Seventh Cavalry, met him on the streets of St. Louis and arrested him. He was sent to Fort Rice for trial and the writer was the Judge Advocate of the court that tried him. He escaped from the guard house and was captured, as noted above, and brought back to Fort Rice. Later, in the summer of 1877, he again escaped and was absent some two or three months. One day, as the writer was on a steamboat on the upper Yellowstone River, waiting to be ferried across, he saw this same man working as a deck hand of the boat and again arrested him. He afterwards served out his sentence.

On one occasion, year not stated, the same Lieutenant Wood mentioned above, with seven men, rode from Fort Reno to Arkansas City via Skeleton Creek, 140 miles, leaving at 10:00 A. M. one day and arriving at 5:00 P. M. the following day. The horses showed fatigue but were not injured. Halts were made, horses unsaddled and put on grass after having made about twenty-five miles, seventy-five miles and one hundred and twenty miles. The gaits used were the trot and walk, the men being dismounted and walked frequently. On first starting out the walk was taken for about forty-five minutes, when a short halt was made, the saddles adjusted, etc., after which the trot was taken, a six-mile trot, he says, for an hour and then the walk again for ten minutes.

This same officer reports having once made a march of seventy-five miles between 4:00 A. M. and 6:00 P. M. on a hot trail and over a rough country. No particulars given.

When in command of the Department of Arizona, General Miles organized a plan of hardening the horses and men of the cavalry of his command by a system of raids and pursuits from the different posts. The following rides were made under this plan: Lieutenant Pershing, Sixth Cavalry, with a detachment of twenty-seven men, pursuing Lieutenant Scott, Sixth Cavalry, rode one hundred and thirty miles in fifty-four and one-half hours. Lieutenant McGrath, Fourth Cavalry, with twenty-two men, made one hundred and seventy-three miles in forty-two hours. Lieutenant Scott, Sixth Cavalry, and twenty-five men rode one hundred and ten miles in twenty-six hours. Captain Chaffee, Sixth Cavalry, now Lieutenant General, Retired, made seventy miles in twenty-four hours. Lieutenant Pershing again made one hundred and thirty miles in fifty-seven hours.

The following is an account of a ride made during the Nez Perce campaign of 1877 by the writer and which is compiled from notes made several years ago when he promised to write it up for the CAVALRY JOURNAL.

On the 11th of August of that year General Miles, who was then in command of the District of the Yellowstone, received information that the Nez Percés had escaped from the commands that had been pursuing them on the Pacific slope and were making to the eastward, and that there was a possibility that they might cross the mountains and come into his district.

The Seventh Cavalry, of which regiment the writer was then a second lieutenant, was then encamped on the north bank of the Yellowstone, nearly opposite where the town of Miles City is now located, this regiment having been engaged in scouting the country between the Yellowstone and the Missouri rivers for some three months. The men and horses, while not having been overworked, were in good condition for any service.

Some time after dark of that day the writer was ordered to report to General Miles at the headquarters of General Sturgis, then colonel of the Seventh Cavalry, and on doing so received instructions to take a detachment of five men with a guide and proceed to Fort Ellis, Montana, with dispatches for General

Sherman and to ascertain the whereabouts of the Indians. General Miles informed me that General Sturgis would follow me up the Yellowstone as far as Pompey's Pillar and then, in case he had heard nothing from me, he would proceed to the Mussel-shell River, in the vicinity of Judith Gap, it being supposed that the Nez Percés would make for that country, as it had been a favorite hunting ground for these Indians.

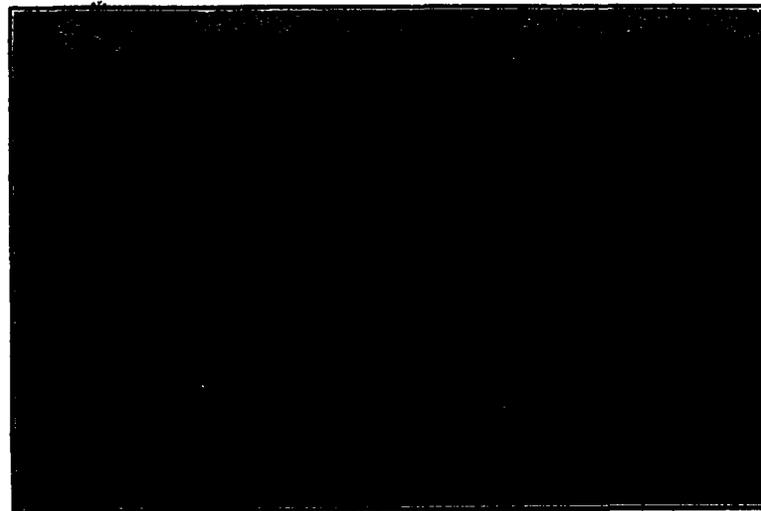
I was ordered to make all possible speed, and, if practicable, to reach Fort Ellis in five days, there to deliver the dispatches to the commanding officer, to be forwarded by him to General Sherman, who was then in the National Park and whom General Miles wished to have advised that the Indians might pass through the Park, as they afterwards did, after which I was to get in communication with the Governor of Montana and General Gibbon, then Colonel of the Seventh Infantry and in command of the district of Montana, by telegraph and ascertain the movements of the Nez Percés. In the meantime, any information that might be received was to be communicated to General Sturgis. General Miles informed me that a scout would report to me who was familiar with the country up the river a certain distance, but that I should not wait for him, as he would overtake me en-route if unable to report before we left.

Five picked men with selected horses from five different troops reported to me and we pulled out at eleven o'clock that night, following the wagon trail that led up the north bank of the Yellowstone. Each of the party carried five days' rations of coffee, hard bread and bacon and were equipped with the usual arms and equipments for field service at that season of the year.

During that night the trot, alternating with occasional short periods at the walk, was kept up and two or three short halts of not over ten or fifteen minutes were made. Occasionally it was necessary to dismount and lead up and down hills, especially down Holsinger Hill, which was very long and in places steep. This hill was named after Veterinarian Holsinger, who was killed near there on August 4, 1873, while serving with the Seventh Cavalry. While on the road, about eight o'clock the next forenoon, the man riding as the rear point reported someone coming behind us, which proved to be the scout that was ordered to join the party.

This scout, "Jimmy" Woods, was a peculiar character who was fairly educated and had been at one time a teller in a bank, but his dissipated habits lost him his place and he drifted to the frontier and became a scout. When he reported he wore a blue shirt, with a large silk handkerchief about his neck, a pair of blue overalls and nothing else. He was without hat or shoes and had no rations whatever with him. He rode one pony, a captured Indian pony, and led or drove another. He knew little or nothing of the country above the mouth of the Big Horn.

As stated above, the five troopers rode selected troop horses, and I rode my private horse "Billy" but also took a second horse,



"BILLY."

a troop horse, on which we packed our rations and one blanket for each man. This second horse was turned over to one of the men on the second day, as his horse had become lame and was abandoned.

Woods reported to me that if we could overtake the mail rider, who had left Miles City the morning before, at a little settlement that had been started on the north bank of the Yellowstone and about two miles above the mouth of the Big Horn, he could show us a trail leading over the rough country between there and Baker's Battlefield that would save us some distance.

We pushed on and reached the hill near which General Custer had his fight of August 11th, 1873, where Lieutenant Braden was so seriously wounded, at about midnight. Knowing that this point was not far from where this new settlement was located, and fearing that we might pass by it in the night, it not being on the old direct trail up the river, we bivouacked until daylight and then moved on and came to it after traveling a couple of miles. The distance between Miles City and this settlement was reported to be one hundred and five miles and the mail rider said it was fully that or more.

This mail rider, whom we found at this settlement,* informed us that by crossing the river on the ferry we could follow a shorter trail on that side and that it was a plain trail and could not be missed.

We crossed the river, and after starting the party on the trail, I rode two miles down the river to the mouth of the Big Horn, where a company of the Eleventh Infantry was camped. There I breakfasted with the officers, gave my horse a good feed and procured what grain I could pack on the pommel and cantle of my saddle and started after the party, whom I overtook about twelve or fifteen miles up the river. There we halted, watered and fed the horses and rested for an hour or more. Pushing on, we reached Baker's Battlefield a little before sundown, where we remained for the night, crossing the Yellowstone by ferry. There was a ranch at this point, but we could procure no grain there.

The next morning, leaving at the break of day, we followed the wagon-trail up the river on the north side and reached Cañon Creek about noon. We found here two families who had just settled there who kindly invited me to dine with them and who furnished us with grain for the horses. Just one month to a day, and almost the hour after that, I saw both these houses in flames, they, together with the stables and stacks of hay they had put up for the winter, having been burned by the Nez Perces, the families having escaped into the timber. The Cañon Creek fight with General Sturgis' command took place about ten miles up the creek from where these ranches were located.

*The name of this settlement can not now be recalled, but it was of Indian origin. It was located, as stated above, but the maps show no place now there by any similar name.

That day one of the men was taken sick and he was left to work his way back to the command as best he could.

I am unable to remember all of the details as to camps, etc., for the remainder of the trip beyond the fact that we obtained but one other feed of grain while en route, and that a ranch at the upper end of Clark's Fork bottom.

Before reaching this last ranch we met a man named McAdow, who was on his way to put up a saw mill down the Yellowstone. From him we heard of General Gibbon's fight with the Nez Perces at the Big Hole, and that the Indians were then supposed to be in the vicinity of Henry's Lake. He also gave me a copy of a Bozeman paper which gave an account of the fight.

I at once started one of the party, a man named Sullivan, with a dispatch to General Sturgis, giving him the information I had obtained.

To cut this already too long account short, we reached the mouth of Shield's River in the afternoon of the fifth day, where I left the party and pushed on with the scout over the mountains to Fort Ellis, reaching there just as retreat was sounding.

The total distance was said to be three hundred and fifty miles, which was made in about five hours less than five days. It is true that we were supposed to save about fifteen or twenty miles the second day by crossing to the south side of the Yellowstone, but when the rough country—almost mountainous—is considered, it is doubtful if anything was saved in the wear and tear of horse and man. At any rate, much of the distance had to be made on foot, to spare the horses when going up and down hills, and the party were more exhausted from this day's ride than on any other day of the trip.

The usual routine of each day was to saddle and move out at or before daylight and move on until a good halting place could be found and then stop for an hour or more for breakfast and to graze the horses. It was always very late and very dark when we halted for the night, and it was not practicable to select a proper place for our bivouacs, so that these generally were without water and sometimes wood or the best of grazing. Another long halt was made usually about noon and still another late in the afternoon, after which we would continue until the

distance determined upon for the day's march had been covered. The trot was the habitual gait used, alternating it with short periods of from twenty to thirty minutes at a walk, and occasionally dismounting and leading the horses. This was invariably done in going up or down hills, always bearing in mind the old adage as to the care of one's horse:

"Up hill, hurry me not;
Down hill, flurry me not;
On the level, spare me not;
In the stable, forget me not."

The dispatches for General Sherman were forwarded that night and he left the Park long before the Indians entered it. It was found impracticable to get in touch with either the Governor or General Gibbon that night, and, in fact, replies were not received to my telegrams until the afternoon of the following day.

In the meantime, upon the advice of the commanding officer at Fort Ellis, a man was sent back to Carpenter's ranch, at the mouth of Shield's River, where the party had been left, with instructions for him to build a skiff which I intended to use in going down the Yellowstone with my dispatches for General Sturgis with the hope that I could reach him before he left the Yellowstone for the Musselshell.

After having rescued Woods from a gambling den in Bozeman, where he had gone to get rid of the money that I had loaned him for the purpose of purchasing some clothing, we started back for Carpenter's ranch soon after dark, and reached there about midnight. Here we found that the man Carpenter had been on a spree and that the boat was only just commenced. By the help of myself and the men it was completed soon after sunrise and a rough affair it was, crooked and cranky, and with oars that had been roughly hewn out of pieces of two-by-six lumber.

Starting the party back down river with orders to make as fast time as possible with safety to the stock, Woods and I took to the boat and started down stream. The boat had been launched in Shields River, and on passing out of that stream into the Yellowstone we encountered the worst rapids of the trip, and they

are not a few in the upper Yellowstone. As neither of us could swim, we wished ourselves back on our horses several times that day. Both of us stripped ourselves to our underclothing and I carried my dispatches in the bosom of my undershirt, expecting on several occasions to be dumped into the river.

The river was low, and except when running rapids the progress was slow, one of us being at the oars all the time and blistering our hands with the unaccustomed work. Carpenter as well as the commanding officer at Fort Ellis had informed me that we could make the trip from Shield's River to Baker's Battlefield in less than a day, and we had taken cooked rations for that time only. Soon after starting it began to rain and kept it up all that day and night. Just as it was getting dark we heard the roar of rapids ahead which we were afraid to run in the dark, and we pulled for the shore, landing just at the upper edge of them. We crawled into the bushes and obtained what rest we could and again took to the river at daylight. We rowed all that day and night, the river now being extremely low and with little current, and reached our destination about ten o'clock the following morning. Fortunately for us, we discovered the place where McAdow was about to build his mill about noon of the second day, and there we enjoyed a meal of trout, hot biscuits and coffee that never will be forgotten and also took along enough to last us until we reached our destination.

On arriving at Baker's Battlefield, I attempted to buy or hire a horse to ride over to the Musselshell River, where General Sturgis would be that night, but the ranchman could not or would not spare either of the two that he had. Fortunately a party of prospectors from the Big Horn Mountains came along that afternoon and I hired one of them, a man by the name of Leonard, to carry my dispatches to General Sturgis with a promise of fifty dollars if he reached him before he broke camp the next morning. This he did and he was then employed as a scout by General Sturgis and was finally killed by the Indians in that campaign.

Dismissing Woods and sending him back to General Miles with copies of my dispatches, I joined the mail carrier, who from here on up the river used a buckboard, and started back over the same trail to rejoin my detachment. They were met about fif-

teen or twenty miles above Baker's Battlefield, where I again mounted my horse and started up the river for the place where a trail from the Musselshell to the Yellowstone crossed the road I was following. I presumed General Sturgis would take this trail in coming south to cross the Yellowstone and go up into the mountains east of the National Park to head off the Indians, who would necessarily have to come that way. After we had gone about seventy miles up the river from where I rejoined the detachment, the scout Leonard overtook me and informed me that General Sturgis would strike the Yellowstone at the mouth of the Stillwater. We then again rode back down the river some twenty miles or more to that point and rejoined the command a little after noon, having been absent twelve days less about ten hours, and the horses having traveled approximately six hundred miles in that time.

I rode this same horse during the remainder of the campaign, and a hard one it was, with the exception of the part of one day when Lieutenant Wallace* loaned me a troop horse, which, however, had soon to be abandoned.

Having now drawn this article out far beyond what was originally contemplated, it will be necessary to give the accounts of the long-distance or forced marches of larger commands and of raids in some subsequent number of the JOURNAL.

*Afterwards Captain Wallace, who was killed at the Wounded Knee.



CAVALRY IN THE WAR OF INDEPENDENCE.*

BY GENERAL CHARLES FRANCIS ADAMS, PRESIDENT MASSACHUSETTS
HISTORICAL SOCIETY.

In the notice of this meeting the subject of my present paper is given as "The Failure of Washington to Utilize Cavalry," and it so chanced that this morning's papers announce the unveiling at Washington yesterday of the long delayed Pulaski statue. In connection with my paper the event is of interest, for Count Casimir Pulaski was the first Chief of Cavalry in our Revolutionary Army. Being some twenty-eight years of age, he came to this country with letters from Dr. Franklin in the year 1777, one of a numerous band of Europeans, some, like Lafayette and Steuben, men of rank, character and military training, the larger number adventurers, pure and simple. This matter, by the way, of Europeans drifting in times of war over to America, moved either by motives of sympathy combined with a spirit of adventure, or as soldiers of fortune, I discussed here incidentally two years ago,† my attention then being drawn to the subject by the recent publication of what occurred when, in 1861, an attempt was made to induce Garibaldi to take part in our Civil War conflict, at that time in its earliest, or Bull-Run stage.

In Garibaldi's case, it will be remembered, difficulty arose from the fact that, while our government was ready to offer him a commission of the highest military rank by law authorized, that

*Reprinted from the Proceedings of the Massachusetts Historical Society for April, 1910, by kind permission of the author.

†3 Proc., I. 319-325.

of Major-General, Garibaldi, most fortunately, declined to come unless he was immediately to be put in supreme military command,—practically made Dictator. This, of course, reduced the whole movement to its proper basis,—that of an absurdity.* The Garibaldi episode, the circumstances connected with which have only recently come to light, never attracted attention; while Pulaski's memory is a tradition, preserved only through the medium of the school-reader by Longfellow's lyric. Yet, as an historical fact, it did devolve on the Pole, Casimir Pulaski, to make the first serious attempt to give form to a systematic American cavalry organization for actual use in practical warfare. Of him and it I shall presently in this paper have more to say.

Fifteen years ago I was accidentally led into a somewhat careful as well as critical examination of the actual facts of two Revolutionary battles, as contradistinguished from the accounts thereof contained in our books of history accepted as "standard,"—the two battles were that at Bunker Hill, on the 17th of June, 1775, and that before Brooklyn, N. Y., known as the Battle of Long Island, fought August 27, of the following year, 1776.† In connection with the second of these engagements, that on Long Island, my attention was particularly drawn to the curious fact, which I did not remember ever to have seen noticed, that Washington, in the operations he then conducted, had apparently no conception of the use to be made of cavalry, or mounted men in warfare. His idea of an effective military organization, at least for the work then cut out for him to do, appeared to be a command consisting of infantry of the line, with a suitable

*A somewhat similar proposal was made in the War of Independence. Silas Deane, then in France, and under instructions to engage officers and munitions of war, listened to a suggestion that a commander-in-chief of the American army could be had in Europe, provided sufficient recognition was given to him by Congress. He derived the suggestion from Kalb, who made it in behalf of Charles Francis Broglie, known as "Count" Broglie. The Count required a dictatorship, and promised much; but Congress paid no attention to the suggestion, and the matter was dropped, until revived by Thomas Paine in his controversy with Deane. The story is told in *Diplomatic Correspondence of the American Revolution* (Wharton), I. 391, and *Deane Papers* (N. Y. Hist. Soc. Coll.), III. 362.

†*Amer. Hist. Review*, I. 401-413, April, 1896; 650-670, July, 1896. As respects both battles, see also paper entitled "A Plea for Military History," in "Lee at Appomattox and other Papers," 354-361.



GENERAL CASIMIR PULASKI.
FIRST AMERICAN CHIEF OF CAVALRY.

artillery contingent. He did not seem at all to grasp the idea of some mounted force as an instrument essential to ascertaining the whereabouts and movements of his opponent, or concealing his own movements.

My attention has more recently been drawn again to this subject, while reading two of the later contributions to the military annals of the War of Independence, the volume, published in 1907, of his "American Revolution," by Sir George Otto Trevelyan; and Sydney George Fisher's "Struggle for American Independence," which appeared two years ago. Sir George Trevelyan brings his narrative down to the battle of Monmouth, in June, 1778, about twenty-two months after the operations on Long Island to which I have alluded. Mr. Fisher's narrative is complete, covering the operations of the entire War of Independence. Having myself been an officer of cavalry during nearly the whole of the War of Secession (1861-1865), I have since, not unnaturally, when occupied with military talk or books, found myself instinctively, and almost unconsciously, giving attention to cavalry as a factor in what occurred. Especially has this been the case while reading of the doings of Prince Rupert and of Cromwell in Great Britain, of the wars of Frederick the Great and of Napoleon, and, more recently, of that in South Africa. In this reading, almost wholly casual, I have, when studying historical works relating to our, so-called, Revolution, been more and more impressed by the absence of all reference to the employment of, or the failure to employ, cavalry in Washington's strategy and tactics; though the narratives of Trevelyan and Fisher are, in a measure, less open to this criticism than those which preceded them. So far as my observation goes, those who have undertaken to tell that story have been altogether civilians, men of the library; and in reading their accounts of what took place it has been to me unceasingly apparent that, even less than Michael Cassio, had they ever "seen a squadron in the field"; nor, consequently, did they "the division of a battle" know in connection with the practical use of the "squadron." Judging by the narratives, it never seems to have occurred to the writers thereof that in 1776 and later, the seat of warfare in America, especially between the Hudson and the Potomac,—the field in which Washington conducted his operations,—was one singu-

larly adapted to irregular cavalry operations. As the records show, it was a region full of horses, while every Virginian and nearly every inhabitant of Pennsylvania and the Jerseys was accustomed to the saddle. Then, as later in the Confederacy during our War of Secession, people owned their mounts. Every farming lad and every son of a farmer was, in a rude way, an equestrian; the doctors made their rounds on horseback; the lawyers rode the circuits; in fact the whole social and business life of the community was in a more or less direct way connected with the saddle and the pillion. The horses, also, were of fairly good breed; and, when brought into military use, showed solid powers of endurance, especially those raised in Virginia. Under such circumstances, subsequent experience in our own civil troubles should, it would seem, lead the modern critic and student of military operations to assume that the patriot force would naturally have drifted into that irregular mounted service which was so large and picturesque a feature both in earlier and later warfare,—not less in the operations under Prince Rupert in Cromwell's day than more recently in South Africa.

Connected with the history of the Revolutionary operations and campaigns, beside the, so-called, standard narratives, we have the "Memoirs," left by various participants, such as "Light-Horse Harry" Lee, Graydon, Tarleton and Stedman, all of whom were in a way experts from the military point of view; though, when they wrote from memory, perhaps long after the event, their statements are, of course, open to the suspicion which proverbially attaches to evidence of that character. I fail, however, to recall any more recent general historical narrative relating to persons or events of the Revolutionary struggle which indicates on the part of the narrator any direct personal familiarity with military operations; and, in many of them, the absence of that familiarity is almost painfully noticeable. Our late associate, John Fiske, is a case in point. Not only is his most readable work marred and made unreliable by a spirit of adulatory and indiscriminating hero-worship wherever Washington is concerned, but, while he has composed an interesting story, the absence of anything indicative of either military experience or strategic instinct is conspicuous. He tells the tale; but he does not understand its details, nor, from the military point of view, their significance. In con-

nection with Washington, another instance readily suggests itself. As a contribution to history, and the great literary reputation of its author, Irving's Washington naturally recalls Sir Walter Scott's *Life of Napoleon*; but, in referring to the latter, Napier in his *Peninsular War* does not hesitate to allude (Bk. iv, chap. 6) to "that intrepidity of error which characterizes the work."

Let me here, once for all, premise that it is no part of my present purpose to deal exhaustively with the subject, or myself to endeavor to make good what I regard as the omission of others. The attempt so to do would involve an amount of research upon which I cannot afford time to enter, on a subject with which I make claim to no especial familiarity. I propose, therefore, merely to call attention to what I have been led to consider a noticeable and serious defect in historical treatment; and, in so doing, to suggest a tentative criticism involving possible limitations in Washington as a military commander,—his knowledge of the use of the standard weapons of warfare, and his lack of a certain alertness in availing himself of weapons within his reach. This paper, therefore, confessedly superficial, is suggestive only. It is the throwing out of an idea, in hopes that some other engaged in a more careful study of the subject may take it up, and work that idea out for what it is worth, be the same more or less.

The criticism opens with the course of events in the second year of the war,—the operations in and about New York during the latter half of 1776; for it goes without saying that, except for camp and orderly duty, and as an instrument to effect more rapid communication, there was no occasion for any force of cavalry, or opportunity for its use, in the operations of 1775, whether conducted about Boston, or in the wilderness of Maine, or in the Canadas, with Montreal and Quebec as objectives. But in the early months of 1776 the seat of active warfare was transferred from Boston and its immediate neighborhood to the mouth of the Hudson; and Washington himself reached New York, and assumed command there, on the 13th day of April. On the other side, the British armament, naval and military, made its appearance off Sandy Hook during the closing days of June; and, in the early days of July, a landing on Staten Island was effected. Then, for nearly two months, the opposing forces idly

confronted each other. During that long period,—the best campaigning weather of the whole year,—Washington was meditating the extremely difficult problem before him; a problem, though he confessedly did not at the time realize the fact, from a military and strategic point of view altogether insoluble.*

It is now quite apparent that, to advance the patriot cause, a wholly new system of both strategy and tactics was advisable. The mouth of the Hudson did not, under existing conditions, admit of successful defense. The true policy to be pursued was to abandon it to the enemy; and then to draw that enemy away from his base, and into the interior, where recourse against him could be had to the tactics of Lexington and Concord. Away from New York, he would have no strategic objective, and he could be harassed day and night and from behind every tree and stone wall. He would have held only the ground on which he camped; and the more country he tried to cover, the more vulnerable he would have become. Space, mobility and marksmanship were the elements of American strength; in solid battalions, as in artillery and organization, they were manifestly weak. But it was on these last that Washington staked the issue of the second campaign of the war. It was on his part a strategic misapprehension; and the campaign was doomed to disaster from the start.

Such being the general strategic situation, the brothers Howe, the one in command of the British fleet, the other of the army, continued to offer throughout the summer months a well-sustained demonstration of their incapacity, or their unwillingness to make any effective use of either the one or the other arm of the service. Active land operations were at last begun by Sir William Howe in the closing days of August. He was in command of a large and very perfectly equipped force, some thirty thousand strong. Washington, having then been for twenty weeks on the ground, found himself facing an enemy in complete control of the sea, while it devolved on him to hold the town of New York at the extreme end of Manhattan Island, a position not only surrounded on three sides by deep and navigable waters, but commanded from the east by the heights of Brooklyn, within easy artillery range. As a simple, hard, military fact, Washing-

*Writing to the President of Congress, September 2, 1776, Washington said: "Till of late I had no doubt in my own mind of defending this place."

ton was open to attack by a military force not only numerically superior, but in every way better organized and equipped than his own, on his Brooklyn front, on either flank, or in his rear; and the point of attack, wherever selected, would assuredly be covered by the converging fire of such a number of ships-of-war as could be advantageously brought into action. The patriot leader, misled by his Boston experience of the previous year, had delivered himself into the hands of his opponent.

Under these conditions, not yet developed fully, during the early days of July and seven weeks before Sir William Howe showed any signs of activity, Governor Trumbull of Connecticut sent a detachment of "light-horse," as they were called, to New York. Some four or five hundred in number, they were a body of picked men,—as Washington wrote, "most of them, if not all, men of reputation and property." Yet, on the score of expense, he refused to allow them to keep their horses; and, when they declined to do infantry duty, he roughly sent them home, writing to their commander, "they can no longer be of use here, where horses cannot be brought into action, and I do not care how soon they are dismissed."* It is not easy to understand how a commander of Washington's experience could have reached such a conclusion, much less have expressed it so bluntly and in writing. In the first place, what had he in mind when he asserted that his operations were necessarily conducted "where horses" could not "be brought into action"? It is obvious that both New York and Brooklyn then were, as they now are, on islands; but, that fact notwithstanding, the field of operations included in those islands afforded ample space as well as constant occasion for the employment of any arm of the service,—engineers, infantry, artillery or cavalry. In the second place, to hold the town of New York it was necessary to occupy Brooklyn, and the occupation of Brook-

*Writings of Washington (Ford), iv. 217n, 229, 238. See 588, *post*. Much the same course was followed in North Carolina. Hewes writes from the Continental Congress, May 16, 1776: "I urged the necessity of taking your light Horse into their service, but could not prevail on them to do it, no colonies having been yet allowed to raise any on Continental pay. It is said they are very expensive Troops, and of little use in this contest. I am informed a company or two were raised in South Carolina, but being found by experience to be too expensive the Horses were discharged, and the men turned in to the ranks of foot Regiments."—Colonial Records of North Carolina, x. 605.

lyn implied at least a dozen miles of uncovered front, or avenues of approach, to be vigilantly guarded and unceasingly patrolled. As an historical fact, it was by means of one of these avenues of approach to Brooklyn, wholly unguarded,—though some four or five miles only to the eastward of the direct road from the place where Howe landed his army,—that, a little later on, a sufficient detachment of the British force worked its way by a flanking movement to the rear of Washington's outlying right wing, and inflicted on it and him crushing disaster. Yet Long Island then was full of forage, which afterwards was either destroyed or fed the horses of the British cavalry and artillery; and, so shockingly deficient was the American mounted service, that on the very day when Clinton turned, in the way referred to, the American flank, Heath, the American acting quartermaster-general, was writing from King's Bridge, a few miles away on Manhattan Island to Mifflin, about to cross his command over the East River to Brooklyn,—“We have not a single horse here. I have written to the General [Washington] for two or three.”* To a military critic, the attempt to hold the outer Long Island line under such circumstances seems little short of ineptitude. General Sullivan, who was in command of that line, and who, together with Stirling, his next in command, was captured when his flank was turned, afterward claimed that he had all along felt uneasy about the Bedford road—that by which Howe effected his turning movement—and “had paid horsemen fifty dollars for patrolling [it] by night, while I had command, as I had no foot for the purpose.”† The plain inference would seem to be that none of

*“We suffer here extremely for horses; not a single one at this Post to send on Express. General Mifflin acquaints me that he cannot spare either horse or waggon from that Post. I beg that two or three may be ordered here.”—Heath to Washington, August 27, 1776, Heath Papers. At this very time General Howe's light horse were pillaging and intimidating the inhabitants of Long Island, offering an example of mobility and effectiveness.

†Amory, *Life of John Sullivan*, 28. Stedman says: “This pass the enemy had neglected to secure by detachments, on account of its great distance. In order to watch it, however, they sent out occasional patrols of cavalry: But one of these being intercepted by a British advanced guard, the pass was gained without any alarm being communicated to the Americans.”—*History of the American War*, I. 195. The “great distance” in this case was a short two miles, and the route the British took to get into Sullivan's rear ran, according to the excellent map in Stedman's *History*, just about half a mile from Sullivan's extreme left flank. That such a route should not have been constantly patrolled seems, under the circumstances, simply inexplicable.

the American commanders, from Washington down, had at this stage of the war any understanding of the use and absolute necessity of mounted men in field operations. A cavalry patrol fifty strong only, on the flank of the American advanced line on Brooklyn's right front, and patrolling the approaches, might, and probably would, by giving timely notice, have saved the commands of Sullivan and Stirling from the disaster of August 27; and yet, a few weeks before, the four hundred Connecticut mounted men had been sent home by Washington for the reason that cavalry could be of no service in military operations conducted "here, where horses cannot be brought into action"! But, American or British, it was all of a piece; and the whole story of what occurred August 27-30, 1776, on Long Island, is on both sides suggestive only of a badly played game of chess; as the result of which the losing party escaped a checkmate only through the quite unaccountable procrastination of his opponent on land, and the inactivity of that opponent on the water.*

All these happenings, as well as the subsequent transfer of the patriot army from Brooklyn across the East River to New York, occurred during the closing days of August. Four months later the affairs at Trenton and Princeton closed the campaign of 1776, and Washington's army went into its winter quarters at Morristown.

For present purposes, it is not necessary even to pass in rapid review the incidents of that melancholy campaign or its redeeming, and even brilliant, close in the Christmas week of 1776. It is sufficient to say that throughout those operations, from the ignominious Kip's-Bay panic on September 15 to the splendid closing rally at Princeton on New Year's day, 1777, there is nowhere any indication of the presence of mounted men,

*The first return of cavalry was on September 28, 1776, one month later, when one hundred and sixty light-horse were recorded.

November 29, 1776. Congress appointed a committee of five to "consider and report a proper method for establishing and training a cavalry in this continent." The meagre result was Sheldon's appointment to command a single regiment of cavalry. Of course, it could not be raised, equipped and trained before the following spring.—*Journals of the Continental Congress* (Ford), VI. 992, 1025. In January, 1777, the two troops of light horse from Virginia (Bland's and Baylor's) were taken into continental pay, and in February, Moylan's regiment consisted of six troops, each troop containing thirty-two privates.—VII.

much less of any organized auxiliary cavalry service, connected with the patriot army; nor is it easy to see how the necessary courier and orderly work was done. Of patrol work, picket duty and scouting service there was no pretence on either side. Indeed, it was to this fact, and the neglect on the part of the British of the most ordinary military precautions against surprise, that Washington owed his success at both Trenton and Princeton. Yet the second year of active operations was drawing to a close; and, certainly, operations during the last four months of that second year were not conducted "where horses" could not "be brought into action."

It is narrated of Frederick the Great that, after his first experience in active warfare in the fortunate, but for him personally inglorious and somewhat mortifying Mollwitz campaign, he subjected himself to sharp self-examination as to the errors and oversights for which he felt himself to have been responsible; and especially he "meditated much on the bad figure his cavalry" cut at Mollwitz; and, thereafter, he strove incessantly to improve that branch of the Prussian service, "till at length it can be said his success became world-famous, and he had such Seydlitzes and Ziethens as were not seen before or since" (Carlyle, Frederick, Bk. XII. chap. 13).

If Washington, in his Morristown winter quarters, subjected himself, as he doubtless did, to a similar rigid introspection, the first and most necessary requirement of the situation which suggested itself to him, must, it would seem, have been an adequate mounted force of some kind, attached to his command, at once his army's eyes and ears, its safeguard against surprise and his most ready weapon of offence. And, as respects safeguard against surprise, Major General Charles Lee, then second in command in the patriot army, furnished at this juncture and in his own person an illustration most opportune, though somewhat ludicrous as well as forcible. Of Lee it is unnecessary to speak. Both as man and soldier he stands condemned.* But, in the course of these operations, Howe had

*Lee did appreciate the value of cavalry. "For God's sake, my dear General, urge the Congress to furnish me with a thousand cavalry. With a thousand cavalry I could insure the safety of these Southern Provinces; and without cavalry, I can answer for nothing. I proposed a scheme in Virginia

sent out Colonel Harcourt with a detachment apparently of the Seventeenth Light Dragoons (Stedman, I. 191, 226) to obtain information as to Lee's movements. This detail seems to have roamed about at will; and finally, through an intercepted letter put in charge of "a countryman" to carry to its destination, Colonel Harcourt not only learned of General Lee's whereabouts, but also got full information as to how he was accompanied. Stedman (I. 226) says that the American commander had gone out "in order to reconnoitre," and "stopped at a house to breakfast." Fiske asserts (I. 226) that Lee had "foolishly taken up his quarters" at the house in question, and had there slept. However this may be, on the morning of the 13th of December, a fortnight to a day before the affair at Trenton, a mere squad of British cavalry, thirty strong only, swooped down on White's Tavern, near Baskingridge,—half-way across the State of New Jersey,—and, in leisurely fashion, carried Lee off in slippers and dressing-gown, a prisoner of war. Another point of interest in connection with this somewhat opera bouffe performance was the presence in it, as a participant, of Banastre Tarleton, then a cornet of light-horse. Subsequently Tarleton gained notoriety as an active and enterprising cavalry officer in the Southern Department; and, as such, he also left a volume of Memoirs relating to the operations in which he bore part. The capture of Charles Lee does, however, reveal the fact that Howe's army in this campaign did boast a small force of regular cavalry, designated by Stedman "light dragoons" (I. 191) or "light-horse" (226), and mention is from time to time made of it; but its only noticeable, or even recorded, performance was this bagging of Charles Lee. It is none the less apparent that, with a sufficient and effective

for raising a body almost without any expense. The scheme was relished by the gentlemen of Virginia, but I am told the project was censured by some members of the Congress, on the principle that a military servant should not take the liberty to propose anything.... From want of this species of troops, we had infallibly lost this Capital, but the dilatoriness and stupidity of the enemy saved us."—To Washington, July 1, 1776, Correspondence of the Revolution (Sparks), I. 246. He had already written to the Virginia Committee of Secrecy: "Your resolution to raise a body of light-horse is, in my opinion, most judicious. It is a species of troops without which an army is a defective and lame machine."

auxiliary mounted force, such as Tarleton subsequently had under him in the Carolinas, the advantages gained in the operations about New York during the autumn months of 1776 by Howe and Cornwallis could easily have been followed up later, and Washington's straggling and demoralized army might have been effectually dispersed. On the other hand, while the British, from the lack of a mounted force adapted to irregular service and American conditions, did not, and could not, follow up their successes, the Americans, for the same reason, were wholly unable to harass their enemy and retard his advance. They could not even keep informed as to that enemy's position and movements, much less cut off his supplies, or exhaust and distract him by continually beating up his cantonments—a system of tactics subsequently most successfully employed in the Carolina campaigns under even less advantageous conditions. That the British during the earlier stages of that seven years' struggle failed, so to speak, to "catch on" to this somewhat novel feature in warfare, as then conducted, is perhaps, considering the national characteristics, no matter for surprise. At best the British soldier is not peculiarly adaptive; and, fighting in a new country under wholly unaccustomed conditions, a Prince Rupert was not at once developed. The curious and hardly explicable fact, however, is that, later, they did "catch on" more quickly than Washington, who was to the manner born, and did develop, in advance of the Americans, a substitute for Prince Rupert, and a tolerably good one also, in the person of Tarleton. But, with material directly at hand in the way of both horses and riders, it is fairly matter of wonder that no American Mosby developed anywhere or at any time within the field of operations presided over by Washington. Further south the partisan leader and the mounted rifleman did appear, as if by spontaneous generation, almost immediately after interior operations began; for Marion, Sumter, Pickens and the two Horrys were the Mosbys and Wheelers of the earlier struggle (Fisher, II. 275). But north of Chesapeake Bay, where the initiative and personal influence of Washington, so to speak, set the gait, any trace of this aggressive individual enterprise is looked for in vain. Morgan stands forth the nearest approach to it. Washington, as is well

known, did at one time consider the possibility of being compelled to fall back to the well-nigh unexplored region beyond the Alleghenies; and, subsequently, he had recourse to what is known as a system of Fabian tactics. But the Parthian system of tactics was quite as well established historically as the Fabian,* only it never seems to have occurred to him. Yet all the conditions lent themselves admirably to a recourse to that system. As I have said, the men were there; the horses were there; the forage was there: all in abundance. The organization and leaders only were lacking; nor were the leaders far to seek. Daniel Morgan, of Virginia, was there, Jersey-born but of Welsh stock, no less a born commander of irregular horse than, eighty years later, in the War of Secession was Forrest, of Tennessee, a man of exactly similar type, instinctively a strategist and cavalry leader. And again another instance: from the very commencement of hostilities, Benedict Arnold gave unmistakable evidence of the possession of every quality which went to make up the dashing cavalry commander.

Contrasting him with well-known characters familiar to a later generation, Washington seems, on the contrary, to have had more traits in common with George H. Thomas than with either Sherman or Sheridan. To the military critic, he is something of a puzzle; for, though ordinarily cautious and even slow, he at times was wonderfully alert, and at other times actually audacious. In the operations in and about New York during the autumn of 1776 he failed to grasp the strategic situation, and vacillated in presence of his opponent in a way which should have led to his destruction. The decision, alertness and energy displayed by him at Princeton and Trenton were, on the other hand, indicative of qualities which at the time elicited from the retired veteran of Potsdam words of warm appreciation; while, the next year, at Brandywine and Germantown, the audacity, not to say rashness, with which he challenged battle with an opposing force which, not only in organization and equipment, but even numerically, completely outclassed him, was, and is, simply confounding. Finally his move on York-

*"The ne'er yet beaten horse of Parthia

We have jaded out o' the field."—Antony and Cleopatra, III, 1.

town in 1781 was a brilliant strategic conception, as decisive as it was energetically carried out.

Returning, however, to the subject under immediate consideration—the organization of a mounted service and its effective use in the Revolutionary operations—Washington did not evince mental alertness. On the contrary, while his correspondence and reports reveal no trace of the consciousness of an unsupplied necessity in this direction, he, in the field, showed himself distinctly lacking in what may, for present purposes, be well enough described as the cavalry *flair*, so conspicuous in Cromwell and Frederick. There is in Sheridan's Memoirs a passage curiously illustrative of this divergence of view, chiefly attributable to character and temperament, but in part due to training and vocation. Sheridan was essentially a cavalry officer—a *sabreur*. Originally assigned to the artillery, General George G. Meade, the victor of Gettysburg, later served in the engineer corps until August, 1861, when he was put in command of a brigade of Pennsylvania infantry then being organized. Both were in their respective ways excellent officers, but Sheridan says of Meade (Memoirs, I, 355): "He was filled with the prejudices that, from the beginning of the war, had pervaded the army regarding the importance and usefulness of cavalry. General Scott then predicted that the contest would be settled by artillery, and thereafter refused the services of regiment after regiment of mounted troops. General Meade deemed cavalry fit for little more than guard and picket duty." Sheridan, on the contrary, regarding the problem from the cavalry point of view, grasped the possibilities and wanted to weld that arm of the service into an effective, and even deadly, weapon of offence. Throughout the Revolutionary operations, Washington seems to have looked upon cavalry much as did Scott and Meade in the later struggle; and, in the Revolution, no Sheridan forged to the front.

To undertake to review in detail the subsequent Revolutionary campaigns from a cavalry point of view, would extend this paper beyond all reason; it would assume the proportions of a treatise. Necessarily, therefore, I must confine myself to outlines and suggestions. I have referred to the campaign of

1776.* That of 1777 — Washington's third — was marked by Burgoyne's invasion from Canada, and the ill-considered and altogether aimless movement of Sir William Howe on Philadelphia. The northern campaign began in the middle of June, and closed with the Saratoga surrender on the 17th of October. Burgoyne was a cavalry officer, and had won such distinction as he enjoyed by organizing the so-called "light-horse" as an arm of the English military service. Now, however, he was called upon to conduct operations in a well-nigh primeval wilderness, through which he should have moved by water whenever it was possible so to do, but elected to march by land. Accordingly, men, and Germans in some cases at that, accustomed to European roads found themselves following woodland trails through a country intersected by creeks, and consisting in great part of impassable morasses. Under such conditions, a mounted force would have been simply an additional incumbrance. Accordingly, in the Saratoga campaign, cavalry cut, and could cut, no figure.

It was otherwise in Maryland and southern and eastern Pennsylvania, the region which Howe selected as the field for his operations; and that in which Washington next had to figure.

During the earlier months of that summer, there had been some desultory movements on the part of Howe, from New York as a base, which Washington had contented himself with observing. He was pursuing a Fabian policy. He was, also, wise in so doing; for, in every branch of the service—infantry, artillery, or even cavalry—the force opposed to him was incomparably superior to anything he could put in motion. In fact, it is not easy now to see how Washington was able to hold the field even defensively. The movements at this juncture are known in Revolutionary annals as Howe's "two weeks' fooling in New Jersey" (Fisher, II. 13), and during them

*There is record of a payment made by the Continental Congress of nearly five thousand dollars, for the service of a company of light-horse of Essex County, New Jersey, raised December 25, 1776, and discharged March 17, 1777. The exact service given is not mentioned, but it probably guarded the prisoners taken at Princeton and Trenton.—Journals of the Continental Congress (Ford), VIII. 393.

it is quite needless to point out how valuable any mounted force, regular or irregular, would have been to the patriot commander. Presently Howe moved his army back to Staten Island, and, loading it on transports, disappeared from view until the last days of July, when he, so to speak, turned up at the entrance of Delaware Bay. Washington, his opponent's objective being now apparent, hurried his ill-organized command to the new field of operations. On his way he passed through Philadelphia, where the Continental Congress was then holding its sittings; and, from a letter written by John Adams to his wife, we get a glimpse of a more or less nebulous cavalry contingent as a component part of the patriot army. John Adams wrote: "Four regiments of light-horse. Bland's, Baylor's, Sheldon's and Moylan's. Four grand divisions of the army, and the artillery with the matrosses. They marched twelve deep, and yet took up above two hours in passing by. General Washington and the other general officers with their aides on horseback. The Colonels and other field-officers on horseback."*

Presently the British expedition made its appearance in Chesapeake Bay, and, finally, a landing was effected near Elkton. Philadelphia, it was plain, was now the British objective, and Washington hurried across the country to plant himself in Howe's path. With a force some eleven thousand strong, only half-disciplined and wretchedly equipped, while Howe had eighteen thousand regulars, with an artillery contingent, this was distinctly audacious. Going by sea, Howe, of course, could not have had any considerable force of mounted men, probably only a squadron or two.†

*Familiar Letters (1876), 298. At this very time a Committee of Congress went to camp and reported that the army consisted of 17,568 men, rank and file, 193 privates of the corps of artillery, and 188 privates of the cavalry. In addition, however, were Colonel Moylan's regiment of horse, and four troops belonging to Sheldon's and Bland's regiments, of which the details are not given. The committee made no recommendations on cavalry.—Journals VIII. 608.

†Stedman says (I. 289) that Howe's army, including "a regiment of light-horse," embarked at New York on the 5th of July, "where both foot and cavalry remained pent up, in the hottest season of the year, in the holds of the vessels, until the 23d, when they sailed from Sandy Hook." Not until the 24th of August did the expedition reach its landing-place, at the head of the

What now ensued illustrated most strikingly the absence of cavalry on either side. To one trained practically in the methods of modern warfare it reads like a burlesque, exciting a sense of humor as well as a feeling of amazement. While Howe's army lay at Elkton, preparing in a leisurely way to take up its line of march to Philadelphia, Washington, it is said, accompanied by Greene and Lafayette, with a few aides, went forward to reconnoitre. In other words, the two generals, most prominent in the army and necessary to its preservation as well as effectiveness, accompanied by a distinguished foreign guest, actually went out in person on a scout. In the early days of our Civil War, a prominent politician freshly made a General distinguished himself by attempting a close reconnaissance on a railroad train; and, in South Africa, on one memorable occasion, an English commander undertook to ascertain the whereabouts of the enemy by utilizing a park of artillery as a skirmish line: but no case except this of Washington is recorded of a general-in-chief going on an over-night scout himself because, apparently, he could in no other way get information of a kind, to say the least, highly desirable.

Riding forward to certain elevations, from which they got a glimpse of a few tents in the distance, Washington and his companions were caught on their return in a heavy rain, and took shelter for the night in a farm-house which chanced to be owned and occupied by a loyalist (Fisher, II. 22). They seem to have been utterly without escort and ran fully as great a risk of being gobbled up as did Lee, eight months before. That they did not now share Lee's fate was pure luck.

It next devolved upon the patriot army to cover Philadelphia. Howe was perfectly advised as to the composition of the force opposed to him, the inadequacy of its equipment, its

Elk. Not until the 8th of September was the entire force concentrated and put in motion towards Philadelphia. The horses of the expedition were thus, during the most trying period of the American summer, kept exactly seven weeks in the holds of the transports. Taking all things into consideration, greater dilatoriness would not have been easily possible. Had Washington at this time been in position to issue orders for the movements of both armies, his own and the British, he could hardly, from the American point of view, have bettered the situation.

lack of cavalry or any mounted force, and its consequent inability to secure early and correct information as to his own whereabouts and tactics. He acted accordingly, preparing a flank movement almost exactly similar to that so successfully employed on Long Island a year previous, and at both Chancellorsville and Sadowa in the following century. Cornwallis moved around Washington's unsuspecting right, just as "Stonewall" Jackson eighty-five years later, and less than one hundred and fifty miles further south, circled Hooker's right. Trevelyan says (Pt. III. 228) that the reports which now reached Washington "were in a high degree confused and contradictory. He had no means of getting at the positive truth, because he was very weak in cavalry"; and so the morning of a momentous day wore away "amidst distracting doubts and varying counsels." Presently, as the result of a reconnaissance made by a single horseman sent out to explore by Sullivan, who commanded the American right, Washington was erroneously advised as to his opponent's probable plan of action, and set his forces in motion for an attack on that portion of Howe's army in his own immediate front. Other and more correct information then at last reaching him, he again changed his plan; but it was now too late. Howe's flanking movement had been completely and successfully carried out; and it only remained for the historian to record that the disaster which a few hours later overwhelmed the patriot cause was due to the fact that those in charge of it could obtain "no reliable information from the inhabitants, and had so few and insufficient cavalry that they could make no extended and rapid explorations." A year almost to a day had elapsed since this same Sullivan had found himself the victim of a precisely similar movement on Long Island, his opponent getting in his rear by a perfectly obvious roundabout route, but one over which his approach was never "dreamed of." On that occasion Sullivan, having no men at his disposal to watch the road, had, it will be remembered, "paid horsemen fifty dollars for patrolling it by night"; and now, under very similar conditions, he wrote, "I have never had any light-horse with me since I joined the army. I found four when I came to Brentford's Ford, two of whom I sent off with Captain Hazen to Jones's

Ford." In such a state of affairs, with an overpowering hostile force creeping around the army's right wing, the question naturally suggests itself, where were "Bland's, Baylor's, Sheldon's and Moylan's four regiments of light horse"?* Of them and their movements no mention is made. Howe now had Washington where a vigorous, and energetic commander likes to get his opponent. Demoralized and exhausted, the patriot army was driven into a *cul-de-sac* formed by the junction of the Schuylkill with the Delaware. Ruthlessly pursued, there was no escape for it. As the alternative to surrender it would have been hustled into the river. But now, as a year before on Long Island, Washington owed his salvation to the inertness of an opponent who never saw any occasion for following up an advantage. Having won what could easily have been made a decisive victory, Sir William Howe showed no disposition to assume an active aggressive, but lay for two weeks in camp in an agreeable situation in a healthy high position within a few miles of his highly successful battle-field.†

*Fisher remarks (II. 27): "This Sullivan who learned of the flanking movement too late at Brandywine, was the same Sullivan who had failed to know of the flanking movement in time at Long Island. His *forte* did not lie in protecting an army's flank." This, possibly, is true. It is, however, equally true that on a previous notable historical occasion the *forte* of the children of Israel did not lie in the making of bricks without straw.

†Stedman says (I. 292): "A general rout took place. A considerable part of the American army fled with precipitation, in small and confused parties, by different roads, towards Philadelphia, Lancaster, and Reading, while General Washington, and the corps he was able to keep together, fled with his cannon and baggage to Chester; where he remained, within eight miles of the British army, till next morning, when he marched by Derby to Philadelphia." Bancroft explains (V. 599, Century ed.) that "nightfall, the want of cavalry, and the extreme fatigue of Howe's army forbade pursuit." Stedman observes (I. 239): "The victory does not seem to have been improved in the degree which circumstances appeared to have admitted. When the left column of the British had turned Washington's right flank, his whole army was hemmed in. . . . He was obliged to retreat twenty-three miles to Philadelphia, where the British lay within eighteen miles of it. . . . For some reason, however, which it is impossible to divine, the commander in chief employed himself for several days in making slight movements, which could not by any possibility produce any important benefits to the British cause." Fiske is fully equal to even that military situation. He says (I. 317): "Washington detained the victorious enemy a fortnight on the march of only twenty-six miles; a feat which not even Napoleon could have performed with an army which had just been 'routed.'"

During this inexplicable interval in active operations, the absence on the patriot side of any eyes and ears of an army received further forcible illustration in the so-called Paoli "massacre" of September 20, through which "Mad Anthony" Wayne got a rough lesson in warfare. When Washington, after the disaster on the Brandywine, withdrew across the Schuylkill, he left a small force, some fifteen hundred strong, on its further side, under Wayne, to watch Howe, and, it is said (Fisher, II. 33), to "harass his rear" if he moved forward. The reason thus given for such a risky division of a force, insufficient at best, is not over and above intelligible; and, certainly, infantry were here left to do what was plainly the work of cavalry. Wayne also was, like Sullivan on the Brandywine, without the means of effective outpost service. Apparently he had a few very inefficient mounted men posted as videttes, who failed to give timely notice of the enemy's approach.* The natural result, a night surprise, followed. At about one o'clock in the morning (Stedman, I. 294) Wayne's camp was rushed, and he lost about a fifth of his command—lives thrown away. But historically the affair has its lesson; for the different eyes with which historians regard it and state the facts connected with it are suggestive. In Trevelyan only is there any comment on the absence of organization which made such a foot-surprise practicable—the single military lesson to be learned from it; but one historian says of the British commander, Major-General Grey, his "only distinction in the war was in prisoner-killing"; and, in this case, he "committed, it is said, most ruthless slaughter with sword and bayonet on those he first came upon. . . . Wayne was not surprised, as has been generally supposed. . . . He was accordingly well prepared, resisted gallantly, and was able to retire, saving his artillery and stores" (Fisher, II. 33). But another historian writes: "The best officer in Howe's army, short of Cornwallis, was Charles Grey, who died Earl Grey of Howick in Northumberland, and who was the father of the celebrated Whig prime-minister. It once was the fashion in America to write about General Grey as if he was a pair with Governor Tryon; but, in truth, he was a

*Stille's Wayne, 86.

high-minded and honorable gentleman, and a soldier, every inch of him. . . . It was as complete a surprise, and as utter a rout, as ever occurred in modern warfare" (Trevelyan, Pt. III. 233). On this disputed point it can only be observed that, if the American commander was at Paoli not surprised and was "well prepared" against a midnight attack, the outcome thereof called for a great deal of explanation on his part. A loss of between three and four hundred sustained by his command was counterbalanced by "precisely a dozen casualties in the English ranks." If "well prepared" for him, Wayne certainly failed, on that occasion, to give his opponent what is in warfare known as a warm reception. At the bar of history the burden of further proof would appear to rest on the American investigator.

During the previous winter Congress, presumably on the suggestion of Washington, had given some more or less shadowy consideration to the idea of organizing a body of what was termed "light cavalry," in apparent distinction to the severely drilled and heavily accoutred dragoon; for, stated in general terms, in Europe the dragoon constituted the more solid mounted arm of the service, equipped with carbines, while the hussar and lancer, lighter and more dashing, depended on the sabre and the lance. Both were quite unfitted to the essential conditions of practical warfare in America. It is, therefore, extremely questionable whether any such mounted force as the Congress authorized during the winter of 1776-1777 ever really came into existence, even on paper. The historians make no mention of it. Meanwhile, Count Pulaski had now been for some time in the country and apparently attached to Washington's headquarters; a member of his military household. Bancroft, in his not very satisfactory or intelligible account of the Brandywine operations, enigmatically says, "on that day (Pulaski) showed the daring of adventure rather than the qualities of a commander"; but, apparently because of his dashing conduct, Congress, on the recommendation of Washington, commissioned him as Brigadier General.* This

*Pulaski held no appointment at the time of the battle of Brandywine. He had a high opinion of his own qualities, for he asked: "such rank and command in the army of these united states as will leave him subordinate to the

was done, the historian informs us, "in order to encourage and develop that arm which heretofore had amounted to little or nothing in the patriot service" * (Fisher, II. 30).

Commander in Chief alone, or to him and the Marquis de Lafayette."—*Journals*, VIII. 673.

Washington's view of the cavalry may be measured by his recommendation of Pulaski: "This department is still without a head; as I have not, in the present deficiency of Brigadiers with the army, thought it advisable to take one from the foot for that command. The nature of the horse service with us being such, that they commonly act in detachment, a general officer with them is less necessary than at the head of the Brigades of infantry. . . . But though the horse will suffer less from the want of a general officer than the foot, a man of real capacity, experience and knowledge in that service might be extremely useful." Franklin, in his endorsement of Pulaski, said nothing of his special fitness for the cavalry service, and Washington doubtless only repeated the Polish adventurer's own claims when he told Congress that "as the principal attention in Poland has been for some time past paid to the cavalry, it is to be presumed this gentleman is not unacquainted with it."—*Writings of Washington* (Ford), vi. 57 n. He was appointed to command the horse, with the rank of brigadier general, but the experiment was short, and, apparently, the reverse of fortunate. He resigned his command in March, 1778, to raise an independent mixed force of horse and foot, known in Revolutionary annals as "Pulaski's Legion."—*Journals*, x. 312.

Of curious interest is the resolution of Congress, of March 2, 1778, on raising State companies of light horse, to serve at their own expense, save provisions and forage, and not to act as expresses or as escort to other than the General. The plan was addressed to the "young gentlemen of property and spirit" in the States.

*Pulaski, some months after his appointment, complained of the "ineffective state" of the cavalry. "It cannot be appropriated to any other service than that of orderlies, or reconnoitering the enemy's lines, which your Excellency must be persuaded is not the only service expected from a corps, which, when on a proper footing, is so very formidable. Although it is the opinion of many that, from the construction of the country, the cavalry cannot act to advantage, your Excellency must be too well acquainted with the many instances wherein the cavalry have been decisively serviceable, to be of this opinion, and not acknowledge that this corps has more than once completed victories. . . . What has greatly contributed to the present weak state of the cavalry was the frequent detachments ordered to the suite of general and other officers, while a Colonel commanded, which were appropriated to every use and the horses drove at the discretion of the dragoons."—*Correspondence of the Revolution* (Sparks), II. 53. Again, in December, 1777, he wrote: "While we are superior in cavalry, the enemy will not dare to extend their force, and, notwithstanding we act on the defensive, we shall have many opportunities of attacking and destroying the enemy by degrees; whereas, if they have it in their power to augment their cavalry, and we suffer ours to diminish and dwindle away, it may happen that the loss of a battle will terminate in our total defeat. Our army, once dispersed and pursued by their horse, will never be able to rally."

At this stage of the present study it is very desirable, if any result of value is to be reached, to bear continually in mind the advice of Dr. Johnson to Boswell that he should, before entering on a certain discussion, "clear his mind of cant"; and in the present case the term "cant" must be held to include cults, hero-worship, patriotism, traditional gratitude, race-pride and various other factors, all more or less disturbing in any historical narrative. The present is an effort towards a cold, critical, military analysis from a purely cavalry point of view. It is also, of course, easy to be wise after the event; and, in the full light of subsequent occurrences, to see what ought to have been done, or left undone, at any given crisis of human affairs. Premising all this, it is yet difficult to avoid the conclusion that if, in the autumn and winter of 1777, the organization and development of an effective mounted force in the American Continental Army was the end in view, the selection of Pulaski as the officer to work that result about was in no way happy.

A showy, dashing Polish horseman, and, as the end showed, a most generous and gallant young fellow, Pulaski, as Chief of Cavalry for the somewhat inchoate Continental Army of 1778, labored under difficulties which were in fact insuperable. With a quick temper and impatient disposition, he could not make himself understood in English; and, a stranger in a strange land, his whole former military experience was, among Americans and under American conditions, a positive drawback. He submitted to Washington a sensible memorial, in which he pointed out clearly the pressing necessity of an organized and improved cavalry service; and, subsequently, he forwarded several reports setting forth in most imperfect English the difficulties he encountered. These I have not seen; nor have I read Colonel Bentalou's pamphlet entitled "Pulaski Vindicated"; but judging by brief extracts printed by Sparks in his *Memoir*,* I infer with some confidence that, while he addressed himself with zeal to the task he sought for and which was assigned him, Pulaski did not go at it in the right way—in the way in which, for instance, Morgan would probably have gone at it. In other words, he did not under-

**Life of Count Pulaski*, Sparks's *American Biography*, New Series, iv.

stand America, and had no correct idea as to conditions. Consequently, as Sparks very well puts it, "the officers of the several regiments, who had heretofore been in a measure independent, were not easily reconciled to the orders of a superior, particularly of a foreigner who did not understand their language, and whose ideas of discipline, arrangement and maneuvers were different from those to which they had been accustomed." The result naturally to be expected in due time ensued. Thus the first attempt at a Continental cavalry organization failed; nor can the responsibility for its failure be attributed exclusively to the injudicious interference of an intractable Congress. It failed because it was in no way American, or entered upon with a correct, because instinctive, appreciation of existing potentialities. And so the brave and unfortunate Pulaski passed on to his early death. It was merely another case of a square peg in a round hole. But the question still presents itself—Who put the peg in that particular hole?—and did the person making the assignment exactly understand either the nature of the hole or the adaptation of the peg to it?

I now find myself face to face with an accepted American historical cult; for the investigator who is so rash as to question, from any point of view or in any respect, Washington's all-embracing prescience or infallibility of military judgment, incurs imminent risk of being summarily ruled out of court—or, so to speak, historically disbarred. In avoidance of this penalty, I find myself, therefore, compelled to reiterate what in any good military treatise would be ignored as a commonplace. To any one at all acquainted with the practical side of warfare the proposition is elementary: There is no branch of the service in which a familiar acquaintance with the country to be operated in, and its conditions, is so essential to a commander's success as is the cavalry. A man not to the manner born may be a good officer of infantry or of artillery, and an excellent engineer, even though he speaks but indifferently the language of his soldiers; not so the efficient commander of horse. To be really effective, he must be of his command; his troopers must see in him one of themselves. Especially is this so in a new country, such as the United States in all respects was during the last half of the eighteenth century. In America and in Europe, engineering and artillery were in

essentials the same. That European infantry at times found itself out of place under American conditions had been demonstrated in Braddock's case and again at Bunker Hill; but still the European battalion and officers could do good work when out of the woods and the reach of rangers and riflemen. With the mounted service it was altogether otherwise. American conditions called for a species of cavalry peculiar to themselves; and, in organizing and commanding it, a European had first to unlearn everything he had ever been taught, and start fresh. He must understand the country, its people and their speech, its horses, its roads and its forage. In a word, no less in Revolutionary times than during our War of Secession, if he is going to prove a cavalry success, he must be a Daniel Morgan and not a Casimir Pulaski.

To the "bookish theorick" and closet historian — the Bancrofts and the Fiskes, past, present and to come — all this may at best be news, or at worst seem quite immaterial; but any man who in America has himself ever "set a squadron in the field" in presence of an enemy will see in it not only the alphabet, but the very crux itself, of his calling. And my point is that, after two whole years of campaigning in the Jerseys and Pennsylvania, Washington ought to have grasped this elementary proposition. That he did so grasp it, I find no evidence, whether in his operations or his correspondence. Yet the third year of active warfare was now drawing to its end, and while poor Pulaski was struggling in vain with the English language and a "Legion" cavalry organization, at once inchoate, ill-considered and insubordinate, both Morgan and Arnold were in command of men who ought to have been on horseback with rifles on their saddle-bows, but who still marched and fought on foot with musket and bayonet.

To return, however, to the Brandywine and the course of military events. The battle was fought September 11th; and towards the close of that month, Howe, by a skillful move, outmaneuvered Washington and, throwing his army across the Schuylkill, occupied Philadelphia. But that he succeeded in doing this, pronounced by the historian (Fisher, II, 35) "the cleverest piece of work" ever accomplished by him, was again entirely due to Washington's absolute lack of any approach to an effective outpost service.

The battle of Germantown followed, involving, of course, the continued occupation of Philadelphia. An audacious conception, it was well planned by Washington, and came near being a brilliant success. Unfortunately, there was, as the historians say, no possibility of quick communication on the field; owing to the prevalence of dense fog the position of the enemy could not be correctly ascertained; and what mounted force was available, known now as "Pulaski's cavalry," was so much separated by attending the different divisions of the army on their march, and other services,* that, during the battle, the several detachments

*The detailed disposition of the mounted force forming part of Washington's army at Germantown furnishes conclusive evidence of the absence of any correct conception of either the organization of cavalry or its use in field work on the part of the American general at that stage of the conflict, 14 months after Howe landed on Staten Island. The entire force might have amounted to two full squadrons, or one modern battalion (400 rank and file). Pulaski, who neither talked nor understood English, but had been made a Brigadier-General less than three weeks before, was in nominal command of all the cavalry, but the cavalry was not organized, and the several units which might have gone into an organized whole were distributed as follows: Moylan's Dragoons accompanied the right wing under Sullivan; two troops of Sheldon's Dragoons under Major Tallmadge, some of Bland's Dragoons, and several of Pulaski's recruits accompanied Greene's left wing. A detail of Bland's troopers acted as escort to Washington. The first City (Philadelphia) Troop was with the Pennsylvania militia on Sullivan's right. In Conway's brigade was a detachment of McLane's cavalry. The reserves under Stirling had no cavalry. The mounted men drove in the advanced British pickets at Chestnut Hill, and elsewhere on this occasion did orderly and courier duty; but, as cavalry, they were not actively engaged.

For the above details I am indebted to the accomplished librarian of the Historical Society of Pennsylvania, Mr. John W. Jordan, who is now engaged in the preparation of a careful monograph on the battle of Germantown. When completed it should be of interest as showing that the idea of a distinctively American mounted service had not yet occurred to anyone. So far as I have been able to ascertain, it first suggested itself to Banastre Tarleton, as the result of his experience and observation during the operations in Pennsylvania and New Jersey between November, 1776, and June, 1778. He was then a captain in Harcourt's horse. Described by Colonel Vetch, in his sketch in the Dictionary of National Biography, as "a born cavalry leader, with great dash, and as such unequalled in his time," Tarleton, as will presently be seen, put his conception of the new weapon in American warfare into form and use in South Carolina, in the early months of 1780. He was then in his twenty-sixth year. At first he was almost unopposed, and used his novel appliance in a most effective way, and with excellent results; but, a little later on, the Americans proved apt pupils, and at the Cowpens (January 17, 1781) Morgan signally worsted the master at his own game. The patent

were not in a condition to be brought into action together. Considering the fog and the nature of the locality, it is also very questionable whether at Germantown any opportunity offered for the effective use of horse.*

Such was the close of the campaign of 1777. Valley Forge followed; for, on the 19th of December, Washington led his now wholly demoralized following, an army in name only, along the western bank of the Schuylkill to their doleful winter quarters.

Summarizing the campaign of 1777, so far as the operations conducted by Washington in person were concerned, Trevelyan (Pt. III. 332) says that if Washington had "begun the campaign with a respectable force of cavalry, numerous enough to cover his own front and watch the movements of the enemy, his advance guard need never have been surprised at Paoli, and even Brandywine might have told another tale." He then adds that Washington during the Valley Forge winter, gave much of both time and thought to the creation of such a force. The organization of what was subsequently known as "Lee's Legion" resulted.† Though doubtless, as Trevelyan says, Washington gave closest attention to everything which concerned the enlistment, the equipment, and, above all, the mounting of the troopers composing this body, yet that very corps, famous as it subsequently became in Revolutionary annals, and brilliant and effective as the work done by it unquestionably was, emphasizes forcibly Washington's limitations as a cavalry leader, and his failure to grasp in a large way the part which a sufficient and effective mounted service both might and should have played in the general field of the operations which it devolved on him to conduct. Trevelyan says truly enough, "The American cavalry had small beginnings and never attained very large dimensions; but it was a serviceable instrument of war from the first moment, and ultimately it played a memorable part in deciding the campaign which preserved Georgia and the Carolinas to the Union." But, while this is undeniable so

of discovery, however, belongs in this case neither to Washington nor to any other American, but distinctly to General Sir Banastre Tarleton, K. C. B. (1754-1833).

*Sparks's Pulaski, 421.

†Journals, xi, 545.

far as it goes, it is suggestive of more—a good deal more—to be said on the same topic.

Why was all this thus? "Lee's Legion," modeled, by the way, apparently on Pulaski's ill-conceived idea of an effective American cavalry service, consisted of some three hundred men, one-half only of whom were mounted. Instead of organizing a cavalry command of such wholly inadequate proportions, why was King's Mounted not anticipated, and a call sent out for the frontiersmen and rangers of Virginia and Pennsylvania to come riding in on their own horses? Why were not Morgan's riflemen jerked into the saddle, where they would have felt far more at home than on their feet?*

In view of what subsequently took place during the War of Secession in this country,† and what took place in South Africa

*In the paper laid before the Committee of Congress, in camp, January, 1778, Washington said:

"The benefits arising from a superiority of horse are obvious to those who have experienced them. Independent of such as you may derive from it in the field of battle, it enables you very materially to control the inferior and subordinate motions of an enemy, to impede their knowledge of what you are doing, while it gives you every advantage of superior intelligence, and consequently facilitates your enterprise against them and obstructs theirs against you. In a defensive war, as in our case, it is peculiarly desirable, because it affords great protection to the country, and is a barrier to those inroads and depredations upon the inhabitants, which are inevitable when the superiority lies on the side of the invaders. The enemy, fully sensible of the advantages, are taking all the pains in their power to acquire an ascendancy in this respect, to defeat which, I would propose an augmentation of the cavalry." It was at this very time Washington was discussing, in the way described by Trevelyan, the formation of Lee's Legion, and he would still have only four regiments of cavalry.—Works of Alexander Hamilton (1850), II. 144.

That the experience was not entirely wasted on Hamilton is shown by his opinion given to Pickering in 1797: "I am much attached to the idea of a large corps of *efficient* cavalry, and I cannot allow this character to militia. It is all-important to an undisciplined against a disciplined army. It is a species of force not easy to be brought by an invader, by which his supplies may be cut off, and his activity extremely checked. Were I to command an undisciplined army, I should prefer half the force with a good corps of cavalry to twice the force without one."—Ib. VI. 249.

†The most recent (1910) foreign critic on the American Civil War and its results thus expresses himself on this point:

"Perhaps the principal military lesson [to be derived from a study of that war] is in the use of cavalry. The problem of getting cavalry to fight well on foot, without losing its cavalry spirit, is often spoken of now-a-days as a

more recently, under conditions strikingly similar to those which obtained here during our Revolution, it is useless to say that this was impracticable; and the question next naturally presents itself—Who was responsible for this strategic and military shortcoming? The unavoidable answer suggests itself. And yet Trevelyan, in a footnote to the very page in his narrative from which I have just quoted, says that when Stuart was taking Washington's portrait, wishing to interest his sitter, he wrote, "I began on the Revolution, the battles of Monmouth and Princeton, but he was absolutely dumb. After a while I got on horses. I had touched the right chord." Washington was then (*circa* 1794) President, and living in Philadelphia. Trevelyan adds he had twenty-six horses in his stable.

The explanation seems obvious. Washington began his military career as a backwoods Indian fighter, and never forgot the lessons then learned, nor outgrew the experience. In the wooded wildernesses of the Alleghanies cavalry could not operate. All he knew of it was from hearsay, and reading the news-letter accounts of the campaigns and battles of Frederick. And so, Virginian though he was, there is from the beginning to the end of his military life, so far as I can discover, no indication of any adequate conception of the value and importance of the mounted man in military operations, and more especially in that particular form of military operation which it devolved upon him to conduct. Yet it is the first business of any great soldier both to appreciate and study the nature of the weapons at his command, and then to make full and effective use of them.

In the employment of the several recognized arms of the service in the Revolutionary struggle, the British enjoyed a great, and for the patriots an insuperable, advantage as respects infantry

sort of ideal to be approached rather than attained; but Sheridan, Stuart and Forrest all solved it to perfection, using mounted and dismounted action indifferently, though the two latter had few real cavalry in proportion to the size of their commands."—J. Formby, *The American Civil War*, 484.

It should be unnecessary to point out that the above conclusion applies only to American conditions and to conditions elsewhere prevailing similar to those which in 1861 to 1865 prevailed in America—South Africa, for example. If applied to Continental conditions in Western Europe, the "lesson" would probably prove fallacious. It is this distinction between American and other conditions that the historians of the Revolution have failed to grasp; in that respect, however, only following the precedent of Washington.

and artillery—what is known as the line-of-battle organization. On the other hand, the Americans, from the outset, found compensation in their superior marksmanship, individuality and mobility. Recourse should, accordingly, have been had to the rifle and the horse. From Lexington to King's Mountain, with Bennington by the way, the opponent the British officer most dreaded the sight of was the leather-clad ranger;* and, of all descriptions of rangers, the organized mounted ranger was the most potentially formidable.

It is useless to object that in 1777 the use made of mounted men and irregular cavalry in modern warfare had not yet been developed. In the first place the fact is otherwise. It had been developed even in Roman times and, as already pointed out, Parthian tactics were quite as proverbially familiar as Fabian; while the name of Rupert was one to conjure with in Virginia. In the next place, if the use that could be made of mounted men in American open country warfare had not previously been developed, it was the province of Washington then to develop it. That is what he was there for; and a little later, at King's Mountain and Cowpens, the instinct of his people developed it for him.

The obvious objection will, of course, next be advanced that the keep of horses is costly, and Washington was always kept short of funds. This hardly merits attention. The Connecticut cavalry were dismissed and sent home on the specific ground that horses were thought to be of no use in the operations then in hand. The riders were invited to serve on foot. Yet only a month later, because of the lack of a suitable mounted service, Washington's advanced line was flanked, and the very flower of

*Trevelyan, Pt. III, 259, 375. While the rifle as an implement in warfare seems to have been wholly unknown in the British service of the Revolutionary period, marksmanship was neither taught nor practised; and, as early as during the siege of Boston, Sir William Howe wrote home telling of the "terrible guns of the rebels." Finally he succeeded in capturing a ranger, and "sent him to England, rifle and all, and the marksman was made to perform there and exhibited as a curiosity." Some six hundred of the Germans sent to America were riflemen, known as "Jägers"; and, in the negotiations with the landgraves, it was stipulated that as many of the recruits as possible should be riflemen.—Sawyer, *Firearms in American History*, 81-83, 140. Referring to the so-called "massacre" at Paoli, Trevelyan justly observes (Pt. III, 236): "Men always attach the idea of cruelty to modes of warfare in which they themselves are not proficient; and Americans liked the bayonet as little as Englishmen approved of taking deliberate aim at individual officers."

his army needlessly sacrificed. A thousand men were there lost. They represented the price of the keep of a few hundred horses for one month; while, at that very time, the majority of the dwellers on Long Island were Tories, whose fields were heavy with forage. In the next place, Washington did not then, nor afterwards, cry aloud for eyes and ears for his army, and have them denied him on the score of cost. On the contrary, until Valley Forge he does not seem to have been conscious of the absence from it of eyes and ears; at least, no allusion to the want is found in his writings. Finally, later on, the item of cost did not, in 1780 to 1782, prove an insuperable obstacle in the way of the development of a most effective mounted service in the Southern Department; though, compared with Greene's, Washington's camp chest was a purse of Fortunatus.

As respects the argument from cost, however, once for all it should be premised that war, effectively conducted, is a grim reality and in no way a dilettante, delicately handled pastime. In it men must be armed and equipped, somehow; horses must be had and fed, somewhence. The Confederates had no great supply of money between 1862 and 1865, but they had a most effective mounted service; likewise the South African Boers in a more recent struggle. In practical warfare the existence of a cavalry force is not so much a question of money as of the existence of an adequate supply of horses, of forage and of men accustomed to the saddle. Of all these, and of the best, the America of the Revolutionary period possessed abundance. At King's Mountain, the prospective cost of horse-keep was, so far as appears, not taken into consideration.

If this limitation of Washington's military capacity was obvious in the two campaigns of 1776 and 1777, that of 1778 emphasized the deficiency. The campaign opened, inauspiciously enough, with the somewhat inexplicable Barren-Hill performance, under the leadership of a boy of twenty, for Lafayette at that time still lacked six months of attaining his majority. Though May was well advanced, active operations had not yet begun. The British army, still under the command of Sir William Howe (though, being superseded by Clinton, he was about to sail for England) occupied Philadelphia; while the patriots, just again gathering strength after their terrible winter experience, remained

at Valley Forge. Washington determined to feel the enemy; and, with that end in view, sent out (May 18) a detachment, some fifteen hundred strong, of his best troops, with Lafayette in command. It was, in fact, a reconnaissance in force; and, as such, should have been composed in the main of cavalry, with a strong infantry support and artillery contingent. The patriot army, however, had no cavalry to speak of, so Lafayette marched off with a command composed almost exclusively of foot. Crossing the Schuylkill by a ford some two hours' march only from Valley Forge, he advanced to Barren Hill, within twelve miles of Philadelphia, and there went into camp. What ensued, illustrates several things: among them, more especially, the extreme danger of attempting without cavalry a close reconnaissance of an enemy of superior force; and, next, the utter impossibility of effecting an intelligible agreement between any two accounts of an outpost affair.

Fully informed as to the movement, the British arranged to bag Lafayette and his command. By merest chance, combined with the dull incompetence of Major-General Grant, who commanded one of the British columns, the bagging plan failed by the narrowest of margins; but it is instructive to read of the affair in the accounts of Tower,* of Fisher† and of Stedman.‡ They agree in hardly any detail; and Stedman only of the three, the one participant and military writer, gives a map of the field of operations and makes mention of the "confused galloping of some of the enemy's horsemen" through whose panicky performances Lafayette probably received his first intimation of impending danger; while "a corps of [British] cavalry took possession of a hill" which was not defended, instead of being thrown forward to seize the ford by which alone could Lafayette's frightened foot effect an escape. The whole episode afforded an interesting example both of the absence and misuse of the weapons essential to success in warfare. According to Fisher, however, Washington did profit, by the experience, for he "was careful to risk no more valuable detachments to watch for the evacuation of Philadelphia." In

*Lafayette in the American Revolution (1895), i. 326-338.

†The Struggle for American Independence (1908), ii. 146-148.

‡History of the American War (1794), i. 376-379.

other words, having no cavalry to send, he sent out no more infantry to do cavalry work.

All this was preliminary; and it was not until a month later (June 18) that the campaign really opened. During that month Washington was observing Clinton closely, knowing well that the British army must move, but in natural doubt as to the direction of movement. It would seem that the utmost degree of mobility on his own part should then have been present to his mind as the great necessity of the hour. If such was the case, the thought took no outward form and remained unexpressed in correspondence. June, 1778, witnessed at last the withdrawal of the British army from Philadelphia, and its somewhat inglorious, but successful, transfer across New Jersey to New York. Its escape from total destruction was then largely due to the absence of cavalry, as a factor of efficiency in the patriot army.

Why, at this advanced stage of the war, it should have been thus lacking is not apparent. For Trevelyan also tells us that when Clinton set out on his march from Philadelphia to New York, his army had at its disposition no less than five thousand horses, "almost all of which had been collected by requisition or purchase, during Sir William Howe's occupation of Pennsylvania" (Pt. III. 367).

To a like effect, the same excellent authority asserts (Ib. 323) that General Greene, Washington's quartermaster, had during the same period "secured a vast quantity of horses for the artillery and transport" of the patriot army. Pennsylvania, as well as Virginia, it would seem, was well supplied with mounts; and, with Virginia only the other side of the Potomac, troopers would naturally not have been far to seek.

Sir Henry Clinton had now succeeded Sir William Howe. For good and sufficient reasons, when his position at Philadelphia had become difficult as well as objectless, he decided to transfer himself to New York. It was in fact a withdrawal from a position no longer tenable. For equally satisfying reasons, practical as well as strategic, it was determined to make the transfer by a land march. When the British army started on its return, the movement was not unanticipated on the part of Washington; and it is curious in reading the narratives to note through incidental mentionings how very gradually it was that the use of

mounted men in the kind of warfare they were then engaged in dawned on the patriot leaders. While, for instance, Clinton's troops passed out of Philadelphia and crossed the river at dawn, six hours later, Trevelyan tells us, a part of Major Lee's dragoons galloped down to the quay in time to see the English rear guard off, as it ferried the Delaware (Pt. III. 371). To the same effect, Fisher says (II. 198) that Allan McLane with his "rough riders" was the first who entered the town. Fisher further notes (II. 131) that during the Valley Forge winter this Allan McLane, "a rough rider and freebooter of the most gallant type had scouted between the Delaware and the Schuylkill, making dashes up to the gates of the redoubts," which had been thrown up for the protection of Philadelphia. He further says that Washington during the season had troops between the Delaware and the Schuylkill, who, being rough riders and acting in small bands, obtained information and watched the movements of the British. Presumably there were thus attached to the patriot army the initial germs of such a mounted organization as the situation called for. It is obvious, however, it had not been organized on any large scale or comprehensive plan, and was not in such force as enabled it materially to affect subsequent strategic operations.

One thing, however, stands plainly out—undeniable. No military movement could possibly have been much more open to fatal disaster through an application of Parthian tactics than that march of the British army from Philadelphia to Sandy Hook, in June, 1778. "When the British reached their second halting-place, the rain poured down for fourteen consecutive hours, ruining the highways, soaking the baggage, spoiling the ammunition and provisions, and drenching the soldiers to the skin" (Trevelyan, Pt. III. 371). Under such conditions Clinton's progress was inordinately slow, and he "consumed a full week over the first forty miles of his journey" (Ib. 375). The heat then became intense, and Trevelyan says that the British infantry, "burdened like pack horses," were preceded by a train of carts "a dozen miles in length and frequently compelled to travel on a single causeway" (Ib. 372). The whole country-side was up in arms, bent on impeding his progress; and Sir Henry Clinton had no cavalry. All the bridges over which the column had to pass were broken down; the road, such as it was, "was execrable, and

the heat like the desert of Sahara." When the retreating army got in motion, on the torrid morning of the eleventh day, Trevelyan adds, "innumerable carriages gradually wound themselves out of the meadows where they had been parked, and covered in unbroken file the whole of the eleven miles of highway which led westward from Monmouth Court House to the village of Middletown." It was here that the American infantry, under General Charles Lee, struck the retreating column. It is curious to consider what would under such circumstances have been the result had the American recourse been Parthian instead of Fabian. The military as well as historic truth is that, on this as on other occasions, Washington measured himself and his army up against his adversary at the point where they were strongest and he was least so. He opposed infantry to infantry; oblivious of the fact that the British infantry were of the most perfectly organized kind, while his own was at best an extemporized force. The natural result followed. Whatever the mounted force under Harry Lee or Allan McLane may have been, it is apparent that it was not sufficient to cut any figure during the momentous movement culminating at Monmouth Court House. To a wagon train, eleven miles in length, the American cavalry offered no obstacle. To have stopped that train's forward movement, and, in so doing, to have thrown the whole column into confusion, would in our day have been a simple matter. But the weapon was not at command. It was by a margin of only five days that Clinton's army and possibly the British fleet escaped heavy disaster, if not total destruction (Fisher, II. 187). Drawing inferences from this record, would it be unfair to conclude that two thousand of the King's Mountain rangers led, we will say, by Daniel Morgan,* might, during those momentous ten days of transfer, have very potently contributed towards then and there ending the War of Independence? (Stedman, II. 23). If so, might not the historian, at once expert and judicious, find cause to suspect that a Fabian policy, combined with economy in horse-keep, came somewhat high at that juncture of Revolutionary experiences?

"No more pitched battles were fought in the North. Washington never met Clinton in the field. The two commanders, one impregably intrenched in the Highlands, and the other impreg-

*Fisher, II. 207. Morgan, at this time, wrote to Washington, "You know the cavalry are the eyes of the infantry."

nably intrenched in the town of New York, simply watched each other from July, 1778, until September, 1781, when Washington made his sudden move to Yorktown, Virginia."*

The period of active operations which has now been passed in review covered almost exactly two years, from July, 1776, to July, 1778. During nearly the whole of that period the British operations were directed by Sir William Howe. Howe belonged to a class of military commanders by no means uncommon, especially in British annals. With a certain degree of initiative, he appears to have been a man of essentially indolent, sluggish temperament, self-indulgent and disposed to be satisfied with incomplete or partial results. But this "enough-for-one-day" inclination on the part of commanders was by no means peculiar to Howe; on the contrary, it is much in evidence in the annals of all warfare. Wellington's career once supplied a dramatic illustration of it, eliciting from him a highly characteristic ejaculation. It was in Portugal, at Vimeiro, August 20, 1808, where Sir Arthur Wellesley, as he then was, in temporary command of the British expeditionary force, met the French army of occupation under Junot. That day the future Duke found himself pitted for the first time against the soldiers of the Empire. He scored a decided success; and then, a born fighter with victory in his grasp, he was replaced in command by Sir Harry Burrard, his senior in commission, who had put in his appearance while the battle was still on. Junot was in exactly the position of Washington after the Brandywine. By a vigorous forward movement Junot could be cut off from Lisbon, as Washington from Philadelphia. Wellesley saw his opportunity. The French were in full retreat, and the English advance along the Torres Vedras road had begun, when, suddenly, Burrard, assuming command, ordered all pursuit to stop. In vain Wellesley expostulated, saying: "Sir Harry, now is your time to advance. The enemy are completely beaten. We shall be in Lisbon in three days." Like Howe at Flatbush, and again at the Brandywine, Burrard held that "enough had been done for one day"; and it only remained for the disgusted Wellesley to turn away, remarking characteristically to his aid as he did so, "Well, then, there is nothing for us soldiers to do here except to go and shoot red-

*See footnote on preceding page

legged partridges!" Judging by his own masterly disposition and energetic pursuit of a routed enemy three years later at Camden (August 16, 1780), Cornwallis, at the Brandywine (September 11, 1777), must have been in much the same mood towards his commander as was Wellington, long afterwards, at Vimeiro. The flank movement conducted by him had been wholly successful; taken unawares and beaten, the American army was in full retreat, while Philadelphia, the British objective, eighteen miles only from them, was three and twenty from the main body of the Americans, driven into a *cul-de-sac*. And, under such circumstances, Cornwallis heard Howe order his army to discontinue pursuit; as on Long Island a year before, "enough had been done for that day." In narrating the course of British operations about New York under Howe, Lord Mahon exclaims (vi. 194), "Thus was some respite obtained for the harassed and dispirited remnant of the American army.—Oh! for one hour of Clive!" Lord Clive was four years only the senior of Sir William Howe, as he was four years Gage's junior. It is well known historically that when, in November, 1774, Clive died by his own hand, the British Ministry, in view of that appeal to the sword towards which the disputes with the American colonists were then plainly tending, planned to avail themselves of his services. In the outcome of either Flatbush or the Brandywine, Cornwallis in command would probably have sufficed wholly to change the course of events; but it confounds the imagination to try even to conceive what history might have had to record had it been fated for Washington, in place of Major-General Thomas Gage, or Lieutenant-Generals Sir William Howe and Sir Henry Clinton, to confront Robert Clive at Boston in 1775, at New York in 1776, on the Brandywine in 1777, or at Monmouth in 1778.

"When Sylla, after all his victories, styled himself a happy, rather than a great, general, he discovered his profound knowledge of the military art. Experience taught him that the speed of one legion, the inactivity of another, the obstinacy, the ignorance, or the treachery of a subordinate officer, was sufficient to mar the best concerted plan—that the intervention of a shower of rain, an unexpected ditch, or any apparently trivial accident, might determine the fate of a whole army. It taught him that

the vicissitudes of war are so many, disappointment will attend the wisest combinations; that a ruinous defeat, the work of chance, often closes the career of the boldest and most sagacious of generals; and that to judge of a commander's conduct by the event alone is equally unjust and unphilosophical, a refuge for vanity and ignorance."*

In penning these reflections, while writing of the tragic outcome of Sir John Moore's Corunna campaign, Napier might well have added to his vicissitudes of warfare the good fortune of a commander who finds himself confronted with a succession of dull and beefy incompetents, or conventional and unenterprising professional strategists. When the caliber and temperaments of those opposed in command to him, and with whom only he was fated to measure himself, are taken into account, there may possibly be grounds for concluding that Washington, even more than Sylla, might have had cause to style "himself a happy, rather than a great, general." The imagination is, however, not greatly tasked to conceive the result, when Gage or Howe or Clinton is thought of as by any possibility of warfare pitted against Frederick or Napoleon. To be so pitted was, before and after, the ill fortune of many forgotten military nobodies in figure, weight and size not unlike those named.

After Monmouth the seat of active Revolutionary warfare was transferred from the vicinity of New York and the Jerseys to the Carolinas, and General Nathanael Greene, in place of Washington, directed operations. Trevelyan's narrative has not reached this stage of the conflict. It practically ends, so far as military movements are concerned, with the withdrawal of the British from Philadelphia, and the concentration of their army at New York, safe under the protection of the fleet.

This paper has already extended far beyond the limits originally proposed; and I shall not attempt to enter in detail into the operations conducted in the Carolinas between the fall of Charleston in May, 1780, and the final evacuation of South Carolina by the British in September, 1782. It is sufficient to say that, as a military study from the cavalry point of view, those operations afford a striking contrast to what had previously taken

*Napier, War in the Peninsula, Bk. iv., chap. vi.

place during an almost exactly similar space of time in the Northern Department.

There was, it is true, a large royalist faction in the Carolinas, but the same element was found in almost equal proportion in New York, New Jersey and Pennsylvania. The horse was equally at hand in each region; while forage was more plentiful in the Northern than in the Southern States; but it seemed as though both sides, simultaneously as if from instinct, "caught on" in the Carolinas.* For instance, Savannah surrendered on the 11th of May, 1780, and on the 29th of the same month, only eighteen days later, Tarleton had behind him seven hundred mounted men when he surprised Colonel Buford at the Waxhaws, and destroyed nearly his entire command. The British officer had covered one hundred and fifty-four miles in fifty-four hours (McCrary, III. 619). This was great cavalry work.

*Describing the expedition to Savannah under Clinton, Tarleton, then a Lieutenant-Colonel, says (Campaigns of 1780 and 1781, 4-6) it included "a powerful detachment of artillery" and "two hundred and fifty cavalry." It left New York on the 26th of December, 1779, but, encountering a succession of storms, the fleet was dispersed, and "most of the artillery and all the cavalry horses perished." On landing in Tybee harbor Tarleton "found the condition of his corps mortifying and distressing; the horses of both officers and men, which had been embarked in excellent order, were destroyed owing to the badness of the vessels employed to transport them, and, unfortunately, there was no substitute found in Georgia to remedy such a catastrophe." Transporting his "men and furniture" by boat to Port Royal Island, Tarleton proceeded "to collect at that place, from friends and enemies, by money or by force, all the horses belonging to the islands in that neighborhood." This was towards the end of February, but "about the middle of March" Tarleton received orders to join the main command, "if he had assembled a sufficient number of horses to re-mount the dragoons; the number was complete, but the quality was inferior to those embarked at New York." Less than a month later (April 12) Tarleton, with his command thus re-mounted, surprised General Huger at the Cooper River crossing; and "four hundred horses belonging to officers and dragoons, with their arms and equipments (a valuable acquisition for the British cavalry in their present state), fell into the hands of the victors. . . . This signal instance of military advantage may be partly attributed . . . to the injudicious conduct of the American commander, who, besides making a false disposition of his corps, by placing his cavalry in front of the bridge during the night, and his infantry in the rear, neglected sending patrols in front of his videttes." (Ib. 16, 17). Exactly one month later Charleston was surrendered, and Tarleton led his command, remounted in the way described, on the raid referred to in the text. No similar showing of energy and enterprise in the cavalry arm of the service had up to this time been seen on either side.

Nothing like it was attempted, much less accomplished, by any of Washington's command in the Monmouth campaign.

The warfare which then developed itself in the Southern Department is, moreover, strikingly suggestive of that in South Africa a century and a quarter later. The tactics employed on both sides in the Carolina struggle were the same. Irregular bodies of partisans, the men mounted on their own horses, called together at a moment's notice and separating at the will of those composing the band, harried the land, cut off detached parties, showed small mercy to prisoners, and, withal, did little in the way of effective work towards bringing warfare to an end. It was a process of exhaustion. Made up chiefly of eccentric partisan operations, as it is studied in the somewhat voluminous detail of McCrary's two bulky volumes, the narrative conveys no lesson. The one cause for wonder is how Greene, without arms, munitions, clothing, commissariat or camp-chest, contrived to keep the field at all.

As to Greene, also, it is impossible now to say whether he possessed in any marked degree the elements of an officer of cavalry. He, however, fully realized, as a result of experience, the immense importance of that arm of the service, causing him to write to Lafayette, when the latter was conducting operations in Virginia, the enemy "are increasing their cavalry by every means in their power, and have a greater number than we have, though not of equal goodness. We are trying to increase ours. Enlarge your cavalry or you are inevitably ruined."*

It is a curious and very noticeable fact, also, that as respects both the employment of cavalry and its effective use, the British not only seem to have taken the initiative, but they held their advantage up to the close of the struggle;* that is, cavalry in

*G. W. Greene, Life of General Greene, III. 320.

*Immediately after the battle of Brandywine, a provincial corps raised in New York under the name of the Queen's Rangers, was adopted by the English commander, and placed under the direction of Major commandant J. G. Simcoe. What it accomplished is related in "Simcoe's Military Journal"; it need only be said here that the corps obtained as wide a fame as Tarleton's, and was taken at Gloucester Point when Cornwallis gave up his army at Yorktown. Sir Henry Clinton told Germain that since October, 1777, when Simcoe's corps was first adopted, it "had been the perpetual advance of the army," one of the most serviceable functions of light-horse.

the campaigns of Cornwallis and Lord Rawdon acted as an adjunct in military operations, and was used effectively in this way. This was the case to a very limited extent only on the patriot side. All the cavalry Greene ever could depend upon as an effective weapon in his immediate central command were the comparatively insignificant organizations commanded by Harry Lee and Lieutenant-Colonel Washington. On the other hand, judging by McCrady's statements, Pickens, Marion, Sumter and the rest gave Greene almost as much trouble as they rendered him assistance. He was continually making futile attempts to draw them under his personal control for some concentrated movement, while they, much older men and natives of the country, plainly more or less jealous of his, the Rhode Islander's, authority, acted on their own responsibility, obeying or neglecting to obey his orders much as they saw fit.

Two conflicts, however, which occurred in the Carolinas—the one at King's Mountain on the 6th of October, 1780, the other at the Cowpens on January 17, 1781—are especially noticeable; and King's Mountain offered a fine example of irregular mounted warfare. The whole patriot force engaged was less than fourteen hundred strong, "over-mountain men," as they were called. Their mode of operation was almost exactly that of the Boers. Suddenly concentrated, and covering a considerable distance with great rapidity, "as soon as they arrived near the base of the spur [on which the conflict occurred] the riflemen all dismounted and, leaving their coats and blankets strapped to the saddles, tied their horses in the woods and, with scarcely a moment's delay, started on foot up the three easy sides of the spur" (Fisher, II. 253). Stedman's account (II. 221) of this episode is curiously suggestive of similar operations conducted in South Africa nearly a century and a quarter later: "These men . . . the wild and fierce inhabitants of Kentucky, and other settlements west of the Alleganey Mountains . . . were all well mounted on horseback and armed with rifles; each carried his own provisions in a wallet, so that no incumbrance of wagons, nor delays of public departments, impeded their movements. . . . When the different divisions of mountaineers reached Gilbert-town, which was nearly about the same time, they amounted to upwards of three thousand men. From these

fifteen hundred of the best were selected, who, mounted on fleet horses, were sent in pursuit."*

So, three months later, at Cowpens (January 17, 1781), Daniel Morgan there gave evidence of the possession of all the attributes of a born military commander and cavalry leader. Making his dispositions without any regard for military rules, he availed himself in the best way possible of the weapons at his command. He had a small force of cavalry only, amounting perhaps to one hundred and fifty troopers. They were under the command of Harry Lee; and these he flung upon Tarleton's flank at the crisis of the action, in a manner so effective that defeat became at once a rout. He hurled his little band of horsemen on his opponent when, to use Napoleon's expression, "the battle was ripe," much as a stone is flung by a slinger. One of the very few patriot victories of the entire war, Cowpens was altogether the most neatly, though unscientifically, fought battle in it. Both in the commander and in the men the distinctive American attributes were there much in evidence.

So far as Greene's operations were concerned, while most skillfully as well as persistently conducted, they indicated rather the possession by him of the attributes of an excellent commander of infantry than the dashing qualities of one either accustomed to the handling of cavalry or naturally inclined to it. Both Guilford Court House and Eutaw Springs could have been turned from defeats, or, at best, indecisive actions, into complete victories had he then had attached to his command an effective force of cavalry and, like Morgan, known exactly when and how to make use of it. Even as it was, his small

*Major Patrick Ferguson of the 2d Battalion, 71st Regiment Light Infantry, Highlanders, an excellent and enterprising officer, commanded the loyalists at King's Mountain and there lost his life. It is a curious and most interesting historical fact in connection with the subjects of the present paper that Ferguson was the inventor of the first serviceable and practical breech-loading rifled weapon ever adopted into any service. Patented in England in 1776, by it "four aimed shots a minute could be fired, as against an average of one shot in fifteen minutes with a European muzzle-loading rifle after it had become foul."—Sawyer, *Firearms in American History*, 137-139.

The only difficulty with the Ferguson breech-loader seems to have been that it was, as a weapon in practical European warfare, a full half century before its time. Even as late as our own War of Secession the West Point martinets and ordnance officers were wholly opposed to the adoption of the breech-loading weapons for use by infantry. Breech-loading cavalry carbines were in use.

body of mounted men, under command of Lee and Washington, rendered on more than one occasion effective service. As to Tarleton, he proved the right arm, such as it was, of Cornwallis, and the raids led by him, both in the Carolinas and in Virginia, seem extraordinary in dash and daring.

But when it is borne in mind that the active military operations of the Revolutionary period extended from the affairs at Lexington and Concord in April, 1775, to the fall of Yorktown in October, 1781, or through more than six years of incessant field work, while, on the other hand, the war in South Africa lasted but two years, and our own War of Secession covered practically but four years, the slowness with which the patriot side realized the nature of the situation, and learned to make the most effective use of the weapons at its command, is indisputably, to say the least, suggestive. It even gives rise to a doubt whether, after all, there was not some ground for the impatience at times felt in the Congress over the Fabian policy of Washington, and whether recourse might not well earlier have been had to a different, and much more effective, system of tactics. But in any event, this phase, as yet undeveloped, of an interesting historical situation merits careful study on the part of some future investigator; for my present examination leads me to think that the military history of the War of American Independence needs to be rewritten to a very considerable extent and in quite a new spirit.

And, first of all, in the light of our Civil War record, Union and Confederate, does not the accepted and traditional American estimate of Washington, the Soldier and General, call for thoughtful revision? Nor would such revision necessarily result in any diminution of his fame, for Washington was much more than a mere military man of any sort, even the highest. He was essentially and conspicuously a man of Character. It was his Character which carried him, and with him the country, through the trials of the War of Independence; and his fame stands in no need of the excessive and indiscriminating adulation with which it had been oppressed. On the other hand, judged by the record, can he be fairly classed among great soldiers? Even Sir William Howe, a commander of "monotonous mediocrity" (Stedman, I. 398), so low in grade

as not to be classed at all, time and again out-generaled as well as out-fought him. He did so on Long Island, and again on Manhattan Island, and again both on the Brandywine and on the Schuylkill. Washington twice surprised outlying detachments, those in command having neglected precautions against attack; and, as the result of a well-conceived strategic movement and combination, he compelled the surrender of Cornwallis. But he never stood victor on a field of pitched battle, and it is indisputable that repeatedly he owed his salvation to the incompetence or procrastination of his opponent. It was so on Long Island; it was so on the Brandywine. Again, with any but a slothful, self-indulgent voluptuary opposed to him, his command would have been wholly dispersed, and its stores captured during the early months of either 1777 or 1778. He could have been easily maneuvered out of either Morristown, in the former year, or out of Valley Forge in the latter. But he was sustained, and carried through every ordeal by a combination of horse common-sense, great fortitude, good judgment and military ability, immense luck and, above all and most of all, commanding Character. He thus had his limitations, and to one of these, heretofore, so far as I know, unnoticed, attention is here called. Nor, possibly, is it in any way speaking beyond bounds to suggest that the existence of this limitation in its military head may have prolonged the War of Independence by a third, if not by a half.

The story of the Connecticut troop of Light-Horse* is told in the following letters in the Trumbull Papers:

COLONEL SEYMOUR TO GOVERNOR TRUMBULL.

NEW YORK, July 11th, 1776.

HON'D SIR,—Notwithstanding the singular Circumstances of my Family, I could not possibly avoid coming with the Light Horse to this place in the Cause of our Country; we got in on Monday, and make a Body of about 500, as fine Men, and as well Spirited as any on the Ground. The General was much rejoiced at the measure, and appears disposed to Shew us every mark of Respect. He is something perplexed about the Expence of forageing the Horses; fears he can't be justified in it without Consent of Congress. He will write Congress upon the subject and use his endeavor (he assured me) to have their approbation. If not, the men must rely upon the Colony

*See page 702, ante.

for it. How long we shall stay is uncertain; this depends much upon the Arrival of our new Levies, and as the Men are principally Farmers, have left their Grass, their Grain, and other Affairs much unprovided for, they hope every method will be taken for their speedy Relief, and in this respect, they rely much upon your Honor's Influence.

T. SEYMOUR.

BRIGADIER-GENERAL WADSWORTH TO GOVERNOR TRUMBULL.

NEW YORK, July 18th, 1776.

HON'D SIR,—As I have the honor to command a Brigade of Militia from the Colony of Connecticut, think it my Duty, to give such information from time to time as may relate to the interest or honor of the Colony; am therefore to inform your Honor, that on the 8th Instant Col. Seymour arrived here, and inform'd the General that a body of about 500 of the troop of horse from Connecticut had arrived near this City, and also shewed him his instructions. The evening following at a meeting of the Gen'l Officers, the matter was under consideration, when it was unanimously agreed, that the men were much wanted here, but as *troopers*, could be of no service in case of an attack, and that those men who were not armed with Carbines, or good fire arms should return to Connecticut with the horses, as forage for them could not be had here; and that the detachment whilst here should do Duty in the Brigade under my command. And thereupon received the General's Command to acquaint Colo. Seymour with said resolution the next morning, which I accordingly did. When he inform'd me he thought it would be disagreeable to his party to leave their horses, but said he would return to them and sound their minds, when a plan of sending their horses at their own expence, (or trust the Colony to reimburse them) so far back as not to prejudice the forrage of the army, was proposed, and as I understood by Colo. Seymour was approved of by the General; and thereon, upon the 10th instant they march'd into the City, were barack'd, drew provision, ammunition &c. Yet many of the Officers objected to their being subjected to fatigue Duty on account of their cloathing, but were answered, a partial treatment of the several parts of the army would create jealousy, animosity, and strife; and would produce great mischief in the army; little duty was required of them till the 10th instant, when a number were warned out to mount guard who complied; a number (of) others being ordered on fatigue did not go. The same Day I received a writing address'd to me, signed by Colo. Seymour and some of the principal Officers of the troop, representing that by the laws of the Colony of Connecticut the troop were not obliged to do garrison Duty or on foot, yet were willing to mount guard but could not consent to do fatigue Duty, and unless exempted therefrom should presume they were at liberty to return home. Which writing by reason of the General's absence and my tour of Duty that Day was not communicated to the General till done by Colo. Seymour in the Evening, when the General, as Colo. Seymour informed me, said he could make no distinction in favor of any one part of the army on this ground, but offered Colo. Seymour's Regiment Liberty of going to Bergen point in the Jersey, to relieve Colo. Bradley's Regiment which is there at present. To this it was objected many

of them had no blankets. The General reply'd if they had not blankets they could not go, and farther added if they would not submit to the Duty in camp in common with others in the army, He did not care how soon they returned home. Being advised of what had passed I suggested every argument I was able to Colo. Seymour, and those of his Officers I saw, to induce them to tarry, but if they were determined to return, not to do it without the General's permission in writing. In consequence of which application was made to the General who wrote a letter to Colo. Seymour which I have not seen, but have it from the Colo. that it contained in substance the declaration made to him the night before, and that he had used his utmost endeavours to persuade his men to stay, notwithstanding which they have almost all left the City. The troops are almost daily arriving from Connecticut in small parties, which makes it difficult to ascertain the number every day, hope they will soon be compleat; an Event much to be wish'd under our present circumstances. Last Fryday two Ships past all our batteries up the N. River under a heavy fire from our guns, which they return'd without any loss on our side, except 6 men by an accident in firing one of our cannon. What Damage the ships sustain'd cannot learn, or how far they are gone up the river. Two flags have come from the Fleet, but the letters not being properly address'd were not received. The Officers in one of them were very polite, and one of them said Lord Howe was very unhappy that he did not arrive a few Days sooner. I am with great truth and respect, Your Honors most obedient Humble Servant

JAMES WADSWORTH.

COLONEL SEYMOUR TO GOVERNOR TRUMBULL.

HARTFORD, July 22d, 1776.

HON'D SIR,—As the Troops of Light Horse returned yesterday from New York, thot it my Duty, to give your Honor the earliest account of our Conduct and proceedings, with every attending Circumstance. I before mentioned the immediate forwarding of your Honor's orders to the Majors of the several Regiments named therein, as soon as came to my hand. The Companies made so great dispatch in their March, that most of them came on, (tho' well spirited) without the precaution of a Blankett, or even a Change of Cloathing; they had conceived the Idea, from the Suddenness and Urgency of the Orders, that they were immediately to be called to Action, and soon to return, which made them too Incautious; I must however in Justice say, that a better Body of substantial Yeomen, never appeared on such an Occasion. They were admired and applauded for their Spirit and Zeal. We no sooner arrived at Kings Brige, Monday Morning, than the General's Letter mett us. Copy of which now inclose. This at once seemed to check and mortify. We had no Idea of sending back our Horses, especially as the Men had left their Farms and Crops in the most Critical Situation, and must return as soon as possible. I ordered them however to halt at the Brige, and with Majors Starr and Sheldon, waited upon General Washington. He soon told us, "Forage could not be had on the Island, (the droughth being extreme that way) and that he could by no means be justified to pay for it, if it could be found." This again flung us into some perplexity, for we thot at least, if there was so great need of the Men, from the danger of a sudden

Attack, as the General often expressed it, that the Continent ought to undergo the burthen of detaining us. There was however, no reasoning upon the Subject. We then proposed finding pastures for our Horses at and this side the Brige, and depend upon the Colony, and so tarry a Short time, rather than be turn'd directly back, which might throw a discouragement upon the honest Intentions and wishes of Men, forward to serve their Country on any Immergency. To this the General *graciously* consented, and after much difficulty to obtain Pastures, for a small space, we marched into the City, thro' dust and Sweat. Our numbers were soon trebled, and the Sound of it rung thro' the Enemys Camp. The same day our Horses were sent out and the men put into Houses with nothing but the Cloaths on their Backs for lodging. As soon as a return of our Men could be made, a number were ordered upon Guard. This was some thing unexpected, but Cheerfully Submitted to. Soon after a further Order came for mounting Guard, and for eight of our men to goe to King's Brige upon Fatigue, there to remain One week. The first of these requisitions were complied with, but the last declined as unreasonable for men under our Circumstances. Col. Silliman as well as others advised against Submitting to Fatigue, that it was counter to the Law of the Colony; and what your Honor had no Idea of Subjecting us to. Major Hart with me of Course (by direction of General Wadsworth) waited upon General Washington and Stated the Case, mentioned the Exemptions of our Law etc. at same time suggested that the men would freely furnish Guard of every kind and man the Lines, as they had done, if they might only be excused from working Partys, for which they were in no measure prepared. We were answered, "that no distinction could be made between our men and the rest, and if they would not Submit to these Terms they might be dismissed." This Reply, after we had come so far, left every thing at home in the most suffering Condition, had made such dispatch, placed out our Horses at so much Expence and Risque, and had done every other Duty in the Time of the Alarm, and at all other Times (except that of the Pick Axe, the Shovel and Wheelbarrow) was indeed very humiliating. We could not account for such Treatment, unless it was from the quarter of such, who allways viewed, the Existence of a Body of Light Horse, with a *Jaundiced Eye*. It was the Opinion of several General Officers, that we ought to be excused; that it might be done consistently, and that we deserved Thanks and applause, instead of the Reverse. And in Short, if so large and respectable a Body of Men, scattered thro' the Colony, are to be blamed, under their particular Circumstances, for not Complying with every formal Round of Duty in Camp, from which they knew themselves excused, it must rather create Disaffection than otherwise. We are however willing if we have done amiss, to stand amenable at your Honor's Barr.

We left the City on Thursday noon last when the most, if not all, our Inlisted Levies had arrived, about Seven Thousand of the flying Camp had also reached the Jersey Shore, these at least must treble our number to that of the Enemy. Lord Howe also arrived the Fryday before without Fleet or Army (save a Ship or two) under these Circumstances, no prospect of any sudden attack, our Horses not to be kept any longer, the pressing Circumstances of our affairs at home, and the general Opinion, that we could not be needed soon, (even General Putnam said we were not wanted) together with the sudden and unexpected Reply from the General, all induced us to

return. I have troubled your Honor too long with a Relation of Facts, but tho't it necessary that no mistake might arise from differing accounts. I ought to mention one Circumstance further, that is, just before I left New York after the Men were all gone, Generals Spencer and Heath, called upon me, and said, there was a misunderstanding in the matter, and that they had just come from the General, and he meant to excuse us from Fatigue. The matter was now over, the Men gone and irrecoverable, and besides the General had otherwise expressed it the Evening before, when Major Hart with me waited upon him for the purpose. I can't help remarking to your Honor that it may be with truth said, General Washington is a Gentleman of extreme Care and Caution, that his requisitions for men are full equal to the necessity of the Case, that if more attention was had to the Northern department; it would be as well. It is much to be lamented that our numbers of Volunteers are so slow and deficient; am perswaded that detachments must after all take place as our only remedy. I should have stopd here, but am this moment informed by Capt. Hooker, that Mr. Webb,* General Washington's *Aid DeCamp* had wrote your Honor something dishonorable to the Light Horse. Whatever it may be, know not; but this I do know, that it is a general observation both in Camp and Country, if less Butterflys and fewer Coxcombs were away from the Army, we should not be put to so much difficulty in obtaining Men of Common sense, to engage in the defence of their Country. Your Honor will excuse my freedom and prolixity in this, as it proceeds from no other motive than a Sacred Regard for the Comunity of which I have the favor to be a member. I am, with every Sentiment of Esteem and Regard, Your Honors most Obt. hble. Sert.

THOS. SEYMOUR.

EXTRACTS FROM NOTES ON THE INSTRUCTION AND TRAINING OF THE FRENCH CAVALRY.

From *Rivista di Cavalleria*, July and September, 1910.†

ON account of the competency and acumen of Captain Teodoro de Iradier, Spanish Cavalry, author of "Nine Months with French Cavalrymen," who lived the life of that cavalryman during his nine months' service in the 10th Regiment of French Chasseurs, his minute and profound observations should contain much of interest.

In the main Captain Iradier is enthusiastic respecting the instruction and training of the French Cavalry and considers the following as the fundamental basis of its value:

*Samuel Blachley Webb. No such letter is in the Trumbull Papers.

†Translated by Major J. F. Reynolds Landis, Thirteenth Cavalry.

1.—The independence and initiative enjoyed by the Captain and his subalterns;

2.—The great and constant work;

3.—The method of teaching;

4.—The excellent body of instructors,

and, as contributing to its perfection:

1.—The inspections;

2.—The varied exercises;

3.—The maneuvers.

THE INDEPENDENCE OF THE CAPTAIN.

The principle that the Captain respecting his troop must be as the Colonel respecting the regiment is applied in France without any restriction; consequently he enjoys complete independence and initiative.

Being responsible for the administration and instruction of his unit, he has almost absolute powers respecting it.

He establishes each *week* the hours for various duties, which are submitted to his Major for approval by him, by the Lieutenant Colonel and by the Colonel.

This plan of establishing weekly the hours for duties is elastic and important.

He makes such use of his subalterns as he thinks best for each of them.

He prescribes what each horse is to eat and can decrease, increase, or change the ration for his animals as he thinks proper, according to the season of the year.

He establishes each week the men's rations, varied for each day.

As can be seen, the initiative he enjoys is such as, on the whole, renders his command an independent one.

The Colonel intervenes in the instruction of the troops only when the moment has arrived to unite the regiment, mainly with the object of unifying the instruction.

RESPONSIBILITY AND INDEPENDENCE OF SUBALTERN OFFICERS.

Subaltern officers with respect to their platoons and within the limits of the hours for duties established by the Captain,

have likewise complete independence and, being responsible for instruction, have complete liberty to employ the hours assigned in the manner and with the method of instruction that they think best; distributing the work as they think most advantageous.

As a general rule each officer takes charge of the entire instruction of his platoon and no officer ever takes his place. When necessary his place is taken by the senior non-commissioned officer.

When individual instruction is completed, he delegates to this N. C. O., under his frequent supervision, dismounted instruction and theoretical instruction. Other instruction is imparted by him in person, being present daily at mounted instruction, including the mounted exercises, at fencing, and at aiming exercises.

Within the troop, one of the following duties is assigned to each subaltern:

Suppling and instruction of young horses;

Instruction of scouts and in the duties of guide;

Instruction of N. C. Os.;

Instruction of lance corporals.

The weekly duty is taken in turn. Regulations require the officer:

To be present when supplies are received;

To be present at the reading of the *program for the day*;

To be present when the horses are fed morning and evening; though in practice the evening feeding is supervised by the N. C. O. on weekly duty.

SUPERVISION BY THE CAPTAIN.

The Captain assembles his officers frequently, supervises the instruction of the platoons, gives such orders as will result in a faithful adherence to the regulations, corrects errors and omissions, but his chief aim is to secure unity of doctrine in the instruction and he does not worry because the progress of the work he lays out monthly is not the same for all.

Thus, the method may be different in each platoon, depend-

ing exclusively upon the judgment of its chief, who regulates its progress in accordance with the personal conditions of his recruits.

THE HOURS FOR DUTIES.

After having attended to his personal cleanliness and had a first breakfast, the men go to the stables, giving a little care to the horses before saddling them.

At 7 in winter and 5 in summer, the platoons go out for mounted instruction. While the men are recruits this lasts 2 hours and from 2½ to 3 hours when the School of the Platoon begins.

Then other instruction follows; an hour being employed, the year around, for vaulting and gymnastics, about an hour for theoretical instruction, and an hour for dismounted instruction.

An hour is given up to breakfast from 10:30-11:30.

At 3, all instruction having been finished, they attend to the cleaning of the horses and equipments until 5.

At 5:30 supper, after which they go free until evening call.

As can be seen, they worked a great deal and constantly.

The following is the work of a regiment during the year:

The recruits are received October 1st; the next day they are given a bath, and on the morning of the 3d they put on their uniforms, after having undergone a rigid medical inspection. In the afternoon they begin to ride.

This individual instruction lasts until the end of December, the School of Platoon until the end of March, the School of the Troop until the end of May. In June that of the regiment begins.

From August until the middle of September the regiment goes to the maneuvers.

Finally, when these are over, in the short time until the class going out of service is freed and the new recruits arrive, there are 8 or 10 days of rest.

* * * * *

Instruction is considered of vital importance and has absolute precedence over all other demands.

The season of the year and the condition of the horses as to flesh is not considered, so that not a day is lost and the work is hard.

* * * * *

Men and horses do a great deal of work. Respecting the latter it is sufficient to say that during the 2½ hours that instruction lasts no other gaits are used except the trot and gallop; there are only brief rests of 5 minutes, while some movement is criticised or some supposed condition is explained.

Nevertheless, horses are in good condition and men enjoy perfect health.

According to Captain Iradier, this resistance to fatigue is obtained:

In recruits, by progressive work in instruction and good food;*

In horses, through their good natural qualities, the habit of work acquired under a rational system of training, and good and abundant food.

THE METHOD OF INSTRUCTION.

In every kind of instruction the method by demonstration is employed.

The instructor, in front of the recruits, obtains their attention by the command "Look at me."

Having assured himself that all are observing him, he executes the movement which he desires to teach, explains it, assures himself that all have understood it and then has it repeated by the motions, one by one, the corporal correcting the errors which the officer notices.

All instruction, of whatever sort, is carried on individually

* The following is the menu for one day:

<i>1st Meal.</i>	<i>and Meal.</i>
Cabbage soup.	Consommé with bread.
Potatoes boulangères.	Cabbage with pork.
Roast beef.	Beef Baudelaire (gravy with wine in it).
String beans.	Fruit.
Salade	

Red wine at 4c a liter (for who ever wishes to buy it.)

and while one recruit is executing any movement the others, standing at ease, watch him.

This method is rounded out, on the one hand, by the tireless patience of the instructor, who repeats what is not well done and constantly corrects errors; on the other, by satisfaction engendered in the recruit, who is praised beyond measure when he understands at once what has been explained.

* * * * *

Regimental instruction may be divided into two groups:

General instruction and special instruction.

The first, which all men receive, comprises, in order of importance:

Mounted instruction;
Fencing;
Firing;
Dismounted instruction;
Theoretical instruction.

MOUNTED INSTRUCTION.

This is given:

On the drill ground (evolutions),
On varied ground (field service),
In the hall (vaulting and gymnastics).

On the Drill Ground—The first day the recruits ride, they are made to trot; on the eighth they gallop the whole time; and on the tenth they begin to jump.

This habit of trotting, galloping, and jumping is kept up the year around; the difficulties being increased as the instruction progresses.

From the ninth day they go out of doors and, during the three months that individual instruction lasts, alternate with work in the hall. In the latter they do nothing but cuts and individual turns at all gaits, but especially galloping and jumping.

Captain Iradier says that one day each recruit executed 42 jumps.

From the day they go out of doors, they are accompanied by the older men who continue with them the whole year.

During individual instruction every care of the officer is given to confirming the recruit in the proper position on his horse, to training him to fatigue, to familiarizing him with every sort of ground and obstacle, executing leaps, ascents and descents of steep ramps, to controlling the horse at all gaits; in a word, to giving him endurance, to raising his moral by making him daring.

During this period elementary instruction is given in moving by twos, by fours, and in single rank; making use of days out of doors to teach him to orient himself, to give him a knowledge of the ground and how to use it, of the duties of a scout, of a vedette, of a guide, as well as of the manner of interrogating the inhabitants and reporting information.

Their Drill Regulations are excellent and admitted by all to be so, even by the Germans. It may be said that the spirit that dominates them is the real cavalry spirit; rapidity, the offensive, initiative, are prominent in every paragraph, in all movements, in all provisions.

Initiative is conceded to everyone, from the commander to the private soldier, or to put it better, there is exacted that liberty which permits the individual to work in his own way to attain the objective. Essentially, each one acts for himself but also harmoniously in the whole.

* * * * *

The fundamental base of all instruction is the platoon, to which the maximum of importance is given by exercising it constantly in all the duties which are peculiar to it. Consequently the real educators, on whom falls the whole weight of instruction, are the subaltern officers.

When these officers have brought their platoons to the desired flexibility, training, and degree of perfection, the Schools of the Troop and of the Regiment consist only in unifying this perfection and in binding together the smaller units.

FIELD SERVICE.

Very great importance and attention is given to this. It is carried out in sectors assigned each week to the several troops,

first by platoon, then by troop, half regiment, and regiment. Exercises of any sort always end with a criticism made on the spot.

VAULTING AND GYMNASTICS.

An hour a day is given to this during recruit instruction and three hours a week during the rest of the year.

FENCING.

This is carried on every day dismounted and mounted—saber vs. saber and saber vs. lance—at all gaits, first against fixed targets and later by horsemen provided with masks.

FIRING.

Is executed once a week, beginning in the second month of recruit instruction and is kept up all year. Each man fires six cartridges and the results are noted in his handbook.

DISMOUNTED INSTRUCTION.

Movements without arms are executed most minutely. In movements with arms, a great distinction is made between the handling of the weapon and its use; the former is taught quickly, the latter is carried out at great length.

Consequently, when the period dedicated to gymnastics and marching is over, dismounted instruction is reduced to a very rapid passing over of what has been learned and to a conscientious improvement in fencing with the saber, in fighting on foot, in loading and unloading the carbine and, especially, in aiming.

THEORETICAL INSTRUCTION.

The senior Non-Commissioned Officers are entrusted with this instruction; the officer superintends and inspects.

It is given in the form of lectures. The instructor explains in detail the matter for the day and assures himself by means of questions that the men have understood it.

Nothing is required to be committed to memory; every one answers in the form that seems best to him; the essential thing being that the answer should be fitting to the question.

Both in theoretical and in dismounted instruction the actual instructors are the corporals, squad-leaders.

SPECIAL INSTRUCTION.

In addition to the first and second grade courses, which N. C. Os. attend to enable them to enter the School of Saumur, the following special instruction is carried on in the regiments:

- Suppling and instruction of young horses;
- Scouts and guides;
- Telegraphers and sappers;
- Lance corporals;
- Graduates;
- Officers.

SUPLING AND INSTRUCTION OF YOUNG HORSES.

This is carried on by troop and an officer is charged with it. It lasts 2 years and includes the young horses mustered as five and six years old.

The first year is given up to what the French call le débouillage, which is nothing more than the continuation of a rational education. In the second year is taken up instruction that will render them fit to enter the ranks, a thing which does not happen before the end of the two years.

SCOUTS AND GUIDES.

This instruction takes place on Thursday and lasts two hours; theory and practice alternating.

The theoretical consists in verbal and graphic (on the black-board) explanation, made by the officer, of whatever relates to the service of scouting and of guides; the practical consists in the execution on the terrain of what has been learned theoretically.

The officer uses a little note-book in manuscript in which are collected all the duties to be carried out by these several cavalymen in order that they may fulfill in the best manner their special mission; each one concerned having a copy of this note-book.

An examination of it showed its contents to be the ideas considered indispensable for the scout and the guide in the form of question and answer.

The principal points of this interrogatory are:

For the Scout:

The Scout as a patrol leader; on the march; the patrol surprised;

News of the enemy and estimate of his strength; indications, etc.

For the Guide:

How he marches and reports, cases that may occur; rate, etc.

For all:

Orientation and march in a given direction; demolitions; judging distances; care of horse and equipment; formation of the regiment; German uniforms.

Great attention is given to this instruction, the men receiving it being selected not from those whose conduct is best but from those whose intelligence is keenest and who are distinguished for their enterprising spirit, their good sight, and good hearing.

In each troop there are 24 scouts; 6 to each platoon.

All wear a small five pointed star of red cloth sewed on the sleeve.

The men so distinguished show great pride in it as attributing to them a greater degree of intelligence and although they enjoy no material benefits there is a real endeavor to obtain the distinction.

TELEGRAPHERS.

A captain is entrusted with this instruction.

The aspirants for this course are selected by competition in the regiment. Those selected are sent to Saumur where the amateurs take a course lasting six months; the professionals one lasting three months. Generally two amateurs and two professionals are sent every year.

The courses usually last from January to July and from

July to October. At the conclusion of the courses examinations are held and those who pass them satisfactorily obtain the title of "Telegraphers." At Saumur their individual instruction is carried on at the same time as their technical telegraphic instruction and for this purpose the horse assigned to them in the regiment is sent to Saumur with them.

There are four effective telegraphers per regiment, one of them being a N. C. O., and a varying number of lance-telegraphers. This personnel, in addition to the instruction it receives in barracks, serves 36 hours a week, as a minimum, in the public telegraph offices in the garrison.

SAPPERS.

These receive no other instruction than that given in the regiment. There are 1 N. C. O., 6 sappers and 3 lance sappers to each troop.

LANCE CORPORALS.

There are 12 to each troop and their instruction is entrusted to an officer. They have a separate bed-room which also serves them as a study room. In mounted instruction and in field service they perform the duties of corporals. Dismounted instruction and theoretical instruction is given to them by themselves and they take turns in exercising command over a squad.

NON-COMMISSIONED OFFICERS.

The instruction of non-commissioned officers is entrusted to the captain and takes place three times a week. Its principal object is to make instructors.

The instruction comprises:

For Corporals:

In theory, as far as the school of platoon; in practice, the duties of a corporal as squad leader.

For Sergeants:

In theory, as far as the school of the troop dismounted and mounted; in practice, as far as the command of a platoon in the school of the regiment.

It (practical instruction) takes place once a week, applying on the ground all that has been learned theoretically respecting evolutions at drill, field service, map reading, etc.

In instruction dealing with field service, a situation is always assumed and the N. C. Os. are assigned command of a platoon, a patrol, etc.

INSTRUCTION OF OFFICERS.

The instruction of Officers is directed by the Colonel who, however, generally delegates it to the Lt. Colonel. The latter once a month examines the subaltern officers on their chargers. Instruction in fencing is optional.

In winter, twice a month, map maneuvers are held; generally on maps of the German frontier. The remainder of the year tactical walks or rides are held at which the N. C. Os. are present as spectators.

OTHER INSTRUCTION.

During the whole year there are exercises in entraining and detraining, embarking or debarking, demolitions, passage of rivers, mobilizing, and making requisitions; in which both officers and men take part.

In addition, officers give lectures on the other arms or on technical questions; make long reconnaissances from one garrison to another when the latter is carrying on maneuvers; make long rides, hold competitions and races and also, in fall and winter, follow the hounds, which contributes greatly to developing an eye for the terrain, equitation, and to making of them, bold, courageous horsemen.

CONCLUSIONS.

As a whole the instruction is really good and the recruit becomes a very good horseman and good shot in spite of the short period of service.

The principal reasons for this result are:

- 1°—The initiative which officers enjoy.
- 2°—The excellence of the N. C. Os. which results as much from the special military education they re-

ceive as from the high degree of culture they possess. The system of recruiting being strictly obligatory, these corporals and sergeants constitute a select group drawn from the best of the French youth.

3°—Re-enlisted Cavalrymen.

4°—The unfailing habit of never ordering an evolution at drill or an exercise without explaining the reason for it, always infusing in it some tactical idea, and afterwards making a complete but courteous criticism of it.

5°—The absolute precedence that is given to everything relating to action suitable in time of war; a weight that sometimes even causes certain military duties to be lost sight of.

* * * * *

Now let us see how this instruction is completed and perfected.

INSPECTIONS.

In France, they are of the opinion that the degree of perfection attained in any instruction bears some relation to the demands made in inspections, and the latter to the personal qualities of the person inspecting. They say, "by such an inspector, such an inspection; and from such an inspection, such a result as far as instruction is concerned." Consequently they draw the deduction that an inspection will be the more perfect and profitable the better the technical qualities possessed by the inspector.

If the latter does not belong to the arm inspected, if he is not thoroughly imbued with the spirit of its regulations, if he does not know thoroughly the duties which may, in war, be entrusted to the subdivision that he is inspecting, he can hardly demand of it that excellence of execution which it must possess in order to carry out the various duties that will be assigned to it in war.

Therefore the inspections pertaining to any arm are made by general officers who have been promoted from that arm.

QUARTERLY INSPECTIONS.

Every regiment is inspected quarterly by its brigade commander who, in addition to determining the condition of its internal affairs and inspecting minutely its books of instructions in case of mobilization, determines the state of its instruction.

The winter inspection is made at the end of December and its object is to examine the individual instruction in all its branches, chiefly in equitation, fencing, and the instruction of young horses six years of age prior to putting them with the old horses.

The spring inspection is made at the end of March to determine the instruction of the platoon and especially field service, dismounted combat, firing and fencing.

The summer inspection is made in June and comprises the determination of the instruction of the regiment, in drill evolutions as well as in tactical exercises, the instruction of the officers, the examination of N. C. Os. in map exercises, and of officers in the riding school.

The autumn inspection takes place at the end of the annual maneuvers to determine the condition of the regiment, men, animals, and armament, after the field exercises.

ARMY CORPS INSPECTORS.

In addition to the preceding, garrisons are inspected by Corps commanders, the principal object of the inspection being to determine the degree of instruction of the troops of the garrison and the fitness for command of the commanders of regiments and detachments.

ARMY INSPECTIONS.

This does end the inspections, for above the authority of the Corps commanders is that of the Army Inspector, which extends to two or more Army Corps.

General Burnez, a member of the Superior Council of War and President of the Cavalry Technical Board, Commander of the XIII Army Corps, of which the 10th Chasseurs formed a part, inspected the regiment in the month of July, examining

platoons and troops separately and the regiment united, always developing some tactical theme.

During the maneuvers (Divisions opposed to one another) this general officer inspected the whole XIII Army Corps.

VARIED EXERCISES.

Leaving out of consideration map maneuvers and staff rides, participated in by general officers and by field and company officers of all arms, I shall speak of the so called "Stages" (tours of duty) much used in the French Army because considered indispensable, or at least very desirable in modern war, in which co-operation between the several elements demands a knowledge of the sister arms; not only the knowledge of how to use them, but also the knowledge of how to oppose them.

SERVICE IN VARIOUS ARMS.

These "Stages" or tours of duty, consist in serving for a certain time in arms not one's own. Officers taking the course at the Superior War School perform these tours of duty, as do likewise, Captains, Majors, and Lt. Colonels who request such detail.

The duration of the tour is nine months and the officers perform the duties and have the responsibilities of the grade they hold.

In the 10th Chasseurs was a Captain of infantry to whom was entrusted the command of a troop and who was at all times responsible for its instruction and administration.

At the same time a Captain of the Chasseurs was commanding a battery in a regiment of artillery.

When the officer's tour is ended, he returns to his own regiment and the commander of the regiment in which he has been serving transmits a report of the opinion that has been formed of him.

MANEUVER PERIOD.

In the first days of August preparation for the maneuvers is begun by marches, instruction of the officers, and theoretical instruction of the recruits.

The maneuvers last 36 days, from August 11th to September 15th and include 3 periods:

- Cavalry evolutions;
- Combat firing;
- Maneuvers with the infantry.

CAVALRY EVOLUTIONS.

After a three days' march the regiment arrived on the terrain chosen for these evolutions. They lasted 10 days and were carried on in connection with the 30th Dragoons, which was brigaded with the 10th Chasseurs, and were directed by the Brigade Commander in person.

The first days were given up to field service and the following to the evolutions.

The latter took place over a large cultivated area seamed with several roads, wood roads, trails, ditches, which had to be jumped in the course of the varied tactical suppositions carried out almost always at the gallop.

During the last days the Corps Commander inspected the brigade, being present at its evolutions.

All the evolutions which the brigade executed were an application of the tactics of echelons; tactics which are ideal for maneuvering, purely French, diametrically opposed to the stiff, right-line, brutal methods of proceeding of the German cavalry; an elastic tactics, subordinate to the terrain and by which one is able instantly to oppose the enemy with a superior force; a tactics difficult of application, requiring absolute freedom of movement, very intelligent leaders, soldiers who are excellent horsemen, and perfect instruction; since, without these conditions, the unity of the attack (in the variety of partial attacks) disappears, converting into weak results, successive and loose, what should be the culmination of efforts which have for their object the triumph, over greater numerical force, of intelligence displayed in maneuver.

This tactics of echelons, the tactics of enveloping movements, of attacks by surprise; the tactics in which rapidity, the offensive, boldness, and initiative go hand in hand, is, consequently, the ideal tactics for cavalry.

However, it is not to be understood that echelons are the best and most suitable dispositions for every cavalry and therefore to be universally recommended.

We, in fact, know by experience that each army must have its own tactics suited to its own peculiarities.

The Germans with their stiff tactics and attack—let us say—in one direction, have found the tactics that fits them and which is in harmony with the Saxon character, with their tenacity; the French with their flexible method of maneuvering have found that which is best suited to their conditions of race, temperament, and horsemen.

COLLECTIVE FIRING.

The evolutions having been finished, the regiment moved into camp at Bourglastic to carry on collective firing.

This is divided into:

- (a)—Instructive firing, carried on by troops separately at targets at 600 and 1,000 meters: the first representing a front of 8 soldiers on foot and the second the front of a platoon (16 men) also on foot;
- (b)—Combat firing, carried on by half the regiment in the development of some tactical idea.

When this second period of maneuvers is ended, the regiment is divided and each half regiment joins a brigade of infantry that is accompanied by 2 batteries of artillery to take part in

THE AUTUMN MANEUVERS.

From the regiment opposed to regiment they progress to division opposed to division.

On an average the cavalry were in saddle seven hours a day.

In accordance with the provisions of the French regulations, the divisional cavalry was often assigned duties that pertained to infantry.

CRITICISMS.

As has been said above, each exercise terminates with a criticism since in France they cannot conceive of the development of a supposition, however simple, that is not concluded by a criticism.

It may therefore be said that this is the last phase, whether of instruction, or maneuvers, or inspections; whether dealing with platoons, or with army corps.

This habit of logical analysis, of the explanation of reasons, of the justification of the ideas which have controlled the progress of a supposition is the consecration, the crowning of every work and constitutes its most useful part.

It alone contains the essence of true instruction and by means of it we not only succeed in correcting defects, rectifying errors, which even in itself is a great result, but we stimulate by approbation the good, the capable, those who know, and we discover those who through lack of capacity, through negligence, or through ignorance have committed unjustifiable errors, forcing out of the service those who, after repeated and inadmissible errors, have not improved.

All this without taking into consideration the grade to which the criticised officer belongs. From a Lt. General down all are subjected to examination and are judged according to the results.

The criticism is made openly, publicly; so special care is taken that the audience is made up of officers of all ranks who have attended the maneuver, not only for the sake of instruction but also as a perfect guarantee that the criticism is impartial, just, and equal for all.

No one is reproved and the formula could not be more diplomatic nor clearer. "What dispositions did you make?" "What orders did you give?" are the questions put to the commanders of parties.

The latter reply, each explaining how he interpreted the maneuver and its development. The Director adds, "I recognize that you must have had good reasons for doing so, but, in your place, I should have done this," and it is plain that in this different opinion, the reasons in support of it being stated,

censure is implied and the errors committed are made evident.

The criticism is perfectly clear and leaves nothing in doubt; but the corrections of the Director, given in a familiar tone of voice, are accepted not as a reproof or as a rebuke but rather as a lesson by which one must profit and as advice which must be followed: consequently no one is made to feel ill at ease.

To bring out how greatly the French hold to this correctness of form, the following episode is related:

On the last day of the division maneuvers, the Inspector General of the Army was present with the Army Corps Commander. The former did not attend the criticism and the latter, after having heard the two General Officers, commanders of the opposing parties, began his criticism, justifying the absence of the Inspector General in the following words:

"You will think it strange that the Inspector General is not presiding at this meeting. This is the reason. The General has followed the whole maneuver and did not understand the greater part of the movements of the A party nor the lack of action shown by the opposing party; although he tried to find an explanation for what was going on, he could not do so and he said to me: 'I do not understand what has been going on, in my opinion it is inadmissible and as these are my views, I do not wish to be present at the criticism for fear that, in the course of it, I might say something not perfectly proper.'

"For my part"—added the Corps Commander—"I am of the same opinion as the Inspector General."

Then he asked the Chiefs of the opposing parties for explanations respecting certain dispositions they had made.

The benefits of criticism are conspicuous even if we only consider that the *amour propre* of some commander, who knows he is to be judged in the presence of his juniors, obliges him to study, to meditate on the responsibilities of his office and makes him always demonstrate that his authority and seniority, represented by the insignia of rank he wears, are justified; allowing his superior officer, in case this is not so, to employ the right of causing him to change his arm or, if deemed necessary, to remove him from active service.

THE QUESTION OF THE BAYONET.*

BY CAPTAIN BAUMANN, GERMAN CAVALRY.

THE subject of arming the cavalry with the bayonet ought to be considered only under the supposition that the saber shall not be entirely supplanted by the bayonet. The most enthusiastic advocate of the lance must acknowledge that in the mounted charge which meets the enemy in orderly formation the lance will in most cases lose the fight. As in many cases, however, the cavalry fight will be decided only by the actual *melee* and as mounted action is now as heretofore the principal manner of fighting—"only where the lance cannot be used, cavalry resorts to the carbine"—we cannot, much as we would like, resort to a measure in favor of the bayonet, through which a large part of our cavalry would become weaponless at the decisive moment.

The supporters of the cavalry bayonet give as the main reason for the necessity of such a weapon the following: A well led cavalry body will frequently be compelled to choose the dismounted attack in order to clear a way for its further activity or to be enabled to execute special tasks, such as the capture of railroad stations and magazines, destruction of works, capture of isolated pickets, etc. "That it is actually impossible to shoot a stubborn defender out of his position, as was believed to be the case at the introduction of modern firearms, is sufficiently proved by the war in Manchuria. There it was seen that superiority was gained only through the bayonet charge and often only through the most stubborn hand to hand fighting with cold steel. For this manner of fighting our cavalry, with its present armament, is unsuited and it appears to be very desirable to equip it with a suitable hand to hand weapon." An anonymous author, in an essay on "Development of the carbine

*Translated from *Kavalleristische Monatshefte*, September, 1910, by Harry Bell, M. S. E., U. S. Army.

and its importance to the cavalry," which appeared in *Vierteljahrs Hefte für Truppenführung*, No. 4, 1908, and to which we will refer several times later on, states that "the bayonet undoubtedly increases the individual's confidence and desire to attack in operations against villages, woods, defended bridges, etc."

I will state that I am an opponent of the cavalry bayonet, because I consider it unnecessary and positively detrimental to the training of the troop and keeping up the proper offensive spirit.

In the first place we may well doubt if the leader of a body of cavalry as easily and often decides on dismounted action in war as he does in peace. In maneuvers the strength of the enemy to be attacked is, as a rule, far better known than can be the case in war. The actual losses resulting in each attack never come plainly to the surface in peace maneuvers; after the attack has been executed, everyone mounts and resumes his way. We never think of the riderless horses accompanying the troops in war possibly for weeks before the arrival of recruits gives relief, which weakens the strength of the troop far more than actual losses have done in a fight.

France acknowledges the inferiority of its cavalry compared with the German cavalry when saying (*Revue de Cavalerie*, May, 1908) that in the start the French cavalry is not to give battle to the German cavalry; only when the latter has been weakened in fights with the cyclist detachments to be attached to the corps cavalry brigades and the *detachments de couverture* to be sent to the front of the army, shall the French cavalry division hasten up and conquer the decimated or weakened German squadrons.

The lessons of the Russo-Japanese war in regard to fire tactics should not be applied to the dismounted fight of the cavalry, according to my views. For, not considering the fact that in Manchuria special conditions favored the utilization of the bayonet, requirements in a cavalry fire fight are far different from those in an infantry fire fight. The Japanese infantry, frequently too weak to gain the fire superiority, preferred to choose the bayonet attack at night if it could gain no success in daytime or if it was believed that the losses would be too heavy.

Carefully trained for night fighting, it could safely choose that method, considering it was opposed by a morally and physically far inferior enemy; but had the enemy been equal, such a procedure would have been extremely dangerous. The manner of fighting adopted by the Russians after their experiences in the first few battles, passive defense in strong intrenchments its lines behind each other, often led to hand to hand battles, especially as the effect of the Japanese artillery on the trenches frequently was very small. Furthermore, on account of the height and density of the *gaoljan* sudden contacts were not infrequent, in which the bayonet only could be used.

But even if we concede that in the future, in a Central European war, the bayonet fights of infantry will be more frequent than heretofore, we do not concede that this necessity exists also in an attack made by dismounted cavalry. Concerning the dismounted fight the German Cavalry Drill Regulations say: "The leader will decide on the decisive attack in general only when he believes to be certain of superiority. Only in case of necessity will he make a frontal attack across terrain which the opponent has selected for his field of fire. On account of its mobility cavalry can gain favorable terrain for the execution of its attack outside the limits of the hostile fire zone and can send detachments to make an enveloping movement even before the opponent can take his counter measures." This means that in the first place we must have a superiority and further means that the possibility of choosing the terrain over which the attack is to be made and enveloping movements are an advantage the cavalry has over infantry in making its dismounted attack. These conditions make it appear very probable that the defender will be "shot out" of his position in most cases; and if he does not allow himself to be shot out, then cavalry can support the charge most effectively by inserting that part of its force which has remained mounted; and we should never forget that the butt of the carbine has done excellent service in a *melée* from time immemorial. Any carbines which have become broken and unserviceable in this manner, can easily be replaced by taking those of the killed and wounded.

The author of the essay mentioned above, cites two historical examples in support of the bayonet. He writes: "That this

want (of the bayonet) made itself felt in the war of 1870-71 already is supported by two examples, which are cited in General Karl von Schmidt's autobiography. On the 21st of October the 6th Cavalry Division took part in the attack made by the 22d Infantry Division on Chartres. At the village of Jouay a heavy fight ensued, in which the leading squadrons of the 6th Cuirassiers and 16th Hussars encountered *franc-tireurs* and guards *mobile* in the narrow meadow valley of the Eure. The Hussar squadrons under Major v. Massonneau immediately dismounted, as well as two platoons of the Cuirassiers, who were partly armed with Chassepot carbines. They drove back the enemy and captured the *barricaded* Jouay." At another place he says, writing about the battles in the vicinity of Cloyes and Chateaudun: "All cantonments had to be stormed, which was done by the cavalry riding in front; the cavalry dismounted for that purpose."

Since both of these cases show that the attack *without* the bayonet succeeded, what is the necessity of having bayonets? The author also mentioned two examples from that war, prior to the ones quoted, in which the attack of dismounted cavalry is discussed. In these cases also the attack succeeded *without* the bayonet. According to my opinion these four examples are excellent proof that the bayonet is superfluous to the cavalryman.

There seems to have been no desire in the Japanese cavalry for the bayonet and its want did not make itself felt; in any case so far there has been no mention made of adopting the bayonet as a cavalry weapon. On the other hand, the War in South Africa proves that cold steel is not necessary either in the *melée* or in the effort to increase the offensive spirit.

When in the first battles of that war the Boers confined themselves to passive defense and allowed the beaten British troops to escape without pursuing them, many authorities gave for the reason of this procedure the absence of an *arme blanche*. That this opinion was erroneous is shown by the subsequent course of the war. Although later on the absence of discipline and subordination often caused the leaders great difficulties, the Boers fought from September, 1900, to April, 1902, thirty-nine larger and numerous smaller offensive battles and showed remarkable bravery and contempt for death in all of them. When-

ever the attack led to a *melée* every one who did not at once surrender was shot down or killed with the butt of the rifle. In spite of the fact that towards the end of the war entire commands had armed themselves with captured Lee-Metford rifles, no one thought for a moment of carrying along the bayonets belonging thereto. The absence of *armes blanches* did not even keep the Boers from several attacks made mounted, both in close and open order, against all arms. V. Maltzahn, in *Vierteljahrsheften* (1909, 3; 1910, 2) says concerning the change of Boer tactics during the course of the war: "The offensive tactics of the Boers assumed in the summer of 1901 were due to their overcoming the original feeling of inferiority on account of lack of training, organization and leadership, which feeling was overcome by the influence exerted by intrepid leaders who had by then come to the front."

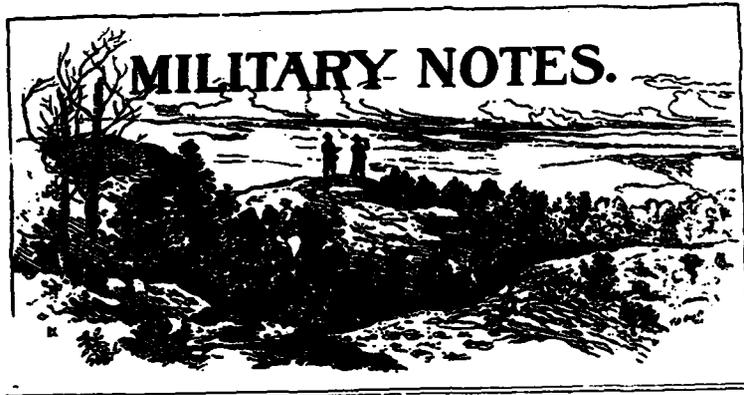
Not the bayonet, but the example set by the leader, the skill in handling the firearms and discipline and obedience instilled by peace training create in the fighting line the irresistible desire to forge to the front.

We will now discuss the disadvantages connected with the introduction of the cavalry bayonet. In the first place, it means an additional weight carried by the horse (about 300 g.); the bayonet makes the piece muzzle-heavy and thus tiresome to the firer; accuracy of aiming and of firing, as well as quickness of executing the rushes, will be materially interfered with thereby. It will also be hard to find the necessary time for properly training cavalry in the bayonet exercises; the horse, cavalry's best and foremost arm, would suffer in consequence; we do not spend any too much time with it now. Today we have little enough time to properly train the recruit to become an adept horseman, which should be our first and foremost endeavor and to which all available time should be devoted in order to preserve the horses and increase our fighting strength in war. The bayonet would prove absolutely detrimental to instilling and fostering the cavalry offensive spirit. And this statement can not be refuted by the mere counter statement that this fear is groundless.

At the present day, in the German cavalry, the desire for the fire fight needs no stimulation or spur, on the contrary, we

can frequently see the carbine used in cases where cold steel ought to have been resorted to. Each large maneuver shows numerous cases of this kind. The general trend of opinion now seems to be that the cavalry battle should be decided by fire fight and that cold steel should play a secondary rôle. Those who hold that opinion point to the bayonet for the proof that the carbine is at least equal to the lance and that any officer has the choice to select one or the other of these arms to solve a cavalry task. But the regulations point out the proper way out of the difficulty by stating: "The cavalry resorts to the carbine only where the lance is out of place."

And our youth should never forget this maxim, so that, should in the future a Seydlitz lead them to battle, he will find cavalymen—not mounted infantrymen.



A NATIONAL MILITARY HORSE SHOW.

ADVANCE copies of orders soon to be issued have recently appeared indicating that steps are to be taken to insure better mounts for the officers of the mounted service.

A recent communication from the War Department to Post Commanders cites certain exercises and states that it is the policy of the Department to have our Army represented at the International Horse Shows later. The natural inference is that it is only waiting till we can furnish creditable representatives in both riders and horses, in some numbers.

That recently returning regiments from the Philippines have demonstrated an increased desire for well-bred horses cannot, I think, be successfully denied. I have been unable to account for this in any way except to credit it to the Military Meets, especially the Division Meet.

The War Department considers the Small Arms Competitions of sufficient value to justify the very considerable expense attached thereto and the absence from regular stations of the officers and enlisted men attending them.

A National—as distinguished from an International Military Horse Show—would, it seems, be a stepping-stone to the International; would tend to disseminate the knowledge of horsemanship by bringing together in spirited rivalry those who have such knowledge; would add to the interest in horses and equitation throughout the service, if not too close a corporation.

The object being to create interest and educate and improve the mounts of officers, the exercises should not at first be beyond the possibilities of what are now considered first-class mounts, and should leave room for advancement from year to year until International quality should be shown. Whether two, three or four years would be required it is not yet needful to say.

Riley being the geographical center of the United States, the seat of the Mounted Service School, where competent judges would be on hand, where a suitable ground and equipment are available, where equitation is paramount—at least in the school—would seem to be the logical place for holding the show.

The distances, as shown in the Official Table of Distances from all stations in the United States where mounted troops are serving, are as follows:

<i>From Riley to—</i>	<i>Miles.</i>
Apache.	1,200
Boise Barracks	1,427
Des Moines	360
Duchesne.	1,023
Ethan Allen	1,564
Huachuca.	1,137
Leavenworth.	134
Meade.	742
Myer.	1,310
Oglethorpe.	896
Robinson.	571
Russell.	610
San Antonio	807
San Francisco	1,880
Sheridan.	619
Sill.	364
Snelling.	705
Vancouver.	1,901
Wingate.	1,006
Yellowstone.	1,160
Total miles.	19,416

The freight rate from Berkeley, California, to Boise, Idaho, on a horse is \$39.50, being \$1.975 per hundredweight on a rating of 2,000 pounds. The distance is approximately 1,200 miles.

Let us call it \$40 per 1,000 miles on a single horse.

From the above table of distances we have, say, 20,000 at \$40 per 1,000=\$800, or, say, \$2,000 for the round trip for one horse from each of the stations at which mounted troops are serving. The rate for officers for transportation—not mileage—would be about the same as for horses. Many roads furnish transportation for attendants. On this basis the total cost should not exceed \$5,000 per show.

It is suggested that in case of such a show one officer and his *bona fide* mount should be sent from each station of mounted troops, provided that a suitable officer desiring to go were present and owning a horse which could demonstrate his fitness to be sent; and provided, further, that where two branches of the mounted service were stationed each should be represented if each could furnish suitable representative. It might easily happen that the smaller stations would not be represented.

Of course, under such an arrangement a regiment occupying several stations would be over-strongly represented, but, on the other hand, these find it harder to keep up enthusiasm, and hence are deserving of more encouragement. Besides it would be extremely difficult for a Regimental Commander to determine anything about the relative merit of horses and riders which were not under his observation.

The character of the show might best be left to the authorities at Riley, with the understanding that Post Commanders would be notified at least three months before the date of assembling at Riley, which date should allow a horse coming from a distance a chance to limber up for a few days before the actual work of the show began.

A discussion of the benefits to be expected seems needless.

When the soldier was convinced that it was worth while to try, it immediately became necessary to add to the difficulties in the Sharpshooters' course and the Expert test.

Arouse interest—widespread interest—in good horses and horsemanship and the character of the officers' mounts will show the result.

The time of year best suited to this competition would require consideration of the authorities—at what time could the officers be best spared from their stations—at what time would they be least prejudicial to affairs at Riley—both these questions should be considered in determining this time, as well as what time the horses would usually be at their best.

This suggestion has not been submitted to the authorities at Riley, and it might easily be found impracticable to carry it out there. It is submitted as a quick and effective way of arriving at what the War Department seems to want, and intended to show that it need not be an expensive program at all.

It is believed that the time is an opportune one for instituting some such plan if it meets the desires of the mounted services.

HORSES TO BE BOUGHT IN SOUTHWEST FRANCE IN 1911.

ORDERS specifying purchases to be made for 1911 have already been given to remount depots in Southwest France. The officers of these depots know already what their purchases will be from next January on through the spring. For example, the depot at Tarbes is directed to buy 428 horses, divided as follows: Twenty-five for officers of dragoons and 173 for troopers of dragoons; 72 for officers of light cavalry and 1,129 for troopers of same; 10 for general staff officers; 2 for hunter class for Saumur, 5 riding hall horses for Saumur, 1 for officers of dragoons at Saumur, 1 for light cavalry officer at Saumur, 3 light cavalry troopers at Saumur, etc.

The method of purchase, age, etc., of these horses and the time and system devoted to their training before they are taken up for duty in the organization are described in No. 1065 of February 2, 1910.

“AN OFFICER ABROAD.”

BETTER MOUNTS.

THE growing interest that is being taken by our officers of the mounted services in better mounts should be stimulated by the instructions that have recently been sent by the War Department authorities to the commanding officers of all stations at which mounted troops are serving. These orders, or rather suggestions, in some respects, are to the following effect :

That the course of instruction prescribed by G. O. 186, War Department, 1908, should be extended so that officers and their mounts may be so trained that teams of them may make creditable showings, at future International Horse Shows. Also, that, to encourage mounted officers in procuring suitable mounts that, by proper training, will be capable of being trained as jumpers, they should be permitted and encouraged to enter their mounts in local horse shows, races, etc., with a view of demonstrating that our officers are at least the equal in horsemanship to the horsemen of our country.

They should also be encouraged to obtain such mounts as, by judicious training, will be able to negotiate all ordinary obstacles to be met in cross country riding and to that end they are informed that horses that can be so trained for the purpose indicated may be purchased from the remount depots.

It is desirable that our mounted officers should keep abreast with those of other countries in all that pertains to horsemanship and in order that suitable teams to represent us in future International Horse Shows may be selected from every regiment in the service.

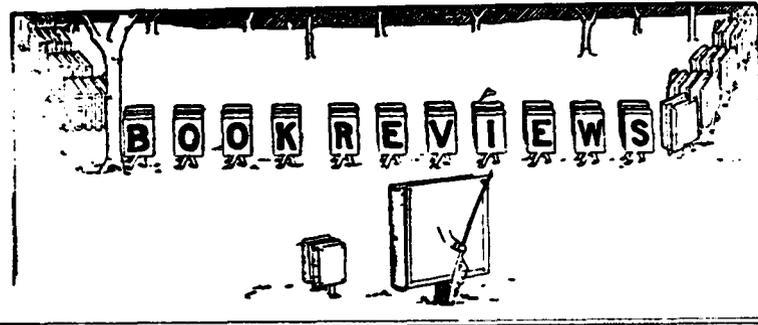
To this end courses will be established at every garrison where mounted troops are serving with obstacles similar to those shown on an enclosed blue print and the taking of

these should be the regular part of the prescribed instruction.

The blue print shows the obstacles and their dimensions as used at the London International Horse Show in June last.

It is regretted that we are unable to reproduce the blue print showing these obstacles but our engraver was unable to make an etching from a blue print, especially from one that was so faint as the copy received.

E. B. F.



The Scha-Ho.*

The fourth volume of the German Official Account of the Russo-Japanese War has appeared. It is devoted to the battle on the Scha-Ho. Like the previous volumes, it is a detailed account of the movements of divisions and brigades, sometimes of regiments and battalions. It is a work for military students and not for general readers. He who hopes for entertainment without the expense of attention and deep study will be disappointed. One should make up his mind to hours of hard labor or leave the work alone. But one willing to burn the midnight oil will find pleasure and reward.

From books heretofore published, principally from the articles in the *Militar Wochenblatt* and General Ian Hamilton's work, a fair general idea can be obtained of this battle. The details of that combat are now laid before one in this volume of 432 pages of text and one volume of eleven excellent maps. The guide map is of the scale 1/300000, the other ten of 1/100000.

*"THE RUSSO-JAPANESE WAR. THE BATTLE ON THE SCHA-HO." Prepared in the Historical Section of the German General Staff. Authorized translation by Karl von Donat, late Lieutenant 33d (East Prussian) Fusilier Regiment, German Army. Eleven maps and eighteen appendices, including five photographic views. Hugh Rees, London, 1910. The U. S. Cavalry Association Sole Agents for the United States. Price, \$4.00, net.

The maps in Hamilton's book were 1/75000, and those used by the War Department to accompany the reports of our attachés, 1/84000. Two plates give the war organization of the two armies, and thirteen of the orders issued by Kuropatkin and his lieutenants are given. Kuropatkin's order directing the movements at the commencement of the action fills five pages, but is very clear.

It is not the purpose of this review to go into a discussion of what was or what might have been done. There is a very admirable series of comments at the close of the book, consisting of thirty-seven pages. This is somewhat more full than the one given by von Caemmerer in the *Militar Wochenblatt*, published by Hugh Rees, "The Battle on the Scha-Ho." Von Caemmerer inclines to the idea that Kuropatkin's best plan was a frontal attack. The comments by the German General Staff incline to a move against the Japanese left being the best. What was done was an attempt to envelop the Japanese right. The General Staff's comments on the plan of envelopment adopted is as follows:

"We do not know what considerations decided Kuropatkin to envelop the Japanese right wing. Perhaps the fact finally settled the matter that this unsupported wing was already overlapped by the dispositions of the Russian forces, which were extending far to the east. There is no doubt that success could have been achieved by the plan adopted, if only the enveloping attack had been conducted with circumspection and energy, after once the Russians had deprived themselves of the advantage of surprise. But they did not act with circumspection; they rather acted with too much caution, energy being replaced by a hesitating mode of procedure, which has nothing in common with the *sine qua non* of success, nothing in common with the firm confidence in the performances of commanders and troops, and nothing in common with the imperturbable will to conquer."

And something to the same effect is found in Hamilton's book, as follows:

"Umezawa, in the east, is so far bearing the brunt of the attack, and seems to be sorely beset. He and his brigade would probably be past praying for had the Russians come down like the wolf on the fold; had they developed even a touch of that

audacious, headlong hunger for the fight which has so often been associated with successful military enterprise."

And again, where he speaks of the halting of a Russian attack near the center of the line:

"But now the long lines halted. Strange indecision! They remained motionless ten minutes; and then I realized that they were intrenching, out of range of the Japanese! In that one moment all anxiety passed away. I cannot explain the sensation or the instinct which possesses me, but there it is, and I feel possessed of great calmness and the full conviction that the Russians have, by their failure to come on, parted forever with that moral ascendancy which is the greatest of all the assets of an attack."

Severe criticisms are made of the Russians for their lack of attempting anything in the nature of surprises. Unquestionably these criticisms are just. One reading them is reminded that very much of a General's duty is still to mystify, mislead and surprise.

I am not inclined to the general belief that the Russians outnumbered the Japanese. Certainly, from Kuropatkin's own work we do not get this idea. The work of the German Staff gives Kuropatkin's force roughly as 210,000 men, and the Japanese 170,000. Kuropatkin states in his work, page 241, volume 3, that on September 29th the Manchurian Army could only muster 151,000 rifles. To this must be added the 9th Corps, which arrived during the battle (less one brigade at Tie-Ling), say 25,000 men. The German Staff account seems to indicate that the mounted force brought this up to the number given by them, 210,000. I believe Kuropatkin's statement is probably nearer the true number. He certainly was in a position to know, and he could hardly dare give an underestimate, on account of being taken up so quickly by enemies, of whom he has had plenty since the publication of his work.

In this work one finds no great regard for Kuropatkin. However, with such Lieutenants, how could anyone have done better? Surely, Kuropatkin was an unfortunate General. But I believe far more unfortunate in his tools than in his character. His two main faults seem to have been, one characteristic, the

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other an impossibility to form anywhere near correct ideas as to the enemy's strength.

As to the first, it was a continual love of huge reserves. Even now, in his book, he blames himself for not more strongly insisting upon a huge strategic reserve at Mukden. And a large part of his work at the Scha-Ho seems to have been moving masses back and forth in the forming of reserves.

As to the second, it seems he always overestimated Kuroki's numbers. This may have been pardonable when we consider the importance of the First Army to either the Japanese or to the Russians.

Regarding the character of the fighting:

The Russian loss is given as 42,645. Taking Kuropatkin's estimate of the total number, 176,000, we have a percentage of loss of nearly 25.

The Japanese loss is given roughly at 20,000. Taking the estimate of their force as made by the German Staff, 170,000, we have a percentage of loss of nearly 12.

Now let us compare these losses with those in some of the battles of our Civil War, taking, for instance, Chickamauga.

According to Alexander's figures we have as follows: Bragg's Army numbered 61,780; his loss was 16,449; percentage of loss, 26. Rosecrans' Army numbered 65,641; his loss was 16,164; percentage of loss, a little less than 25.

It would seem that the American soldier of today, if he is as good a soldier as was his father in '63, can stand the strain of a modern battle as well as the Russian or the Japanese. Of course, this is only a general average. Some Russian regiments and battalions lost very heavily. But it is doubtful if any could show the percentage of loss of the brigade of Regulars at Chickamauga, which was 59 (Rebellion Records). The heaviest Confederate loss was in Liddell's Division of Walker's Corps, the percentage being 51.

I cannot close this review without going again to Hamilton's work and quoting from the description of the seizure of Terayama by Okasaki's brigade. It contains a lesson for cavalrymen and indicates the qualities that a true cavalryman must possess:

"In former wars I have, in common with other commanders of any experience, often had occasion to long for cavalry to



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launch at the enemy during some crisis of the struggle. Throughout the Manchurian campaign such a thought has hitherto never once occurred to me. Neither infantry has the slightest idea of permitting itself to be hustled by mounted men, and it has been apparent to the meanest military capacity that the cavalry could not influence the fighting one way or another except by getting off their horses and using their rifles. But yesterday, when I saw Okasaki's men streaming across the plain, in what I might call ordered disorder, the whole of each individual's faculties and energies concentrated on the enemy in front, I felt for the first time that a few Russian squadrons, adroitly led to within half a mile of the left flank of the charging Japanese, might, by a combination of good luck and good guidance, have struck Okasaki's brigade a staggering blow whilst it was straining every nerve and muscle in mad career against the rival infantry. Obviously mere bravery and dash would not have sufficed for the commander of such a fire-eating venture. To succeed he must have been a man who was capable of keeping his cool touch on the fevered pulse-beats of opportunity until he felt the fateful second had arrived; then, flinging caution and judgment to the winds, he must have had a big heart, iron nerves and the devotion of his men to enable him to spur out of his ambush full tilt, not alone, but followed, as if he were a queen bee leading her swarm, by all his galloping squadrons. A rare type of a man, and that is one reason amongst many why successful cavalry charges were not exactly of every day occurrence, even in muzzle-loading days."

The CAVALRY JOURNAL has reviewed most of the books on the Russo-Japanese War as they appeared, and recommendations were made from time to time as to what books were the best for purchase by officers of moderate means. If I may give a resume of the work already done in the light of most recent publications I would submit the following as my own views of the valuable works:

Of Primary Importance:

First.—*The German Official Account*, (four volumes, now ready).

Second.—Kuropatkin's book, (two volumes).

Third.—*The London "Times" War in the Far East.*

Fourth.—Hamilton's *Staff Officer's Scrap Book*, (two volumes).

Fifth.—*Port Arthur*, Ashmead-Bartlett.

Sixth.—*Mukden, Scha-Ho. From the Militär Wochenblatt*, (two volumes).

Seventh.—*Lessons on the Russo-Japanese War*, De Negrier.

Eighth.—For Comparison, *The Chinese-Japanese War*, Vladimir.

Ninth.—On the Causes, Asakawa's *Russo-Japanese Conflict.*

Of Secondary Importance:

Chasseur's work, *The Work of Asiaticus*, Cowan's book, Wrangel's *Cavalry* and *The Truth About the War.*

In the above I have not considered the English work by the Committee of Imperial Defense, nor the work of Nojine, *The Truth About Port Arthur.* These should be good, but not having read them I cannot make recommendations concerning them.

No large sum is required to possess the books of primary importance above mentioned. The first costs \$3.00 per volume, except the fourth, which is \$4.00; the second, \$7.50 for the two volumes; the third, \$5.00; the fourth, \$9.00 for the two volumes; the fifth, \$6.00; the sixth, \$1.87½ per volume; the seventh, \$1.00; the eighth, \$1.25; the ninth, \$2.00.

Some saving can be made by purchasing these books, at least some of them, from the CAVALRY JOURNAL, which will secure any of the books for anyone.

WHITE.

The Campaign of Chancellorsville.*

This book, a royal octavo volume of 500 pages, is believed to be unique among the studies of American military history. In the array of evidence adduced, and the minuteness with which it has been

*"THE CAMPAIGN OF CHANCELLORSVILLE. A STRATEGICAL AND TACTICAL STUDY." By Major John Bigelow, Jr., U. S. Army, Retired. With 47 maps and plans. Yale University Press, New Haven, Conn. Price, \$10.00.

weighed and sifted, Major Bigelow's work is not to be matched by that of any other of our military writers. The author has peculiar qualifications for his task. He is a military man and a practiced writer. He was not a participant in the campaign and so has no special case to prove. A sufficient time has elapsed since the war to clear the air of political and sectional prejudice. Consequently he has approached his subject in a judicial frame of mind, and has handled it in strict accordance with the canons of modern historical criticism. While in matters of fact the author's sources of information are found, in the large majority of cases, in the Official Records, in his bibliography he cites, in addition over one hundred and thirty authorities.

In his treatment of his subject, the author divides it into two periods, the "Period of Preparation" and the "Period of Execution." The former includes the organization, strength, disposition and condition of the opposing armies, estimates of the characters and capacities of their respective commanders, and a narrative of the minor operations undertaken from the date of Burnside's relief to the moment in which Hooker arrived at the final decision. The latter sets forth and discusses the operations consequent upon this decision, to include the return of the Army of the Potomac to its camps at Falmouth.

The most noteworthy deduction made by the author concern General Hooker's intentions and mental attitude throughout the campaign. The critics usually credit the Union commander with aggressive intentions up to midday, 1st of May, 1863; and his order for a retrograde movement on that afternoon is attributed to a change of purpose brought about by the unexpected aggressiveness of the enemy, coupled with incorrect news of the arrival of Confederate re-enforcements at Fredericksburg. This is the view advanced by Alexander, who in ascribing the Union withdrawal to Hooker's loss of nerve, goes on to justify his change of attitude on the ground that the defensive game was the safest to play. The author does not credit Hooker with aggressive intentions at all, and cites his own utterances, both oral and written to prove that neither at that time, nor at any time previous, had he entertained a thought of the tactical offensive. His mind was

imbued with the notion that the presence of the Union right wing south of the Rappahannock, threatening Lee's flank and rear, left the latter but two alternatives, "to ingloriously fly," or to give battle on his antagonist's "own ground." It is pointed out that Hooker's order for an advance towards Fredericksburg on the 1st day of May is in no sense an order for an attack, but merely for the transfer of his forces from one defensive position to another. During its execution, the enemy proved that he had not flown, and was then and there willing to give battle. But the Union's right wing was not at that moment on its "own ground." It had left a chosen position, but had not reached a new one. This made it awkward for Hooker. To reach his new position he had to fight offensively. This he had not considered within the catalogue of chances, and he neither desired, nor was he prepared for it. In order that the enemy should attack him in a chosen position, a retreat upon the Chancellorsville was essential. Hooker's lack of aggressiveness, not only at this critical moment, but throughout the campaign is brought out in strong relief. His first and only unconditional order for an attack was directed, not to the troops under his own command, but to Sedgwick, and then only when the rout of the Eleventh Corps had made things at Chancellorsville look desperate. Every aggressive enterprise undertaken by the right wing—Sickles' advance, in pursuit of Jackson on May 2nd, his midnight attack from Hazel Grove, and French's counterstroke on the morning of the 3rd—received its impulse from a subordinate. From midday on May 2nd, until the army found itself again at Falmouth Hooker's orders to the right wing were for retrograde movements only. With the bulk of his troops well in hand and full of fight, he withdrew from between the separated factions of an army numerically inferior to his own, yielding one point of vantage after another, calling vainly on Sedgwick to break through Lee's victorious lines to his relief,—one corps to come to the rescue of six,—until he finally retired to the north bank of the Rappahannock at the precise moment when Lee had decided to assault him in a carefully fortified position,—to give him battle on his "own ground."

The author makes it plain that the loss to the Army of the Potomac of the Campaign of Chancellorsville, was due primarily to the state of demoralization into which Hooker fell at the mo-

ment of hostile contact. His previous reputation for decision and aggressiveness stands out in such sharp contrast to the deficiencies which he then displayed, that his collapse has often been imputed to external causes. The author ascribes it to defects in his moral and intellectual make up, which unfitted him for the burden of supreme command. This, in connection with a nervous breakdown brought on by the fatigues and excitements of four days unbroken labor, he gives as the true explanation. He points out that the *weight of evidence is against drunkenness, still sometimes alleged as the cause.* While he does not admit that Hooker was actually in need of a stimulant, he does not criticise the assertion. If Hooker was the heavy drinker he is reported to have been, a sudden abstention from liquor at a time of greatest physical and mental strain, might be well calculated to result in a fit of depression and discouragement. However honorable his notions, at such a crisis Hooker would have done better to take Bret Harte's advice:

Don't be too quick
To break bad habits; Better stick,
Like the Mission folks, to your arsenic."

For the surprise of the Eleventh Corps, with its fatal consequence, the author places the blame almost unreservedly on Howard. He considers Sickles' midnight attack justified by the retaking of one gun and three caissons, and by the occupation of a more advanced line.

Certain critics maintain that the abandonment of Hazel Grove by Hooker's order, on the morning of May 3rd, was a capital error, as the concentration of the Confederate artillery, at that point, caused the evacuation of the Fairview intrenchments, and the Chancellorsville position, thus removing the last obstacle to the junction of the separated Confederate wings. The authors set forth in detail the advantages which the possession of Hazel Grove would confer on either army, but attribute the loss of the Chancellorsville position more to the infantry attacks from the west, together with Hooker's order to Geary to retire, than to the effect of Confederate artillery fire from Hazel Grove.

On page 315 of the text the author appears to have made an erroneous calculation in giving the density of Berry's first line as

about two yards to the man. The average strength of the regiments in the Third Corps he gives as 420. With a frontage of 100 yards per regiment the density of the line should apparently be 4.2 men per yard. A density of two yards to the man would give each regiment (not hitherto engaged) a strength of only 50.

The author justly criticises the field orders issued from the headquarters of both armies. In some of the most important, the language is involved and ambiguous. This he proves by numerous examples. In the quiet of one's den, and after careful study the sense of certain instructions is hard to come at. How much more so in the excitement and turmoil of active service. If our service schools should teach nothing beyond the art of writing field orders clearly and concisely, yet in such terms that their purport is obvious, they will have justified their creation.

The maps accompanying this volume are of the same quality as the text, that is, they are the most complete that have so far appeared on the subject. Unfortunately the greater part of them are bound in the text, and most inconveniently located for reference. There seems to be no good reason for this arrangement, for a part of them are loose and contained in a portfolio at the end. The author states that there is no comfortable way to read military history. All the more reason for eliminating mechanical obstacles wherever possible. With this same object of making the students' tasks easier, it would appear easier to have treated the Jones and Imboden expedition as a distinct episode. Its connection with the Chancellorsville campaign is of the slightest, and to separate its introduction from the main body of the narrative by 335 pages of unrelated matter is to throw a rather severe strain on the student's memory.

In its make-up, the binding of the book is poor, but its paper and type are excellent. It is unfortunate that a number of errors have escaped the scrutiny of the proofreader and appear in the published work. A sheet of errata should be prepared for insertion.

To sum up, Major Bigelow, in confining himself to a single campaign, has given us a discussion which may be described in one word, "Thorough." A copy should appear in every military library, and it will repay the careful scrutiny of every military student.

S. H. E.

Cullum's Register.*

The fifth volume, supplementary, of General Cullum's Register of the Officers and Graduates of the U. S. Military Academy is now out and ready for distribution.

Under the provisions of General Cullum's will, a supplement to his Register of Graduates was to be published "in the year 1900 and decennially thereafter," the income from his bequest to be applied, so far as it would go, in preparing and publishing it. This greatly reduces the cost of this valuable work to the graduates of the Academy.

This volume is a large octavo of 904 pages and is on the same general plan as the preceding ones.

In addition to bringing the list of officers who have served at the Academy from 1900 to 1910, with the departments in which they served, it also contains the names of all of the 4935 graduates, including the Class of 1910, with a complete index.

In the cases of graduates who have died, their records, if not complete in previous volumes, are brought up to the dates of their death.

In the cases of living graduates, their records are made complete up to date of publication except in those few instances where it was impracticable to obtain their histories.

The book is well edited, although, as Lieutenant Braden states in the Preface, under the most trying difficulties. The difficulty in procuring the records of deceased officers is natural and readily explained, but it would appear that there should be no trouble in obtaining those of living graduates, especially of those still in the service. Such, however, is not the case, and the Editor reports that nearly two hundred officers failed to respond to his circular request for information and that the Adjutant General of the army declined to allow their records to be copied from those on file in his office.

The paper and binding of this volume is not up to the

*"BIOGRAPHICAL REGISTER OF THE OFFICERS AND GRADUATES OF THE U. S. MILITARY ACADEMY AT WEST POINT, NEW YORK, SINCE ITS ESTABLISHMENT IN 1802." By the late Brevet Major General George W. Cullum, Colonel of Engineers, U. S. Army. Edited by Lieutenant Charles Braden, U. S. Army, Retired. Price, \$3.00.

standard of the preceding ones, and a hasty examination of the book shows a few typographical errors.

This invaluable book of reference should be in every public library as well as in the office of the Editor of every leading newspaper throughout the country.

It goes without saying that every graduate of the Military Academy should have a copy, except, of course, in those extremely rare cases where their records are unsavory.

There are still on hand a few copies of Volume IV, the 1900 Register, which can be obtained at a cost of \$2.50, or the two volumes will be supplied for \$5.00. As the edition is limited, those desiring copies should place their orders promptly.

E. B. F.

The Mess Sergeant's Hand-Book.*

This volume—pocket size and bound in cloth—is exactly what its name indicates. The fact that it was written by Captain Holbrook is a sufficient guarantee of its being entirely practical.

In the preface Captain Holbrook says:

"Advance sheets of this little handbook were hastily prepared in June, 1910, especially for the use of troops at the several maneuver camps, but the increasing demand for them has induced me to complete the book for more permanent use.

"It has generally been recognized that the garrison ration, as fixed by the War Department orders in May, 1908, provided about the proper proportions and quantities of the various classes of foods; and so long as the authorized issue suggested a basis for consumption, companies were quite certain to be provided with a well-balanced diet. Since changing the garrison ration from an issue to a cost basis, the quantities formerly issued are more than apt to be forgotten, and it is largely for this reason that I desire

*"THE MESS SERGEANT'S HANDBOOK." Prepared by Captain L. R. Holbrook, Commissary, U. S. Army, assisted by Post Commissary Sergeant Patrick Dunne. For sale by "The Guidon," Fort Riley, Kansas. Price, \$1.00 per copy, or \$10.00 per dozen.

to place before Mess Sergeants, in a compact form, all those matters pertaining to the handling of the mess that are considered most essential to successful management."

The following is the table of contents:

Explanation of the regulations pertaining to the rations.

Determination of the cost value of the rations.

Short-cut ration conversion table.

Relation of credit allowance to bills of fare.

Quantities to prepare for each meal.

Bills of fare for garrison.

Dressed beef inspection.

Fireless cookers.

Handling the field ration.

Field expedients.

Individual cooking.

The new field range.

Short-cut multiplication table.

The sample bills of fare given, especially those for ten days based upon the field ration, are very interesting and useful. Coupled with the tables showing quantities of meats, vegetables and fruits needed for each meal (garrison ration), a mess sergeant can easily figure out just how much of each kind of food he must prepare, whether in the field or in the garrison. The latter table shows at a glance the quantity needed at a meal by 1, 5, 10 or 50 soldiers. By means of this table a mess sergeant can quickly determine the approximate amount (of each kind of food) needed for each meal.

The section relating to individual food and the one relating to dressed beef inspection are already familiar to some of our readers, and it is good to see them incorporated in this hand book. The former is especially useful to soldiers generally. The numerous illustrations in the latter half of the book are a valuable addition to the text, and the whole forms a hand book that should be in the hands of every company commander and mess sergeant, whether of the Regular Service or of the National Guard.

ROGER S. FITCH.

Handbook of the Boer War.*

As the name implies, and as the author states in his prefatory note, this is a compilation, for the use of students and others, of the facts that go to make up the account of the various phases of the Boer War of 1899-1902. The author's name does not appear on the title page. We are informed, however, that he served for twenty-six months in this war.

It is stated in the prefatory note that "with some exceptions, every statement of fact relating to the military operations may be verified in one or more of the following publications: The 'Times' History of the War, The War Office Official History of the War, The Minutes of Evidence Taken Before the Royal Commission of Inquiry Into the War."

It will thus be seen that this little book is in no sense a "source" for the military student, and its value as a handy guide to "source" material seems doubtful, owing to its lack of arrangement for this purpose, besides the limited number of probable "source" authorities quoted. No doubt, to one who has already made a study of this war from the authorities relied upon by the author, to which the account of the German General Staff might be added, this little handbook would prove of value as a reminder to what he already knows more or less perfectly.

The volume contains some 365 pages, printed on fair paper, in about the same size type as that of the CAVALRY JOURNAL. The binding is not durable. It does not contain marginal or other notes to show what authority is relied upon for important facts. Indeed, the book can hardly be recommended for the use of the military student who is investigating this war from the scientific standpoint.

The author has indicated, in the course of the narrative, the following to be his views on the chief causes of the prolongation of the war:

*"A HAND BOOK OF THE BOER WAR," with General Map of South Africa and 18 sketches Maps and Plans—Gale and Polden Limited, London, 1910.

The inefficiency of modern tactics as a means of dealing with partisan warfare;

The moral reinforcement derived from a confident belief in the justice of a cause, by which the enemy was continually encouraged to persevere;

The reluctance of the British leaders to fight costly battles;

The constitutional inability of the British officer to take war seriously;

The waste of British horses, due to inexpert horsemanship.

Sx.

Cavalry Taught by Experience.*

Although this book can be read through from cover to cover in a couple of hours, its value to a cavalryman is greater than is that of many a more pretentious volume.

The author's method of handling his subject is practically the same as that which was employed by the author of "The Defense of Duffer's Drift," and which consists in using one general and special situation as the basis for the whole and narrating several separate and distinct "attempts" on the part of the commander to accomplish his mission.

In "Cavalry Taught by Experience" there appears first of all a brief outline of an imaginary campaign of the present day. This is followed by a more detailed statement of the situation in which a cavalry brigade (which had been detached from the main army as independent cavalry) finds itself on a certain night. This brigade is in hostile country and operating several days' march to the flank of its own army. Its commander is ordered to hold a certain pass in the mountains near which the brigade is camped and to ascertain the enemy's strength and dispositions at a point where a hostile force is reported to be concentrating. The brigade

*"CAVALRY TAUGHT BY EXPERIENCE." A Forecast of Cavalry Under Modern War Conditions. By "Notroff." Hugh Hees, Ltd., London. Price, 2/6, net.

is equipped with wireless apparatus, together with some motor-cycles and several automobiles.

"Attempt No. 1" and "Attempt No. 2" each consist in the narrative of an unsuccessful effort of the cavalry commander to carry out his orders. Some of the errors made by the commander in these "Attempts" seem rather overdrawn, but are not beyond the bounds of possibility. The final effort ("Attempt No. 3") of course, crowned with success.

The chief value of this book lies in the pertinent "comments" which follow the narrative part of the first and second "attempts." They bring out many points worthy of thought on the part of cavalry officers generally. Some of the points that are well illustrated in the narrative and ably discussed in the comments are the evils of unnecessary splitting-up of one's forces, the usual difficulty of obtaining reliable information in hostile country, the proper use of motor-cycles, etc., with a cavalry command, the difficulty attendant upon acquiring reliable and timely information through unsupported patrols sent out far to the front, various methods of patrolling and of sending back information from the extreme front, etc., etc.

The author brings out very clearly the necessity for training cavalry in peace in such a way that in war it will be ready and able to make use of mounted action when opportunity offers. He says, in part: "Cavalry which is systematically trained in peace to resort to the rifle in each and every occasion may certainly not be so likely to take any of those risks in war which sometimes lead to a body of cavalry meeting with disaster. They will adopt the safe and sure course, save their own skins and be *cautious* and *slow*. To dismount and loose off their rifles will tend to become a fatal attraction. Cavalry which is taught in peace to have a belief in mounted action, the *arme blanche*, and shock tactics, will be likely, *now and then*, to take a reasonable risk to achieve a great end. Infantry takes risks in every campaign, and meets with disasters in every campaign. So do artillery. The prize offered to cavalry which may dare to take a risk is usually out of proportion greater than the prizes offered to the other arms. Deliberately to train cavalry never to take the risks of mounted and rapid

action is a handicap which may be compared to a game of bridge with the penalty of not being allowed to go no trumps."

The larger of the two maps which accompany this book would appear more realistic if more roads had been shown thereon. The fact that the two maps are stated to be maps of "imaginary country" does not tend to make the situations seem as realistic as if maps of real country were used. Notwithstanding this and other minor faults noted, the book is one that is well worth any officers' time and money.

ROGER S. FITCH.



THE BREEDERS CUP.

As was noted in the July, 1910, number of the CAVALRY JOURNAL, the U. S. Cavalry Association had offered a cup for the horse exhibited at the Virginia Horse Show circuit winning the largest number of blue ribbons in the Charger Class during the season of 1910. It was then stated that this cup was offered with a view of stimulating the breeding of horses suitable for the army, particularly to acquaint breeders with the type of horse best suitable for remounts, and also to co-operate in the efforts being made by the Quartermaster's Department and the Department of Agriculture to encourage the breeding of suitable horses for army purposes.

This movement originated with Captain Casper H. Conrad, Jr., Q. M. D. (Cavalry), who is on duty in Virginia, purchasing young horses for the remount depots.

The accompanying reproductions of photographs of the cup given show that the design is distinctively "Cavalry," and that the makers, Black, Starr & Frost, have fully lived up to their reputation for turning out first-class work.

The cup was on exhibition at the Army and Navy Club in Washington and "has been greatly admired by all who examined it."

By authority of the Secretary of War, Lieutenant Colonel Geo. M. Dunn, J. A.; Lieutenant Colonel Chas. G. Treat, F. A., and Major D. S. Stanley, Q. M. D., attended these horse shows, nine in number, as judges and awarded the cup to the horse Rutledge, owned by Mr. James W. Graves of Richmond, Va.



The judges made their report to the Chief of Staff of the Army and the cup was forwarded to Mr. Graves with the following letter from the Secretary of War:

WAR DEPARTMENT.

WASHINGTON, November 10, 1910.

Mr. James W. Graves, Richmond, Virginia.

Dear Sir:—I take pleasure in informing you that the silver cup presented by the Cavalry Association, United States Army, for the horse winning the greatest number of blue ribbons in the Charger Class in the Virginia circuit of horse shows, is being shipped to you today, having been won this year by your thoroughbred gelding "Rutledge."

The Cavalry Association proposes to donate a cup annually for the horse winning the greatest number of blue ribbons in this class for such horse shows as may be included in the Virginia circuit, and perhaps additional shows.

As it is the object of the association in presenting this cup to encourage and stimulate the breeding of horses suitable for officers' chargers or for military mounts, it is the desire of the War Department that their encouragement in this matter be given as wide publicity as possible, especially among horse breeders of the type of horse desired.

Please accept my congratulations upon your success in winning this, the first cup presented by the Association.

Very respectfully,

J. M. DICKINSON,
Secretary of War.

The following is the reply acknowledging the receipt of the cup:

VIRGINIA RACING AND HORSE SHOW ASSOCIATION.

RICHMOND, VA., November 12, 1910.

*Hon. J. M. Dickinson, Secretary of War,
Washington, D. C.*

Dear Sir:—I beg to acknowledge receipt of your favor of the 10th instant, advising of the shipment of the charger cup won by my horse, Rutledge, which reached me today. It is indeed a

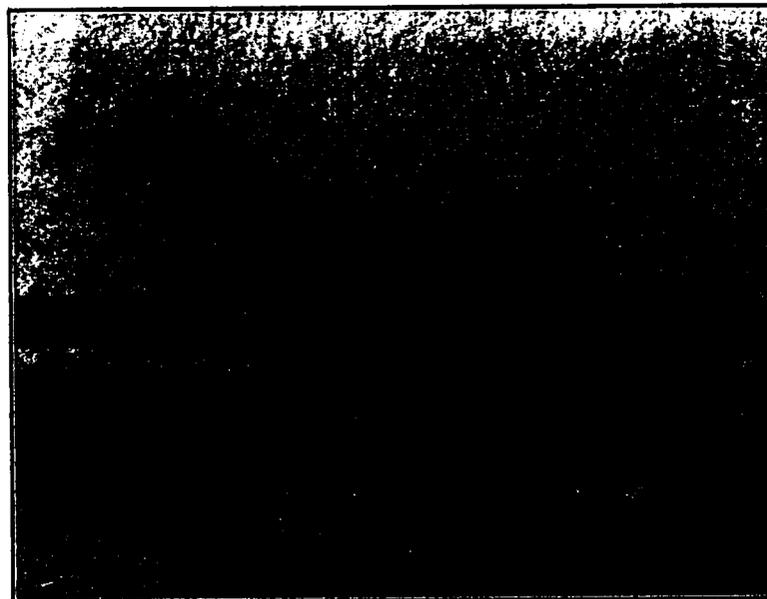
handsome one and is being very much admired.

I will do what I can to bring this class before the public and encourage the breeding of horses suitable for army officers.

Thanking you for your kind expressions, I am,

Very truly yours,

JAMES W. GRAVES.



RUTLEDGE.

Photographs of three only of the competing horses have been received and they are here reproduced.

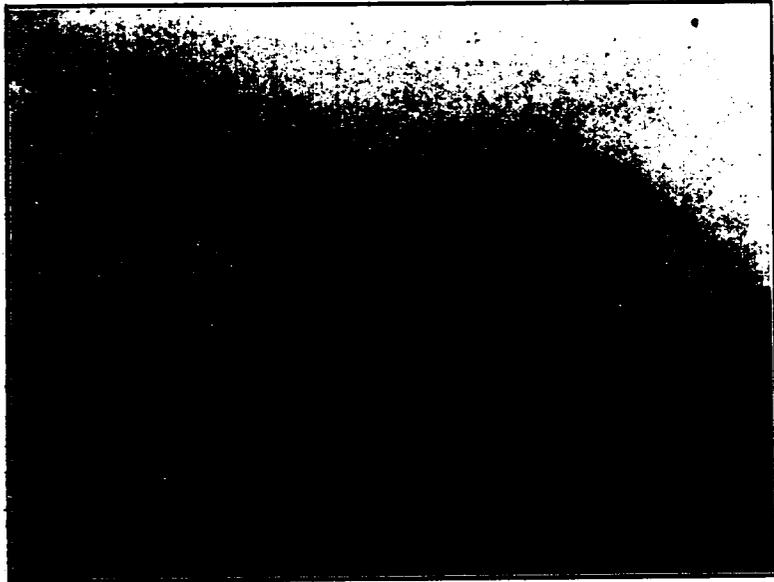
The winning horse, Rutledge, is a chestnut gelding, four years old, height 15—3½, weight 1,025, girth 71 inches, below the knee 7¾ inches.

He is by Orlando out of Miss Hawkins by Billet. Orlando, imp., son of Orme and Huelva by Herald, is the sire of a long list of winners. Miss Hawkins was a high class race mare, who won at two years old and was a winner at three years of the Kentucky Oaks and Twin City Oaks.

Rutledge was the winner of the blue ribbon at the Leesburg, Manassas, Culpeper, Orange and Charlottesville Horse Shows.

The photograph of Rutledge from which this cut was made does not show him in as good flesh as another that was received, but was a better one for reproduction.

Regalis, another competitor for the cup, is a bay gelding, four years old, 15¾ hands, weight 1,070, girth 74 inches, bone 8 inches, owner Mrs. Julian C. Keith, Warrenton, Va. He is a



REGALIS.

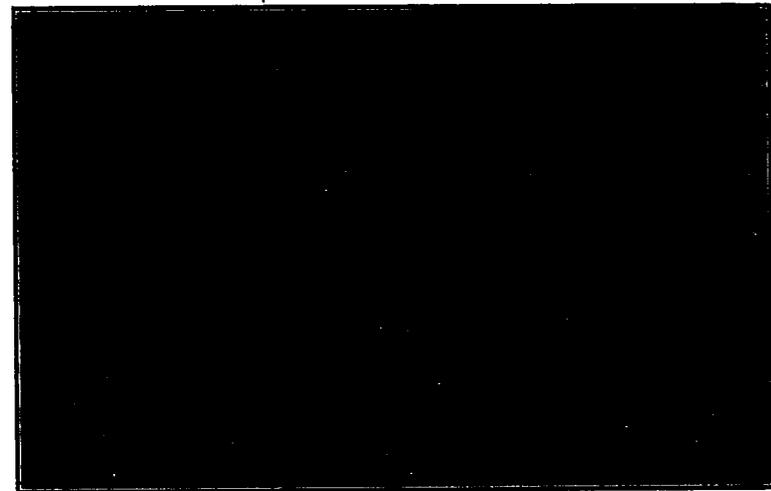
thoroughbred by Hornpipe out of Royal Princess. He was only shown at the Horse Show at Warrenton, where he won the blue ribbon.

The Colonel is a three-year-old gelding, weight 1,200, height 15—3½, girth 72 inches, bone (below knee) 8½ inches. He is by Hiawatha (Hackney) out of Forest Queen (registered Kentucky saddle bred), and is owned by Mr. Kenneth N. Gilpin of Boyce, Va. This horse won the blue ribbon at Berryville,

Va., but should have been disqualified as not being a half-bred or better.

The score cards used in judging the horses in the "*Charger Class*" at these several horse shows had headings as follows: Name, sex, etc., of horse; name of exhibitor; breeding; age; height; head; neck; withers; shoulders; chest; fore legs; knees; back; loins; barrel; hind quarters; tail; hocks; limbs; pasterns; and general appearance.

There is evidently a slight misunderstanding as regards the proposition to give a cup annually for the purpose for which this



THE COLONEL.

one was given, as the Executive Council of the association has not as yet committed itself on this point, although through an oversight this statement was made in the July number of the CAVALRY JOURNAL.

It is believed that this was money well spent not only for the purpose indicated above, but also in bringing the work of the Cavalry Association into notice, but whether or not it is advisable to continue offering a cup annually, particularly for horse shows held in a limited portion of the horse breeding sections of the country, is still to be settled. Some of the members of the

Executive Council favor the idea, provided it were practicable to open the competition to breeders in Kentucky, Missouri and possibly other states. This is, however, probably impracticable, as, insofar as is known, no other state but Virginia has any similar Horse Show Association, nor would it be possible to have competing horses properly judged over widely separated sections.

However, this is a question which the council will consider in the near future, and in the meantime the views of our members as to the propriety of continuing giving such a cup are desired.

THE REMINGTON CUT.

A letter was recently received from Major H. L. Ripley, Eighth Cavalry, which is in substance, as follows:

"Have you in the archives of the CAVALRY JOURNAL any record of the personality of the trooper who graces the outer front cover of the JOURNAL? If not I think you should have, for he was a soldier of the old type and one of the finest figures on a horse I have ever seen. He was Sergeant Jack Lannan, Troop "G," 3d Cavalry. Captain F. H. Hardie, now lieutenant colonel retired, commanding.

"Frederick Remington, who was quite intimate with and visited Captain Hardie, at once noted the ease and grace with which Sergeant Lannan rode and selected him as the most perfect type of the American Cavalryman he had ever seen and he made several sketches of him, one of which has very wisely been selected by the CAVALRY JOURNAL to adorn its cover and I think that the other sketch used by the JOURNAL, of the cavalryman galloping away, rear view, is also of Sergeant Lannan.

"If you wish to verify these statements refer to Colonel Hardie whom I know will be glad to do so and perhaps add to them.

"I remember well when Sergeant Lannan took his 'last

blanket' and rejoined the Third Cavalry at Fort Ethan Allen, Vt., just before the Spanish War. We were all glad to see him back again and I remarked to him, 'Sergeant, haven't you served about long enough to retire?' 'Yes, Captain,' he replied, 'I have served long enough now, but one of my enlistments was in the infantry and I wouldn't want to retire on *infantry* service.'

"Didn't that have the true cavalry ring?"

"Wasn't that *esprit de corps*?"

"He went with us to Cuba and died there with yellow fever.

"His memory is being fittingly perpetuated by the JOURNAL in the Remington sketch and it seems proper that his personality and characteristics should be known to the readers of the JOURNAL."

Being unable to find anything in the records of the Association relative to this interesting question we wrote Colonel Hardie regarding, and in reply he writes:

"The drawing was made in front of my tent while we were in camp at Tampa, Florida, previous to our embarking for the Santiago Campaign.

"Sergeant Lannan was in the Third Cavalry before I joined in '76, I believe. He came to my troop after I got my captiancy. He was a strikingly handsome soldier, a gallant man and a non-commissioned officer of the old fashioned kind, those whose orders were always obeyed. After the surrender of Santiago he was taken sick and died in Cuba."

At the request of Colonel Hardie, the following has been furnished by Captain Charles A. Hedekin, Third Cavalry, commanding Troop "G," as a compilation from the troop records and the recollection of old soldiers:

"John Lannen was born in Canada in 1845. He came to this country while in his teens. He enlisted in 1870 in the Fourth Cavalry and served five years in that regiment. He reenlisted in 1875 in the Third Cavalry and thereafter served in the Third, Troops "F," "B" and "G," with the exception of a short tour on recruiting duty. He accompanied Troop "G" to Santiago in 1898 and died there of yellow fever. At

the time of his death he was nearing the completion of thirty years service and expected to retire.

"At Tampa in 1898 he attracted the attention of Frederick Remington, who made several rough sketches of him. One of these was afterwards completed and is now familiar to the service as it appears on the cover of the CAVALRY JOURNAL. In completing this sketch it is believed that Remington relied on old sketches or photographs for his details because the sling belt and boots shown in the cut were not worn by Sergeant Lannen in 1898. At this time Sergeant Lannen's hair and mustache were white. He had blue eyes and dark, ruddy complexion. He was a superb horseman, carrying himself with remarkable ease and grace. His horse was his friend and comrade.

"Aside from his horsemanship Sergeant Lannen's most marked characteristics were his loyalty to his organization and his unfailing good humor under trying conditions. Ordinarily a stern disciplinarian, he was always ready with a smile and a jest when roads were muddy, skins damp and cold and rations low. He accepted hardships as part of his day's work.

"There are too few of his kind."

It will be observed that there is a difference in the spelling of the sergeant's name in the above communications. Probably that in the note from Captain Hedekin is correct as having been taken from the records.

Some two years ago it became necessary to have a new plate made as the old one was becoming much worn. The original drawing was, and is still in the possession of a former editor of the CAVALRY JOURNAL and it was obtained from him for the purpose of making the fresh plate.

From this new plate, several electros were made for future use and at the same time this opportunity was taken to have made an enlarged three-color plate made. From this it was intended to make prints for our members, but up to the present time we have never succeeded in getting a combination of colors that made a print that suited our ideas as to how such a cavalryman should appear.

THE STAR AND CRESCENT.

The above is the title of a new military magazine which is "A Quarterly Record of Sport and Soldering in the Seventeenth Cavalry." It is published at Bareilly, U. P., India.

In forwarding us a copy of the first number, its editor writes:

"I am sending you under separate cover a copy of a new regimental magazine called the '*Star and Crescent*' which is published in English and Urdu. Some, but not all, of the vernacular is a translation of the English matter.

"The objects of the magazine are set forth in the preface, but I should like to emphasize the fact that this is the first magazine of its kind ever attempted and that it has the cordial support of the authorities encouraging as it does a closer relationship between the Indian ranks and ourselves.

"Another number will certainly be compiled, but after this the success of the magazine will depend largely on its ability to secure the sympathy of some outside subscribers, its circulation in a native cavalry regiment being, as you will understand, very limited.

"It is in the hope that you will be interested in this attempt to find a community of taste and interest with the Yeoman class of India (of which so little is heard at home) that the Editor of the *Star and Crescent* ventures to send you a copy of the magazine for the favour of your perusal, and if space permits, notice in your columns.

"Many of us retain the most friendly recollections of the United States Army in China. This magazine, the first of its kind ever attempted in the Indian Army, is sent to the Editor of the U. S. CAVALRY JOURNAL in the hope that some of the articles may be deemed of sufficient interest to merit the notice of our comrades in arms."

It is a small periodical of only thirty-eight pages in English and about the same in Urdu, whatever that may be, probably some language of a native Indian race. It is well printed on extremely heavy paper and in large clear type.

While about eight pages is devoted to purely local matters, yet there are several interesting and instructive articles, some of which we will notice or reprint in a future number of our journal.

FROM OUR MEMBERS.

The following are extracts from letters received from various members:

"By the way, we have for each squadron, as you know, an equipment for demolitions, but are not allowed to use them. I believe this is an important part of our cavalry business and should be practiced the same as any other duty. Can you not agitate the subject and get the cavalry to take more interest in it: I am drilling this squadron in demolitions but am using other dynamite for the purpose."

"I regret to learn from a note in the current issue of the JOURNAL that it has been decided to discontinue the publication of 'Non-commissioned Officers' Problems.' Those that have been published were discussed with very great interest by the non-commissioned officers and privates of my troop and, although no answers were sent from this troop, the publication of the problems was not less valuable on that account. Inasmuch as none of the books of map exercises that I have seen, contain problems of these simpler sorts which have to do with the individual work of non-commissioned officers and privates. I trust that even though the competitive feature and the prizes be eliminated, you will continue to publish such problems with approved solutions."

This matter will be brought to the attention of the Executive Council at the first opportunity.

"Would it not be practicable to publish in the JOURNAL a list of the cavalry organizations of the organized militia showing the location of each? Such a list was published some years ago and it is probable that many changes have occurred since then."

CAVALRY EQUIPMENT BOARD.

The Editor is reliably informed that a recent press announcement to the effect that "The Cavalry Equipment Board has adopted the old 98 legging," is not entirely accurate. The fact appears to be that the Equipment Board was called upon to recommend a legging which the Quartermaster General could adopt tentatively as a model in placing contracts for the necessary current supply of leggings. For this purpose the Equipment Board recommended the old canvas legging with strap under the instep, the canvas of improved quality and re-inforced with leather on the contact side. It is not yet possible to say what kind of foot-gear the Board will recommend for permanent adoption. Much data pertaining to relative wear and cost of leather and canvas leggings, shoes, hunting boots, etc., must be considered by the Board before a final report can be made.

Publisher's Notices.

BROOKS BROS.

The advertisement of this well known firm appears in columns for the first time in several years.

Those of our members and readers who have ever patronized them, can certify to their reliability, not only as to the uniforms, civilian clothes, etc., but also as regards their reputation for fair dealing.

They can supply everything an officer requires in his line of wearing apparel, either for military or civilian dress.

THE NEW EBBITT.

There is probably no hotel in the country that has entertained more officers of all branches of the service than The Ebbitt House of Washington, D. C. Early in the present year the house changed hands, Mr. G. F. Schutt, a hotel man of wide experience and high reputation becoming the proprietor. Mr. Schutt at once had plans prepared for improvements that virtually made the house over new. It is said that over \$70,000 has been expended; and certainly the changes are marked. The entire sleeping apartments have undergone complete renovation; private baths have been installed; a new café has been added; the lobby, office, guests writing rooms and ladies' retiring rooms rearranged — and the whole house redecorated and refurnished.

Electric lighting and refrigerating plants have been added; the entire kitchen equipment is new. In fact there is no hotel in the National Capital more modern or up-to-date.

The New Ebbitt should specially appeal to the Army and Navy because of the years of association, and now that it has been modernized and its service brought to the highest degree of efficiency it is all the more entitled to be considered "headquarters."

KNICKERBOCKER WATCH CO.

Attention is called to the new advertisement of this firm. They are making a specialty of wrist watches for the army trade. These are now on sale at all Post Exchanges where they can be examined. The prices for these watches are remarkably low.

SAVAGE ARMS CO.

The advertisement of this well known firm appears in our advertising department for the first time.

They are especially advertising the SAVAGE AUTOMATIC PISTOL with which many of our readers are familiar. This is a TEN SHOT 32-caliber pistol that weighs but a trifle over one pound; it has the features of simplicity, accuracy and safety, all important factors in any weapon.

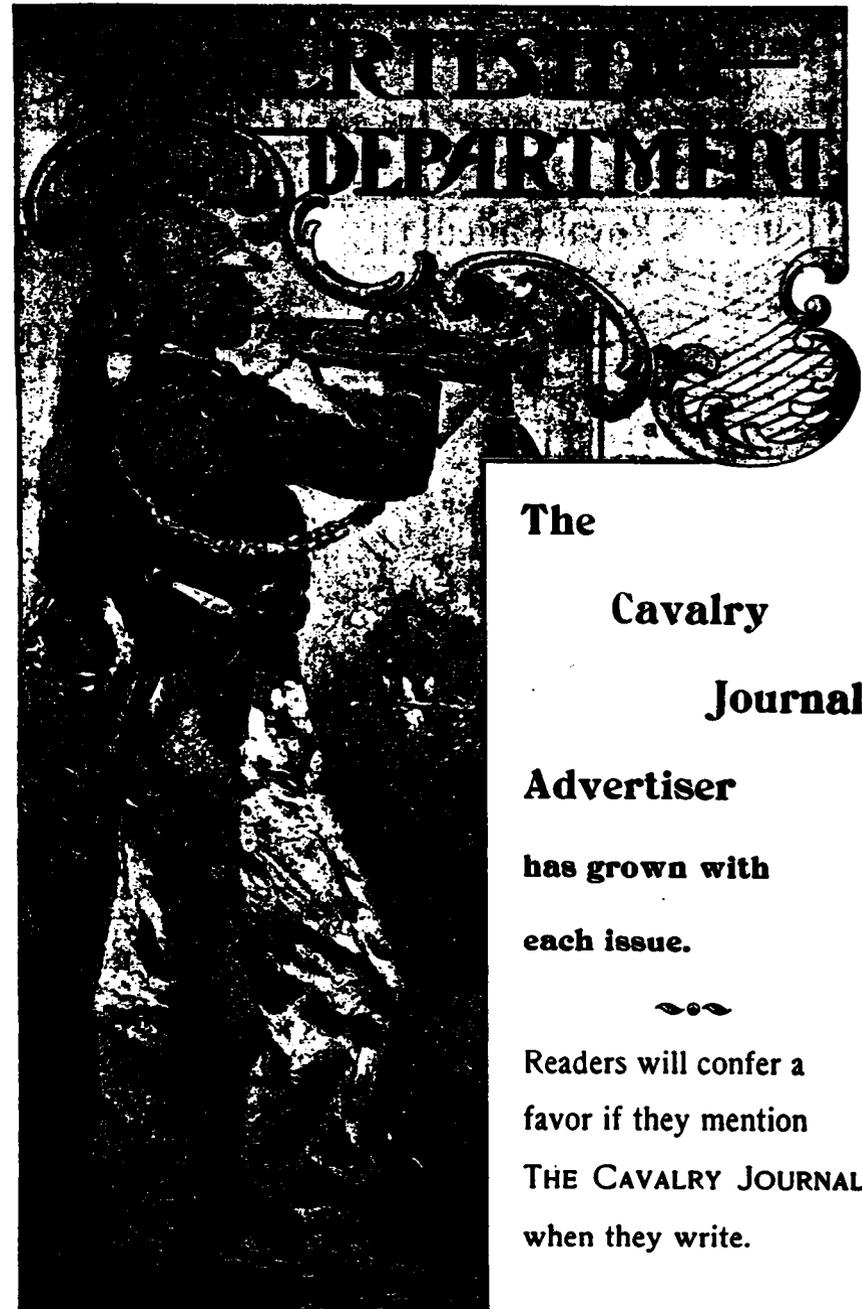
NEW BOOKS.

The attention of our members is called to the new books being advertised in this number of the CAVALRY JOURNAL.

Captain Gray's "Cavalry Tactics" is attracting much deserved attention, not only for its style of make-up, but more particularly on account of the thoroughness in which he has culled the records of the Civil War to illustrate the principles taught in the book.

Lieutenant Kruger's translation of Balck's Tactics is now in press and will be ready for delivery the latter part of this month.

The last edition of this well known book was obsolete. This, an authorized translation, is thoroughly up-to date and many references are made to the Russo-Japanese and Boer Wars.



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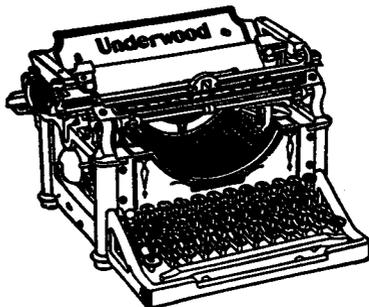
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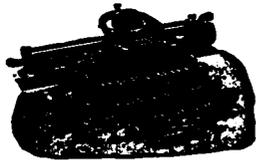
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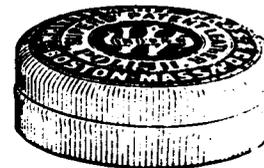
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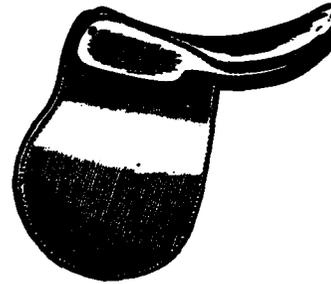
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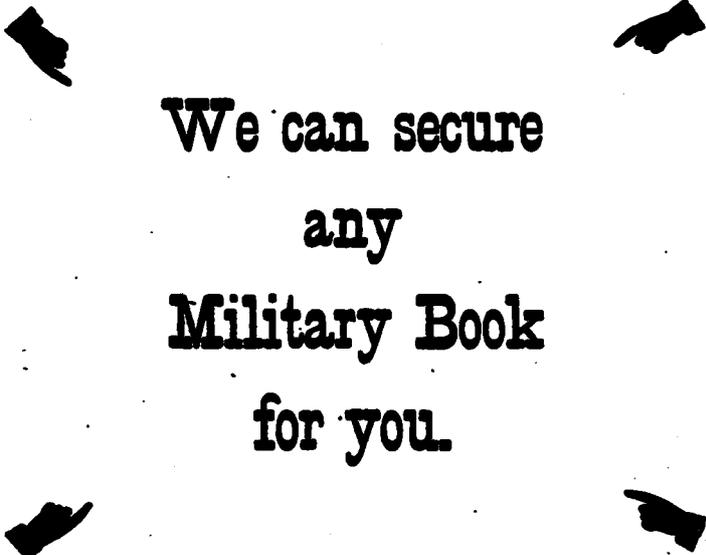
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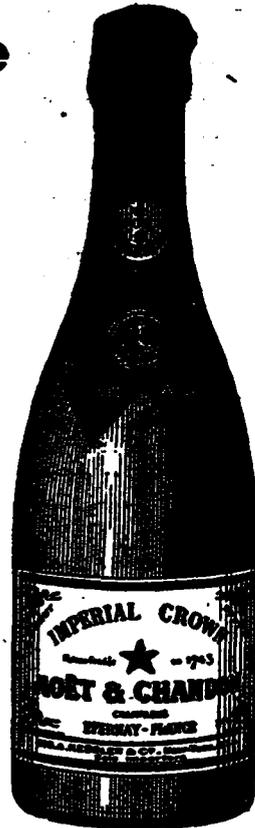
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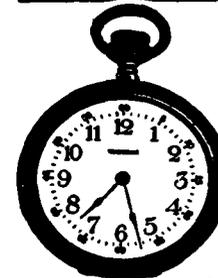
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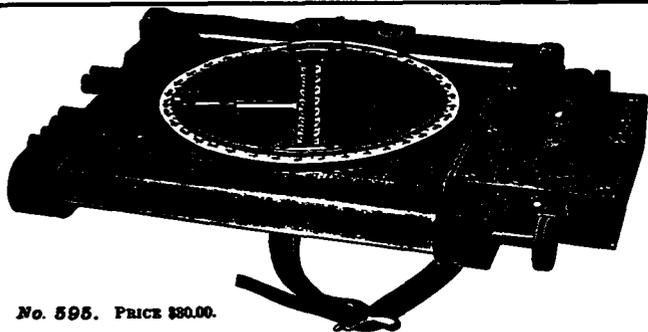
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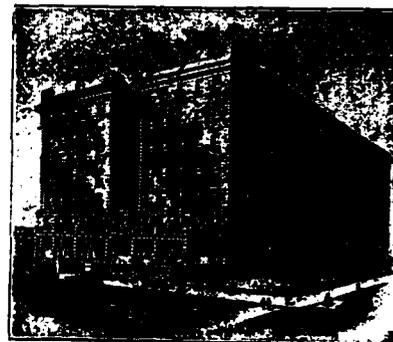


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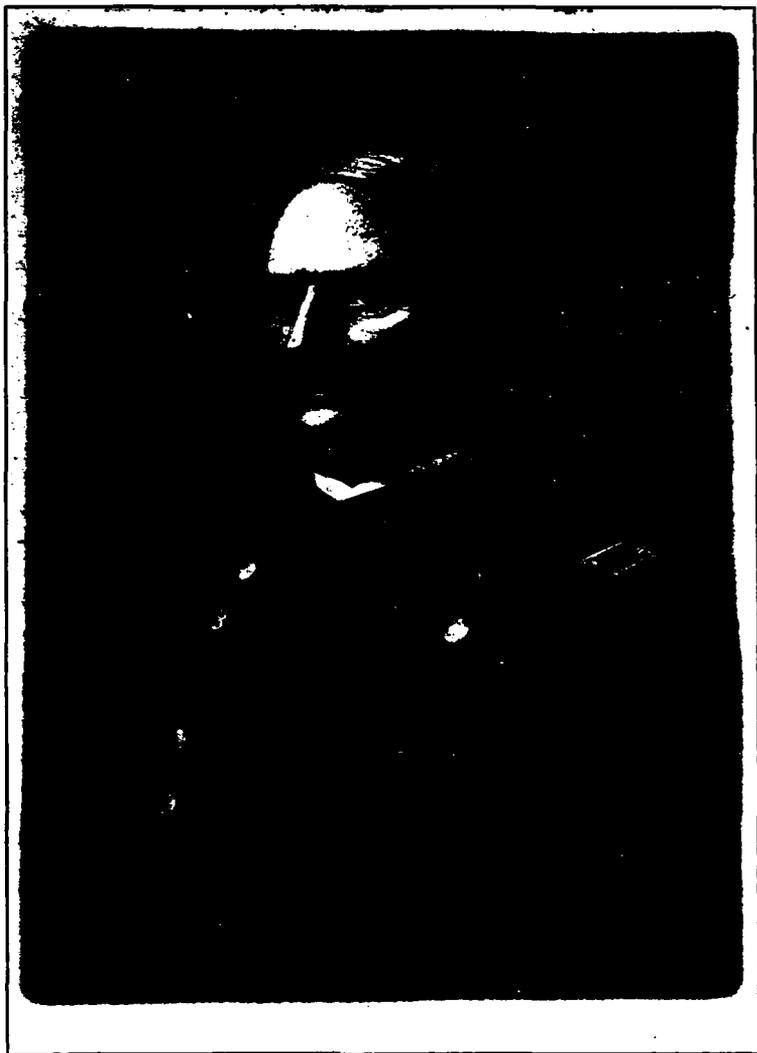
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CONTENTS FOR MARCH, 1911.

	PAGE
FIELD TRAINING VS. TARGET PRACTICE—Captain E. E. BOOTH	811
GENERAL WESLEY MERRITT—Lieutenant Colonel EREN SWIFT	829
THE ONE BEST SEAT OF THE RIDER—EDWARD L. ANDERSON	838
AIMS AND IDEALS OF THE MOUNTED SERVICE SCHOOL—Captain W. C. SHORT	843
A CRITICISM OF OUR CAVALRY DRILL REGULATIONS—Major H. H. SARGENT	853
NOTES ON THE PROGENITORS OF CERTAIN STRAINS OF THE MODERN AMERICAN HORSE—Veterinarian COLEMAN NOCKOLDS	864
SEATS AND SADDLES IN CONNECTION WITH SORE BACKS—Major T. BENTLEY MOTT	881
REPRINTS AND TRANSLATIONS:	
ORGANIZATION OF THE STRATEGICAL RECONNAISSANCE SERVICE OF THE CAVALRY DIVISION	89
THE CAMPAIGN OF 1777	914
MILITARY NOTES:	
CAVALRY EQUIPMENT	960
GRANT'S IDEA OF THE PISTOL	970
WHY REVOLVERS	970
PRICES AND SPECIFICATIONS FOR FRENCH OFFICERS' HORSES, 1911	972
REGULATIONS FOR THE PURCHASE OF HORSES FOR MILITARY SERVICE IN CHINA	974
FRENCH SADDLE STALLIONS BOUGHT FOR FOREIGN GOVERNMENTS	977
DEFECTIVE EYESIGHT OF ARMY HORSES	977
MORE RESPONSIBILITY FOR THE TROOP COMMANDERS	978
NEW FRENCH LEGGIN FOR CAVALRY	980
BRANCH ASSOCIATION AT WASHINGTON	981
BOOK REVIEWS	982
EDITOR'S TABLE	983
PUBLISHERS NOTICES	1009

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JOURNAL

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No. 83.

FIELD TRAINING VS. TARGET PRACTICE.

BY CAPTAIN E. E. BOOTH, SEVENTH CAVALRY.

IN making the report recommending changes in the Provisional Small Arms Firing Manual directed in Circular No. 80, War Department, 1910, it is thought that cavalry officers should keep in mind the scheme of instruction for the "Training of the Mobile Army," prescribed in General Orders No. 7, War Department, 1911.

The target practice prescribed in Provisional Small Arms Firing Manual, 1909, requires so much time during the season of the year when outdoor work is practicable as to seriously interfere with the instruction of cavalry in its mounted duties.

Experience proves that when troops have the routine garrison duty to perform such as guard, inspections, an occasional review, and time lost by bad weather, etc., etc., that it takes approximately three months to complete the entire prescribed courses in target practice, consisting of:

1. Gallery practice.
2. Marksman's course.
3. Sharpshooter's course.
4. Field practice, minimum amount of instruction practice only. No regular practice.
5. Proficiency test.

6. Expert rifleman's test.
7. Revolver practice.
8. Estimating distance drill.

The gallery practice prescribed by the 1909 firing manual requires nearly as much time as does the marksman's course. It is possible, with good weather and nothing else to do, to complete the course in some less than three months, provided that only the minimum prescribed instruction practice in each course is fired and the courses are rushed through with all possible speed.

However, so long as the standing is published, and the proficiency of the troops is compared with each other and with the infantry, most troop commanders will devote all the time they can get to target practice, so as to make as good a showing as possible, without regard to how much the instruction along other lines, which is not published, is neglected.

It should be remembered that the cavalryman has three arms, while the infantryman has but one. Present regulations require the same rifle practice for the cavalry as for the infantry. In addition, the cavalryman is expected to be proficient with his pistol and saber. After completing the rifle practice the infantry has three to four weeks for instruction in drills and field maneuvers, which the cavalry should devote to pistol practice.

The results are that the majority of the cavalry organizations go to maneuvers with hardly a day's instruction in scouting, patrolling, advance and rear guard and all the other duties pertaining to the subject of security and information, and formations for attack and defense, both mounted and dismounted. In brief, the cavalry has practically no instruction in those duties which it is expected to perform in time of war, and for which it is primarily maintained. By the time maneuvers are over and the annual practice marches are completed, it is so late in the season that weather permitting outdoor work is at best very short. Consequently, most of the entire open season of the year is devoted to target practice.

There is no doubt but that a high state of efficiency in marksmanship increases the efficiency of any arm of the service, but the same may be said of other duties. It would be almost ideal if our cavalry, in addition to being thoroughly instructed in the performance of its legitimate duties, was as well instructed

in all infantry duties as is our infantry. Unfortunately, however, there is a limit to the open season of the year.

As it is practically impossible in addition to the prescribed target practice thoroughly to train a cavalry soldier in all the duties required of him by our present regulations, in one enlistment period, the actual results, generally speaking, are that instruction in mounted field work is sadly neglected. It is believed that officers who have attended the various maneuver camps the last two years will agree that the average trooper is woefully deficient in all mounted work in maneuver exercises.

While it is necessary for the cavalryman to be familiar with the powers and limitations of his rifle, to know how to use it, and to be able to shoot with a reasonable degree of accuracy at short and mid-range, it is believed to be a serious mistake to teach shooting almost to the entire exclusion of other instruction. Generally speaking, the cavalryman uses his rifle when he can no longer ride his horse.

It may be argued that exceptional proficiency in target practice gives additional morale. Therefore for our cavalry to have less practice than the infantry might tend to make it timid when engaging the enemy's infantry. While this may be true to a limited extent, it is believed that it would be more than offset by its confidence that it could out-ride, out-scout and out-maneuver any other arm of the service. A cavalryman will come more nearly performing the duties expected of him in time of war if he is taught to regard his horse of more importance than his rifle.

It is noticed at maneuvers that there is a tendency on the part of too many cavalry officers to dismount to fight on foot as soon as the enemy is sighted. It is believed that this is the natural result of a system of instruction which devotes so much time to rifle firing and so little to the legitimate duty of a mounted command.

All will admit that expertness in marksmanship is most desirable, provided it can be attained without neglecting instruction in more important duties. That there are other duties for our cavalry more important than dismounted fire action, all must admit who accept our present Field Service Regulations as authoritative. In addition, it is believed that the history of the cavalry operations in the civil war shows that the best cavalry,

that is the cavalry which most nearly met all the requirements of cavalry in war, did not place its chief reliance on dismounted fire action.

It is believed that the course in target practice outlined below will insure each trooper being sufficiently well trained in marksmanship to enable him to use his rifle effectively in dismounted action and that there will be sufficient time to thoroughly instruct him in his mounted duty, namely, the care of his horse, patrolling, reconnoitering, advance and rear guard, screening, formations for attack and defense, etc., etc.

This training should, however, follow in logical sequence, and the amount of time devoted to each should be in proportion to its relative importance. In determining its relative importance the special characteristics of cavalry should be kept in mind. Without going into all the details of its organization and equipment it is sufficient to remember that the functions of cavalry, that is the functions for which it was organized and is maintained, are more nearly fulfilled when the trooper, the mount, and the special equipment act as a composite unit. Take away either one and the cavalryman in all the name implies no longer exists.

A study of our Field Service Regulations and other authorities on the subject of the action of cavalry in campaign shows that the following is the order in which it generally will be called on to exercise its various duties. Furthermore, they show the relative importance of its action and its methods of fighting.

- 1st. Screening, scouting, and reconnoitering.
- 2d. The mounted charge.
- 3d. Dismounted fire action.

In order to perform all the duties expected of it in time of war the cavalry should be proficient in all, for each is very largely dependent upon the other.

In order to cover the entire subject each year, a systematic and logical course should be laid out and adhered to. The following is suggested:

November 1st to March 30th. Instruction in care of arms, equipment, mounted and dismounted drill and other gymnastics; sighting drills, position and aimings drills, and, where facilities permit, gallery practice. Non-commissioned officers' school, to include instruction in riding and must include instruction in map

reading. The last is very important, for no man can find his way through an unknown country with any degree of certainty, even if provided with a map, unless he is able to read a map. This instruction should go further than simply learning to follow a road.

April 1st to April 30th. Individual horsemanship, school of the trooper and school of the squad. The ability to ride implies something more than being able to sit on a horse's back. A man trained in the methods taught at the Mounted Service School will be able to control his horse under all conditions and will be able to get more out of him with less fatigue to both the rider and horse than a man trained under the old method.*

May 1st to May 31st. Troop, squadron, and regimental close order drill and pistol practice. Some close order drill is valuable for disciplinary purposes and to teach unity of action. If any part of the course must be omitted it should be the close order drill, excepting so much as is necessary to insure the troop going through the occasional ceremonies with some degree of credit.

June 1st to June 30th. Patrolling, reconnaissance, screening, advance and rear guard and formations for attack and defense, both mounted and dismounted. If other ground is available the troop drill ground should not be used. From the handling of the patrol to the formations of the troop for combat the dispositions and formations should be made in accordance with the ground and the assumed conditions of the enemy. Normal formation should be avoided as one would avoid poison. The patrols should be taught how to take advantage of the ground to extend their observations and at the same time concealing themselves from the view of the enemy.

July 1st to July 31st. Squadron and regimental field exercises.

August 1st to 31st. Maneuvers.

September 1st to 15th. Annual practice march.

September 15th to October 31st. Target practice. As much time as possible after completing the known distance practice should be devoted to "Field Practice."

*As the writer is not a graduate of the Mounted Service School, the statement is based upon observations.

Maneuvers are supposed to be the culmination of the season's field training, but under the present system they are, generally speaking, "the beginning and the end." Unless the regular troops can be given some such course of instructions as outlined above, they are no more prepared to benefit from the maneuvers than the militia. Enlistment is not sufficient in itself to qualify a soldier for field service.

On account of the militia it will be impracticable to hold all the maneuver in the month of August. If held earlier a part of the close order drill should be omitted; if held later the practice march could be made before going to the maneuvers, or the time devoted to target practice. If only the regular troops were to be considered the maneuvers might better be held during October. This arrangement would enable all the troops to complete their target practice before going to the maneuvers. This would be ideal.

If the troop has previously been well trained in individual horsemanship and close order drill, the courses suggested for the months of April and May could be modified. The important point is that the troop be thoroughly trained in tactical field problems from patrolling to combat before going to maneuvers. If target practice is had before going to maneuvers, there is not time enough left for the field training.

In addition to being the logical order of instruction, the members of the troop will take more interest if held at this time because they have the maneuvers to look forward to as an opportunity to display their ability in field work. And, finally, it should be remembered that cavalry is intended for mounted work. If this were not true there would be no use for cavalry. A troop which has been thoroughly instructed in target work, but has had no instruction in its legitimate duties in field work, may be good mounted infantry, but it is not cavalry.

COMMENTS ON PROPOSED PISTOL AND RIFLE PRACTICE.

Pistol Practice.

The cavalryman generally uses his pistol mounted. As it is much more difficult to become a good shot mounted than dismounted, he should be given more mounted practice. The pro-

posed course prescribes enough dismounted practice to teach the soldier how to use his pistol; but his qualification is in mounted work only. It is almost certain that any man who shoots well mounted is a good shot dismounted.

The important thing, however, is to reduce the rifle practice now prescribed so that some time each year can be devoted to other work.

Rifle Practice.

Cavalry should never be expected to use long distance firing for hours and days as is expected of the infantry. The dismounted action usually required of cavalry will be at the shorter ranges and of short and decisive character. The instruction practice is sufficient to familiarize the soldier with his rifle; the record practice is primarily intended to determine his relative proficiency. One score will do this as well as two.

For Cavalry.

As prescribed by the Provisional Small Arms Firing Manual with the following modifications:

Paragraph 60, after the sentence "Troops firing special course A, take both the instruction and record practice therein, regardless of the scores made in the second trial of the gallery practice test." Add "*For cavalry when the soldier has once qualified at gallery practice or has fired one season on the range, only such gallery practice as the troop commander deems necessary will be required.*"

Slow Fire.

Paragraph 138. *Targets "A" at 200 and 300 yards; "B" at 500 yards.* (See "Targets," Part 6, Chapter 1.)

Sight. The Battle Sight will be used for one score instruction practice at all of the ranges.

Rapid Fire.

Same as paragraph 139 Provisional Small Arms Firing Manual, omitting the sentence "For Infantry and Coast Artillery, the bayonet will be fixed."

Skirmish Fire.

The same as paragraph 140, Provisional Small Arms Firing Manual, omitting instruction relative to the 600 yards firing point and changing the number of shots and the time limit to agree with the attached table.

Paragraph 87. After the sentence "All officers enumerated in the above table of over 15 years commissioned, or commissioned and enlisted service in the Regular Army, or who have completed five regular seasons' practice, or who have qualified as expert riflemen, are authorized, but not required, to fire," add "*For cavalry, should the soldier fail to qualify in the marksman's course in his first target season, first enlistment period, he will each target season thereafter be required to shoot a maximum of one score instruction practice and the record practice prescribed in the above table until he qualifies. Any soldier who qualifies in any course will not again fire the regular practice, in that course, in his current enlistment.*"

Field Practice.

Instruction practice only, as prescribed in paragraphs 189 and 190.

Proficiency Test.

As prescribed in paragraphs 351 to 356 inclusive.

MARKSMAN'S COURSE.

Slow Fire.

INSTRUCTION PRACTICE.				RECORD PRACTICE.			
Range Yards.	Position.	Time Limit.	Scores.	Position.	Time Limit.	Scores.	Required for Qualification.
200	Choice of prone, kneeling or sitting.	No Limit.	Maximum of three scores at each range.	Choice of prone, kneeling or sitting.	Maximum of one minute per shot.	1	Total of 135 points at slow, rapid and skirmish fire.
300						1	
500						1	

MARKSMAN'S COURSE.

Rapid Fire.

Battle Sight Only Will Be Used.

INSTRUCTION PRACTICE.				RECORD PRACTICE.			
Range Yards.	Position.	Time Limit.	Scores.	Position.	Time Limit.	Scores.	Required for Qualification.
200	Choice of prone, kneeling or sitting.	20 seconds for each score.	Maximum of three scores at each range.	Choice of prone, kneeling or sitting.	20 seconds for each score.	1	Total of 135 points at slow, rapid and skirmish fire.
300						1	

MARKSMAN'S COURSE.

Skirmish Fire.

INSTRUCTION PRACTICE.					RECORD PRACTICE.				
Range Yards.	Position.	Time Limit.	Shots.	Runs.	Position.	Time Limit.	Shots.	Runs.	Required for Qualification.
500	Choice of prone, kneeling or sitting.	40 seconds	3	A maximum of three runs.	Choice of prone, kneeling or sitting.	40 seconds	3	One.	Total of 135 points at slow, rapid and skirmish fire.
400		40 seconds	3			40 seconds	3		
350		40 seconds	4			40 seconds	4		
300		30 seconds	5			30 seconds	5		
200		20 seconds	5			20 seconds	5		

SHARPSHOOTER'S COURSE.

Timed Fire.

INSTRUCTION PRACTICE.				RECORD PRACTICE.			
Range Yards.	Position.	Time Limit.	Scores.	Position.	Time Limit.	Scores.	Required for Qualification.
500	Choice of positions.	30 seconds for each score.	Maximum of two at each range.	Choice of positions.	30 seconds for each score.	1	A total of 35 points.
400						1	

EXPERT RIFLEMAN'S TEST:—As Now Prescribed.

Revolver Practice.

Paragraph 241, amended to read as follows:

TARGET "N." A rectangle 6 feet high and 4 feet wide, with black circular bullseye 5 inches in diameter. Value of hit therein, 10. Seven rings with diameters as follows: .

- (1) 8½ inches.....value of hit 9
- (2) 12 inches.....value of hit 8
- (3) 15½ inches.....value of hit 7
- (4) 19 inches.....value of hit 6
- (5) 22½ inches.....value of hit 5
- (6) 26 inches.....value of hit 4
- (7) 46 inches.....value of hit 3
- (8) Outer remainder of target..... 2

TARGET "Q." A steel skeleton frame representing a soldier in the standing position, covered with cloth and with black paper cut as a silhouette to the shape of the frame. Each hit scored as 1.

TARGET "R." A skeleton steel frame representing a soldier mounted, covered with cloth and with black paper cut as a silhouette to the shape of the frame. Hits in the black silhouette only count. Value of hits direct or ricochet on any part of figure to be scored as 1.

In targets "Q" and "R" only hits on the paper silhouette will be scored.

Paragraph 349, amended to read as follows:

The requirements for qualification as revolver shot—All who are required or authorized to fire the mounted course, and who make a total of 20 points, will be qualified as revolver shot; any who make a total of 24 points will be qualified as "expert revolver shot."

REVOLVER PRACTICE.

Dismounted.

Instruction Practice.

SLOW FIRE.				RAPID FIRE.		
Range Yards.	Target.	Time Limit.	Scores.	Target.	Time Limit.	Scores.
15	N	No limit.	Minimum of one score at each range.	N	10 seconds.	Minimum of one score at each range.
25	N			N		
50	N					

REVOLVER PRACTICE.

Mounted.

INSTRUCTION PRACTICE.					RECORD PRACTICE.				
Paper Targets Q on B Frame.			Figure Target Q.		Figure Targets Q.		Figure Targets R.		
Range Yards.	Gait.	Shots.	Gait.	Shots.	Gait.	Shots.	Five targets.		Two targets.
							Gait.	Shots.	Gait.
10	Gallop.	10	Gallop.	Minimum of 25	Gallop.	25			
15								Gallop.	10

Paragraph 215, amended as follows:

Under the word "Course," opposite the word "Cavalry," change to read *instruction practice mounted and dismounted. Record practice, mounted.*

Any man who qualifies as a "revolver shot" should be given one dollar per month additional pay; any man who qualifies as an "expert revolver shot" should be given two dollars per month additional pay.

It is easier to make 320 points in the dismounted course than it is 24 points in the mounted course.



CAVALRY TRAINING AND TARGET PRACTICE.

(Comments on the foregoing article by CAPTAIN BOOTH.)

IS the cavalrymen satisfied with the present infantry rifle for their long range weapon?

From the almost unanimous vote of the Fort Leavenworth Branch of the U. S. Cavalry Association, at a recent meeting, it would appear that the rifle as now issued does not meet the special needs of the cavalry.

At this meeting the advantages and disadvantages of the present infantry rifle were very thoroughly brought out with the result that the cavalry officers here are not satisfied with it. The advantages of a flat trajectory for long ranges and the knowledge of having as good a weapon as our infantry possesses (the latter is probably not true of the rifle as cavalry must use it, for its sights have been found in practice to be too light to bear the usage, even at drill; likewise the magazine mechanism has been found in practice to get out of order too easily when the rifle is jounced up and down in the boot on a horse at a trot) are more than outweighed by its clumsiness to the trooper on horseback; its length and therefore greater twisting or pendulum motion when carried on the saddle; its delicate sights, and its delicate magazine mechanism.

In the hands of the infantryman, no doubt none of these faults obtain. For under all conditions in which an infantryman finds himself he can and will care for his rifle. It may be the means of saving his life. This is not so with the cavalryman, who has other weapons to equally care for and for use in case of need, the horse, pistol and saber.

Other reasons for arming the cavalry with a long range weapon designed to meet the special needs of cavalry are logically set forth in the following summary of what cavalry needs on this subject, which has been submitted by a cavalryman at Fort Leavenworth.

PLAN.

Premise 1. The cavalry is a special corps belonging to the army and is in the same category with the engineers, signal troops, medical corps and field artillery.

Premise 2. As a special corps, it should devote all the twelve months' period of training each year to perfecting itself in the use of its special weapons, in the perfection of its special methods of attaining its special ends, just as do the field artillery, engineers and signal troops.

Premise 3. Its special weapons are the horse, saber, pistol and long range weapon ("carbine" or "cavalry rifle").

Premise 4. Its special methods are laid down in the Cavalry Drill Regulations, except in the use of its long range weapon. For the latter the infantry firing regulations govern.

Premise 5. Its special ends are to be determined from the study of the most accepted works on tactics and strategy and from the lessons of our own cavalry in the latter part of the Civil War, which will enable us to apply the principles of the most accepted modern works on tactics and strategy to the peculiar traits of Americans and American terrain.

PRESENT CONDITIONS OR FACTS.

1. The cavalry is not efficient; it has not the true cavalry spirit of dash, energy, sureness developed to the degree it is capable of and that it is imperative it should have to be successful on the battlefield.

2. Why? Answer: Lack of training. Why the latter? Answer: Lack of time. Again, why the latter? Too much time spent in emulating and competing with the infantry in the use of the infantry rifle.

3. The cavalry is proficient in the use of one of its four arms only, *viz.*, the infantry rifle.

4. It is deficient in the use of the horse, the saber, the pistol. In the use of patrols, in sending messages and reports, in scouting and in the proper employment of larger bodies, such as squadrons, regiments or brigades, in conjunction with other forces.

DEDUCTIONS.

1. We should arm the cavalry with a cavalry rifle designed to meet the special needs of the cavalry, but using the same ammunition as the infantry rifle. Why? In order to overcome many of the faults of the present infantry rifle (which is well suited to the needs of the infantry) and obtain a more suitable cavalry weapon; and especially to automatically disassociate from the minds of cavalymen that they can or may compete with the infantry on the target range.

2. We would have the whole outdoor training period to use in perfecting ourselves along our own special lines, unharassed by preparing for, attending and furnishing such large details to assist in conducting competitions.

3. A cavalry firing regulations for the cavalry rifle (or carbine), including regulations or manuals for the saber and pistol, all in one book, should be prepared and issued to the cavalry.

4. A scheme of instruction, progressive in character and covering the individual and collective duties of the cavalry, should be followed by the cavalry at each post during the whole twelve months. This scheme in its broad extent to emanate from the chief of staff, being put into practice in detailed form at each cavalry post.

5. Would not the cavalry then become contented, studious, trained, full of *esprit de corps*, and ready to act its part at maneuvers or in battle?

6. Would not the tendency of cavalymen to always dismount to fight on foot, displayed in the war game, or map problems, or on the maneuver ground, be overcome by teaching them the possibilities of the other weapons and by taking away the infantry rifle? The infantry rifle, I believe, is absolutely unsuited to cavalry. The infantry rifle hangs like a stone to the cavalryman's neck, slowing up the whole cavalry service.

7. In war the difference in efficiency of a lighter, shorter, long-range weapon would not be noticeable beyond 600 yards, due to the inability to estimate the range correctly beyond 600

yards. No doubt the Ordnance Department could now improve on the present rifle and could design one especially adapted for cavalry uses, which, barring competitions with the infantry on the target range, would enable the cavalry to maintain a morale equal to that of the infantry.

In other words, I don't believe that the cavalry would go into battle feeling that it was armed with a long-range weapon one bit inferior to that that the enemy's infantry possessed.

8. Would not the arming of the cavalry with a CAVALRY rifle or carbine have an automatic effect in restraining the higher commanders at maneuvers from using the cavalry so often for infantry work? Especially would not its proficiency in the use of the other arms become so well known that the higher commander would trust them to charge or to act with that freedom necessary to the successful employment of cavalry when the three arms are combined?

These suggestions are radical, I admit, in part, but I believe that nothing but a radical change will cure our evils. I am aware of Captain Booth's suggestions for a change in the firing regulations to meet cavalry needs. These ideas harmonize with his detailed plan, but I go further. I would by this exposition lay the whole matter bare, and by discussion in a board or in the general staff, or both, build up from certain basic principles a system of regulations for the cavalry and a scheme of instruction for it, just as independent of infantry regulations and schemes of instruction for them as has been done for the field artillery. Two or three years would, in my opinion, see a flattering improvement in the cavalry. For they are in the spirit for it now; they are awake and realize from colonel to private how deficient they are, and a well thought out scheme of instruction (have a good board spend a year or more on it if need be) would be seized with an impulse that would be felt, I am sure.

Perhaps these ideas are not as clearly or as forcibly expressed as they might be, but I wish to send them on for what they are worth, and because by improving the cavalry we improve the army, and keep step with the other arms.

S.

For some time there has been a growing feeling in our service that we were not giving sufficient time to training our mounts, and, coincidentally, to training our men in horsemanship. For the purpose of comparison, one of the members of the executive committee of the Cavalry Association tried to get a detailed statement of how a squadron in each foreign service divided the time available for instruction.

In all cases it was found that the instruction given was left principally to the squadron commander (corresponds to our troop commander), *who was held responsible for results*, and who was given the necessary freedom of action to enable him to obtain results. Squadron commanders were forbidden to use any set scheme of instruction and required to so divide the time that all their men should be well instructed in all their duties.

The fear in which squadron commanders stood of their regulations forbidding the use of a set scheme of instruction, together with the fact that they frequently instruct different sets of their men in different subjects at the same time, made it impossible to obtain the desired information in a form in which it could be tabulated for publication. Not being required to have a certain kind of drill on a certain day, they will, for example, detail the poorest horsemen for instruction in riding, while others are exercised in patrolling and carrying messages. From the replies received it was possible, however, to learn that all foreign services give at least twice as much time to caring for their horses, including exercising the ones not used at drill, as does the average troop in our service. They give probably ten times as much time and attention as do we to horse training and field exercises other than maneuvers, such as patrolling, carrying messages and battle exercises on a small scale on varied ground.

On the other hand, they give comparatively little time to mounted drill as pure drill on a parade ground, and they do not have a target practice season that practically eclipses all else for from one to three months of the best season of the year. Their men are sufficiently instructed in rifle practice, but instruction in this one arm is not allowed to stop instruction with the cavalryman's first and most important weapon—the horse.

While our cavalry does not need to go to Europe for its ideas, still the fact that in practically all other armies the cavalry gives its first thought to horsemanship and horse training leads one to think we might well consider a radical change in our system of instruction.

E.



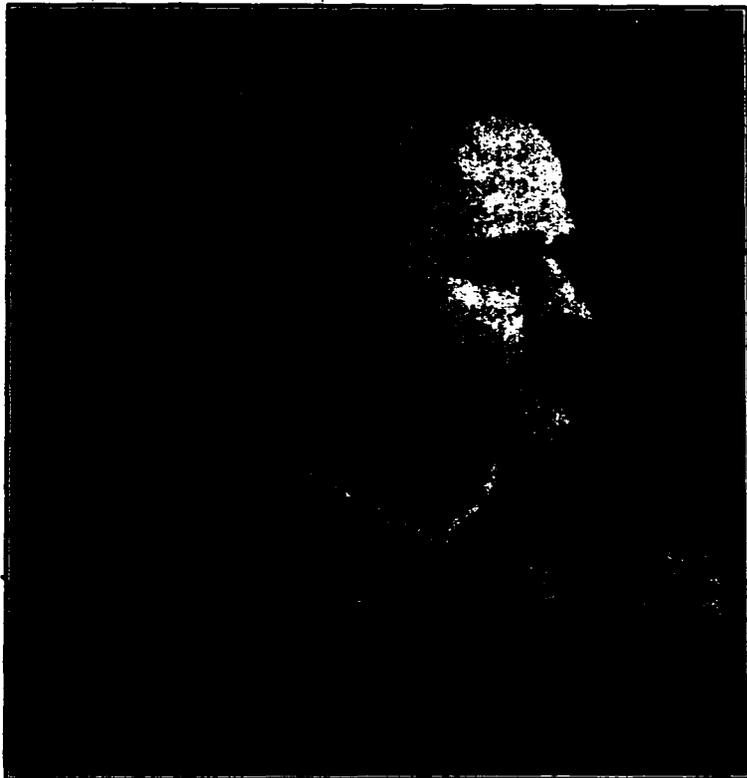
GENERAL WESLEY MERRITT.

BY LIEUTENANT COLONEL EBEN SWIFT, EIGHTH CAVALRY.

WESLEY MERRITT was born in New York and went with his family at an early age to Illinois in 1840. It is hard to realize what that journey meant at that time and that it was taken by men and women of this generation. In 1840 the "Fast Express" took three days to cover the trip from New York to Philadelphia. Thence to Pittsburg the journey was made by stage, then down the river by boat to St. Louis, from which point wagons were brought to carry the family of pioneers over to Southern Illinois, where a thousand acres of prairie land was waiting for them.

Merritt was graduated in the class of 1860 at the Military Academy. He was 24 years of age. In scholarship he was rated at the middle of his class and in the other soldierly qualities he was near the head. His first assignment was to the Second Dragoons, which was serving in Utah. He soon attracted the attention of General Philip St. George Cooke and was made A. A. A. General of the District and Adjutant of the regiment. At the same station were a number of officers of Southern birth, including Buford and Gibbon, who, with Merritt from Southern Illinois and Cooke from Virginia, were entirely loyal to the cause of the government, but were not in sympathy with the ultra-abolitionists of that day. Party spirit ran high and political discussions may have led these men of conservative opinions to express themselves too freely and perhaps caused them to be misunderstood. At all events, they were reported to Washington for disloyalty, and their career as soldiers was in danger, as suspicion poisoned many a cup in those days. The matter in some way came to the knowledge of General Cooke, who promptly ordered the arrest of the officers who sent the report. The adjutant put on his full

uniform and started out to find the offenders and to read the order to them in formal style. He found the first of them playing a game of billiards in the Sutler store, and, suddenly forgetting all about his official mission, he proceeded to take personal satisfaction at once. This incident is a good example



MAJOR GENERAL WESLEY MERRITT, U. S. VOLUNTEERS,
CHIEF OF CAVALRY, ARMY OF THE SHENANDOAH.
(From a Civil War time photograph.)

of his impetuous temper, a quality which he often considered a fault, but which he soon schooled himself to hold in complete subjection. The injurious reports, fortunately, were headed off and the officers who made them, strange as it may seem, received slight recognition during the war.

In 1861 the regiment marched to Fort Leavenworth, making a record march for cavalry, when we consider the distance, the lack of forage and the excellent condition of men and horses at the end.

The regiment soon found itself on the Peninsula, with Cooke as chief of cavalry and Merritt as aide on his staff. When Cooke in sorrow and disgust left the Army of the Potomac, Merritt went with him, but returned on the advice of Cooke and acted as aide on the staff of General Stoneman during the Richmond raid of 1863. The story of the Northern cavalry of those days was inglorious. Its most dangerous enemy was at Army Headquarters, and not at the front. Cavalry generals often had to fight their own high commanders in rear, and the result was sometimes as disastrous as defeat by the enemy. The cavalry had no good chance until Sheridan appeared and in strong words which we must not forget, refused to accept the rôle that had been given him. That was not until 1864, but light did begin to dawn under Hooker's brief regime. Merritt was then captain and after the Stoneman raid he joined the regiment to find himself in command—not an uncommon incident among junior officers in those days. In the battles of Beverly Ford, Aldie and Upperville, Merritt continued to command the 2d Cavalry. At Beverly Ford he led his regiment in a charge. In the smoke and dust he closed in on a Confederate officer of high rank. "Sir, you are my prisoner!" shouted Merritt in his ear. "The hell I am," replied the Confederate, cutting him over the head. The blow was stopped after going through the hat and a handkerchief that Merritt was wearing as a protection against the heat, but it still left a mark that he always carried. It was the old story of the feeble saber. Merritt gathered his regiment together which had lost one-third of its strength in killed and wounded and was soon ready for further duty. Notwithstanding the slight successes gained at this time, the main trouble with the Army of the Potomac was correctly diagnosed by General Hooker to be in the cavalry. It did not cover the right flank at Chancellorsville, and in the subsequent operation its failure to break Stuart's screen resulted in the loss of 10,000 men—with Milroy at Winchester. So Hooker proposed to reorganize the cavalry and to make some new brigades.

diers. The proposition was accepted and the choice fell on four young subalterns whom two years of war and stormy weather had tossed upon its highest wave. Gay blades they were—Custer with his yellow curls, velvet suit, gold lace and trailing plumes; Kilpatrick who had already earned his nickname "Kill Cavalry"; Farnsworth so soon to die in Devil's Den; and Merritt with his red cheeks and boyish face and airs of Knighthood's days and joust and tourney. Merritt's name was at the head of the list, and he received his commission and the command of Buford's old brigade two days before the Battle of Gettysburg.

At Gettysburg Merritt was only able to get away from the everlasting guardianship of wagon trains on the third day, when he threatened the left of Longstreet at the time of Pickett's charge. The failure of Lee's plan to attack with 30,000 instead of with 15,000 men against Meade's center was largely due to the action of Merritt and Kilpatrick at this critical moment.

In the pursuit of Lee after Gettysburg, Merritt continued to command his brigade and later, on the death of Buford, succeeded to the command of the division during the operations in Central Virginia in the fall and winter preceding the Richmond Campaign of 1864. Torbert got the division in April, but was on sick leave at the Battle of Todd's Tavern and during the raid to Haxall's Landing, when Merritt again commanded.

The birth of the cavalry dates from Grant's failure to flank Lee at Spottsylvania, a failure that was evidently due to the restricted rôle assigned to the cavalry, fiercely resented by Sheridan at the time. In the following movement to Haxall's Landing, Merritt led the way, seized the Brooke road and began the Battle of Yellow Tavern, which ended in the defeat and death of Stuart.

In covering Grant's passage of the Pamunkey and in fiercely battling for advanced strategic points and holding them till the arrival of the infantry, Merritt again commanded his brigade. At Matadequin Creek it was the charge of his command upon the Confederate flank that turned them out of their position. By these movements were Grant's flanking movements

secured and made possible, while Lee was forced to withdraw and contract his lines towards Richmond.

At Trevillian Station during the Charlottesville raid, Merritt's advance on Hampton relieved Custer and permitted him to withdraw when surrounded by the enemy.

Transferred to the Shenandoah Valley, Merritt became the permanent commander of the famous first cavalry division with Devin, Custer and Gibbs as brigade commanders. The division had a brilliant record. From the time when it was organized under Buford until the end of the war, it captured more horses, guns and munitions than would equip it thrice over. It never during this time suffered a surprise, never "lost a wheel," captured by the enemy, and never met the enemy's cavalry but to defeat it. At Cedarville, near Front Royal, on August 16, he had a brilliant success over Kershaw's division of infantry and two brigades of cavalry, who were trying to force the Shenandoah in order to attack Sheridan in rear. He defeated them with a loss of 600 men and two flags.

At the Battle of the Opequon (Winchester) on September 19, his division gave the most effective instance in a hundred years of war, of the use of the cavalry division in a pitched battle. He rode over Breckenridge's infantry and Fitzhugh Lee's cavalry and effectually broke the Confederate left. At this time Sheridan wrote to a friend: "I claim nothing for myself; my boys Merritt and Custer did it all."

At Tom's Brook, on October 9th, Merritt and Custer defeated Rosser's cavalry with a loss of eleven guns, and pursued for twenty-six miles.

On the disastrous morning of October 19th, at Cedar Creek, Merritt's division blocked the way of Gordon's victorious Confederates, held its position north of Middletown all day, without assistance, then charged and crossing the stream below the bridge joined Custer in the pursuit to Fisher's Hill. In that campaign Merritt's division captured 14 battle flags, 29 pieces of artillery and more than 3,000 prisoners.

From the beginning of 1865 Merritt acted as Chief of Cavalry of the Army of the Shenandoah and continued in that position till the end of the war. The position was practically that of commander of a cavalry corps of two divisions under

Sheridan, who, from time to time, exercised the functions of an army commander.

The final campaign began with days in rain and nights in mud, with empty sack and dry canteen. Grant called it off, but Sheridan hung on at Dinwiddie and begged to stay. Merritt pushed ahead to capture Five Forks, when Pickett, with five brigades of infantry and three divisions of cavalry, caught the advanced troops of Devin and Davies, in front and rear and on the left flank. But Merritt, with his reserve, assisted by Gregg, struck Pickett in rear, forced him to face about, and secured the safe withdrawal of Devin and Davies around the Confederate flank. It was a fine example of the principle that there is no situation into which a cavalry officer may not venture and from which he cannot extricate himself by his own resources.

On the 1st of April at Five Forks, Merritt followed and pushed the Confederate infantry and cavalry into their intrenchments on the White Oak road and held their double force in front, while Sheridan in person led the attack of the Fifth Corps against the left flank. As soon as the envelopment was completed, Merritt charged with Devin's division and one of Custer's brigades dismounted, while Custer charged their right flank with two brigades mounted, and one of the most decisive battles of modern times was ended with the complete defeat of the Confederates and the capture of more than half their force. That night the enemy was followed several miles.

On the next day Merritt's two divisions, reinforced by MacKenzie's division, pursued the enemy to Ford's Station on the south side railroad, and then northward across Namozine Creek to Scott's Corners, where camp was made at dark.

On the 3rd a running fight was kept up all day, the advance being greatly delayed by the high water in the creeks. At night Deep Creek was reached, when a rear guard and five guns were captured.

On the 4th the advance was made to Bevill's Bridge of the Appomattox across which Lee's main army was retreating. From there a parallel course was run towards Amelia Court House, where the concentration of Lee's Army was first definitely located and reported by Merritt. The importance of this service lay in the fact that Grant's westward march gave Lee

the choice of two lines of retreat—one was to outstrip the Federal Army and to reach the Danville road before it, the other was to march due south across Grant's line of communication and reach the Weldon road. Until Lee's army was located and his objective known, Grant could not freely move. After the war, on several occasions Lee talked about his plans and said that he never understood why he did not succeed in extricating his army, why every movement was checkmated and the enemy always in his path. Plainly he did not count on the efficiency of the cavalry. If he had done so he would perhaps have taken the opposite course, which in the necessarily dispersed condition of Grant's army might have had more success. And so the situation was completely cleared up for Grant, and he personally hurried every man he could get to Jetersville, south of Amelia. On this day the cavalry of Merritt made many attacks, with heavy captures of wagons and provisions at Tabernacle Church. Sheridan called Merritt to Jetersville in the evening.

On the 5th the command remained near Jetersville, due to Meade's desire to concentrate the Army of the Potomac before attacking Lee. During the night, however, the Confederate general gained a march by moving across Meade's left flank towards Farmville. Sheridan had anticipated this and sent his cavalry to the west on the 6th, without joining in Meade's advance on Amelia. Merritt moved across country, paralleling the Confederate line of march, each of his divisions alternating with Crook in hitting at the column. Several unsuccessful attempts were made, but at length Stagg's brigade under the eye of Sheridan himself struck the road in the interval between Ewell's and Gordon's divisions at Hott's House, pushing the latter off to the north. At the same time Merritt and Crook crossed Sailor's Creek further on and rode into the gap between the head of Ewell and the rear of Longstreet and thus blocked the further advance of the former, and captured his artillery. The Confederates then crossed Sailor's Creek and formed up to drive away the cavalry which was blocking the road ahead. At the same time the approach of the 6th Corps in the rear forced them to face in that direction also. The result was to cut out 8,000 men and a dozen generals from Lee's

column. Not delaying to rest, Merritt moved off at once towards Prince Edward Court House to anticipate any further attempts of Lee to reach Danville.

Prince Edward was reached on the 7th and as Lee's only chance was now to reach Lynchburg, Merritt was started for Appomattox Station by way of Prospect Station, reaching there in the evening, at the same time as the advance guard of Lee, which was fought and driven back during the evening and night with a loss of twenty-five guns and 1,000 prisoners and all the rations of Lee's army.

Merritt opposed Gordon's attempt to break through the investing lines on the morning of the 9th and on the arrival of the infantry of the Army of the James he mounted rapidly, rode to the Confederate left and had just formed at a trot for a final charge on the Confederate camps, a short half mile away, when a flag of truce from the enemy ended the battle.

At the end of the war Merritt was 28 years of age. He had risen from Captain and Aide de Camp to Major General and commander of a cavalry corps in two years. His commission as Major General of Volunteers was specifically conferred for "Gallant Services."

When events on the Rio Grande seemed to indicate that still further uses for the army were in prospect, Sheridan took Merritt along as Chief of Cavalry.

On the reorganization of the army after the Civil War he went back in rank and served for ten years as Lieutenant Colonel and saw many men advanced above him who had been his juniors in the great war. It was not until thirty years after Appomattox that he again held the rank he earned in that campaign.

General Merritt did excellent service in Indian campaigns. At Indian War Bonnet Creek, Wyoming, on July 17, 1876, after a rapid march of 85 miles in thirty-one hours, he headed off the Northern Cheyennes on their way to join the hostiles and drove them back to their agency. During the Big Horn and Yellowstone expedition he acted as Chief of Cavalry, being engaged in the action at Slim Buttes in September, 1876. In 1879 he marched his command 170 miles in sixty-six hours from Rawlins to Mill Creek, Colorado, to relieve the command of Major

Thornburg, attacked by Ute Indians. His last distinguished service was the capture of Manila, August 13, 1898, and services on the Peace Commission. He was retired in 1900.

It is not easy to write of the cavalry of the Army of the Potomac without writing of all, from its commander to the trooper. The efficiency of the cavalry had been of gradual growth and was already an instrument well suited to his hand when Sheridan received it in 1864. After that he was a moving spirit of tremendous force and the record he made was one with his numerous subordinate commanders of whom Merritt was the chief. In speaking of Merritt it is merely to fix his place in history and not to detract from the credit of Sheridan's directing hand or of Custer and Devin, the division commanders of the Cavalry Corps. This combination fixed the modern use of cavalry in war and resurrected it from the inefficiency into which it had fallen and in which it still remains in some countries. There was glory enough for all when we consider that the world has not seen a better example of a pursuit than the Appomattox campaign; no finer instance of cavalry in advance of an army than at Hawe's Shop, Matadequin Creek and Cold Harbor; no more brilliant use of cavalry divisions combined with infantry in pitched battle than Winchester and Five Forks; no defense of cavalry against infantry better than Middletown.

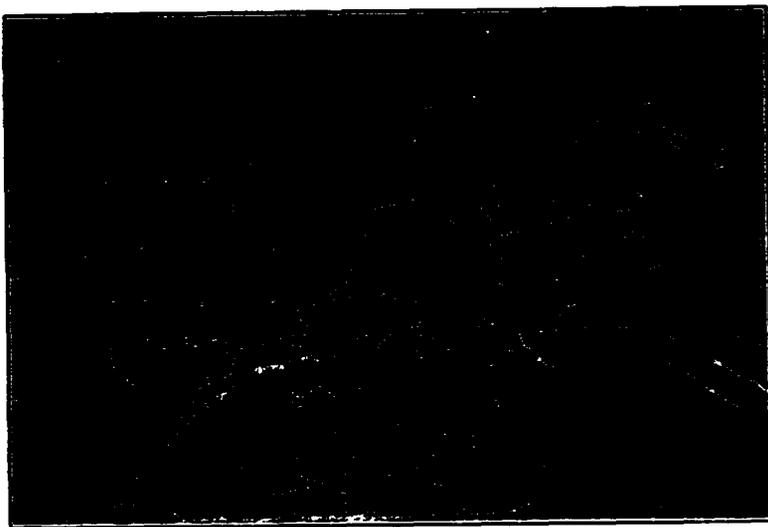
Merritt at his high prime was the embodiment of force. He was one of those rare men whose faculties are sharpened and whose view is cleared on the battlefield. His decisions were delivered with the rapidity of thought and were as clear as if they had been studied for weeks. He always said that he never found that his first judgment gained by time and reflection. In him a fiery soul was held in thrall to will. Never disturbed by doubt, or moved by fear, neither circumspect nor rash, he never missed an opportunity or made a mistake.

These were the qualities that recommended him to the confidence of that commander whose ideals were higher and more exacting than any other in our history. To his troops he was always a leader who commanded their confidence by his brave appearance, and his calmness in action, while his constant thoughtfulness and care inspired a devotion that was felt for few leaders of his rank.

THE ONE BEST SEAT OF THE RIDER.

By EDWARD L. ANDERSON.*

WITHOUT laying one's self open to the charge of sentimentality, it must seem that the horse was formed for man's use. It is only on the back of the horse that the man has an easy, graceful and firm seat. Look at the Assyrian sculptures (700



KING ASSUR-BANI-PAL OF ASSYRIA. 700. B. C.

B. C.), the works of Phidias (500 B. C.), the figures on the column of Augustus (A. D. First Century), the pageant of Trajan's column (A. D. Second Century), the Sarcophagus of Helene, mother of Constantine (Fourth Century, A. D.), and scores of other examples of the man sitting closely to the back

*Author of "Modern Horsemanship," "Curb, Snaffle and Spur," "Horses and Riding," etc., etc.

THE ONE BEST SEAT OF THE RIDER. 889

of the horse with nothing more than a cloth or a pelt to break the contact. How beautifully, how admirably do these representatives show splendid horsemanship! All have the same pose, the same seat, each man of course having the peculiarities that are inevitable to his shape and figure, yet there is always a resemblance that bespeaks perfection in all.

When about the Sixth Century, the Romans introduced the wooden tree, the unity between horse and man was broken for

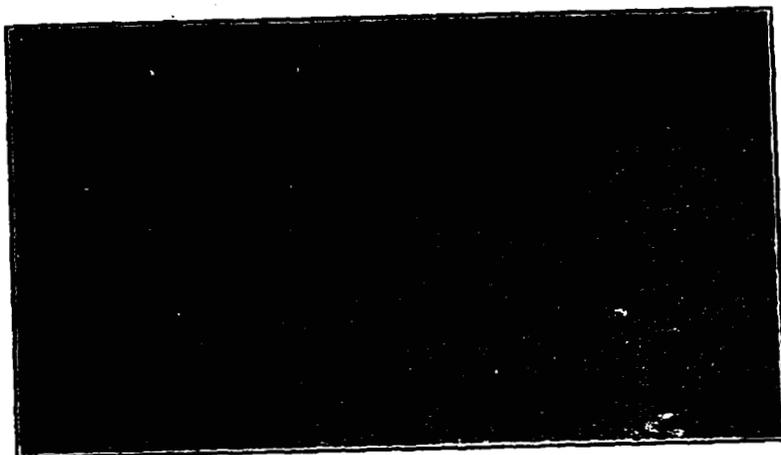


FROM THE FRIEZE OF THE PARTHENON. 500. B. C.

ages, often the saddles were grotesque, often furnishing the most insecure positions, as in the middle ages, always inconsistent with real touch between horse and man.

The flat, or English hunting saddle, affords the nearest approach to the natural, perfect seat of the ancients that modern conditions require. This is really a very fortunate invention for in it a rider may acquire a very strong seat which gives him the opportunity of employing the aid of both hands and heels with precision.

As I remarked in *Horses and Riding*, which was somewhat sketchy by reason of the number of subjects treated, every man has one *best possible seat*, and it should differ from that of others "only in the conformation of individuals." This seat is maintained by the friction of the upright body upon the saddle and such pressure of the thighs and knees as may be required aided by the bending of the trunk to maintain necessary equilibrium, so that the lower part of the legs are always under perfect control, as they are of "as much use in the management of the horse as are the hands." The proper length of the stirrup leather may be found when the tread of the irons strike the



FROM THE FRIEZE OF THE PARTHENON. 500. B. C.

heels of the rider in his seat. The highest authority in France declares that the shortening of the stirrup leather indicates that the rider is losing his nerve or his suppleness.

In my previous works I have laid much stress upon the saddle. I may say here now, that in the first place the tree must be made to fit the back of the horse, which is very easily done by bending the points, so that when the pannel is on there will be a channel along the back of the horse. Then the webbing of the seat of the saddle should be so arranged that the rider finds comfort and ease in it, feeling neither a toppling forward nor backward as he sits in an upright pose.

Finally if the rider finds his best possible seat, there is nothing more to be done than to learn by practice to maintain it as best he may, by friction and balance, under all circumstances.

If the rider has attained the best possible seat, any change of position beyond the give and take of the sway common to man and horse when at ease would break the feeling between him and his mount.

Of course we all know that the present military saddle will not permit a proper seat, although that tree is better than the old McClellan form, which was itself an improvement upon that used previously. I remember that the cavalymen who returned from the Mexican War (grand soldiers they were) stood quite upright, bearing the weight upon the crotch. The riders of the Civil War rode with stirrup straps far too long; but the tendency now is that the leathers are gradually being shortened. Let us hope that at once the privilege shall be granted to our cavalry officers to use on duty a saddle as near the hunting tree in form as conditions will permit, and that soon a similar tree will be issued to all mounted men in the service.

The seat I have endeavored to describe may be considered that of the best European cavalry as I observed it. It is the most firm, by reason of the upright position that permits the bending of the body with the motions of the horse, and giving every possible point of contact with the saddle. From this seat the rider should practice those exercises which tend to make him supple and confident; that is, let the man, mounted upon a steady horse, knot the reins upon the neck of the animal, and with hands hanging loosely by the sides, rotate and bend the upper parts of the body upon the hips; lose his seat to either side, forwards and backwards, and gain the proper position by a twist of the waist and hips without struggles too strongly marked, and without aid from the hands, and go through such other movements as should occur to him. These exercises should first be made at the halt, then at the walk, and then gradually increased paces.

The seat above described is for the trooper as well as for the officer, but until the enlisted men are given proper saddles

we can never hope to bring our cavalry to that state of horsemanship that will do full credit to the most efficient and most devoted officers in any service.

A cavalryman with the seat herein recommended and blessed with a supple body, might rival in easy grace the Polish Rider* of Rembrandt, that ideal horseman who at the springy gait of an active horse faces a long route with a spirit for any adventure.

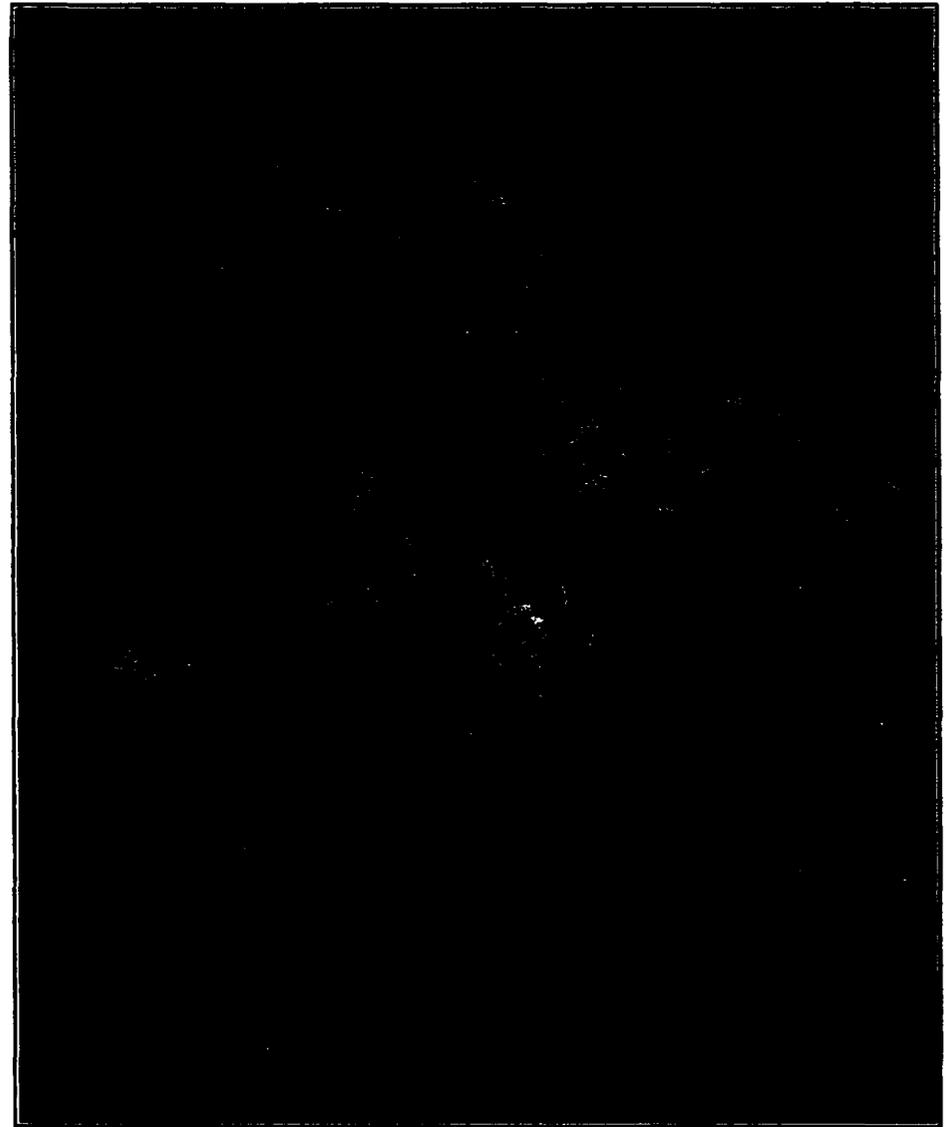
*In a recent letter to the editor, Captain Anderson writes:

"I do not think that 'the best possible seat for the rider,' as understood abroad, is generally known in our service, and I am sending you a few notes upon the subject for your consideration.

"I am also forwarding a few photographs of the early horsemen and a very fine copy of 'The Polish Rider' by Rembrandt (by express). This picture is considered by many critics as the greatest work of any painter of any age. The original was recently purchased by Mr. Frick for \$300,000.00.

"Should you print the article or should you find it unavailable, I beg of you to accept the Rembrandt with my compliments."

THE POLISH RIDER



AIMS AND IDEALS OF THE MOUNTED SERVICE SCHOOL.

BY CAPTAIN W. C. SHORT, THIRTEENTH CAVALRY.

UPON the eve of leaving the Mounted Service School I am taking advantage of the columns of the CAVALRY JOURNAL to try and make clear to the mounted service the object sought in the Department of Equitation up to the present time, and, if possible, to make it easier for my successor than it has been for me.

Lack of knowledge of the object sought, and of conditions existing at the school have often led the service to expect too much from the school and from its graduates.

In order to give my readers an idea of the attention and of the respect given to equitation throughout the armies of Continental Europe, I will give, as an example, the time spent on the education of French cavalry officers; although the other nations of the Continent make almost, if not quite, the point of equitation as the French. In referring to Europe, I do not include England, which country, having gone through almost the same experience as we have, has no method, or perhaps but a varying one. Still she has much the advantage of us in the fact that she breeds more good horses for saddle purposes than any other nation, and more people ride horseback there than in the United States. (Reference: "Modern Riding," by Major Noel Birch, commandant of the riding establishment at Woolwich.)

While a cadet at St. Cyr (the Military School of France), the French cavalry officer rides for two years under the instruction of the best masters that the French army can produce. Upon graduating from St. Cyr he goes to Saumur for one year; he then goes to his regiment and has from six to eight years' experience in training remounts; from there he returns

to Saumur for his second year of instruction. When he receives his majority he returns the third time to Saumur for four months' instruction. Thus it will be seen that a French cavalry officer has altogether four years and four months' instruction in equitation under the best masters, besides from six to eight years' practical experience in training remounts; and yet, just as much is expected of a graduate of the Mounted Service School as of a French graduate of Saumur, although the graduate of the Mounted Service School has had only nine months' instruction and has probably never lived in a "horse atmosphere."

For myself, I can state positively that I learned more and value more my one year at Saumur than all the years during which I experimented for myself; and the horse has been my greatest pleasure since early childhood. I can state just as positively that any officer of the United States Army can learn more equitation in nine months at the Mounted Service School following a method under capable instructors than he could possibly have learned in all his former aimless experimenting. Yet his success in the school will depend greatly upon his previous work with horses, his association with them as it were, but more than all upon the amount of natural aptitude or equestrian tact which he possesses.

The aim of the school has been to, at least, send an officer away armed with a method both simple and reasonable enough to enable him to make a useful troop horse out of the average quality of horse flesh and with the rider which he will encounter in the troop. As to the poor horseman who comes to the school, if he acquires a seat and understands fully the method of training at the end of the nine months, he has accomplished all that could be expected of him. But for the good horseman, the man who has a strong seat, good hands, and the love of the horse, there is a certainty that he will gain a knowledge of equitation that will enable him to make continual improvement and finally, perhaps, to attain a proficiency in the art of which our service can be proud.

Every effort is made at the school to bring the poor horseman up to as great a degree of excellence as is possible in the time allowed; and the good horseman is given every

opportunity to make as big strides as he can. The mistake commonly made throughout the service is to expect perfection from a graduate irrespective of how much he has gotten out of the school. What he will eventually accomplish depends upon the work he does for himself after leaving the school, provided, of course, he follow along the lines he has been taught.

Many a graduate, after leaving the school, will train his horses in the club and ride the most comfortable animal the first sergeant can procure for him; but it should be an easy matter for the regiment to solve the problem of such an one, and not give the credence he expects to his "club riding and training."

Existing orders require graduates of this school to act as instructors of officers in regimental schools, and to train remounts. It is hard for an officer to be expected to act as an instructor after only nine months' instruction, as I have found that our student officers are, figuratively speaking, "from Missouri" and "have to be shown," and consequently the instructor of limited experience and ability often finds himself up against a hard proposition. It should be understood that teaching equitation requires infinite resourcefulness; no cast iron rules being applicable, as every horse and every rider when put together present a special problem requiring much thought and judgment to solve. It takes years of experience and honest study to enable one to recognize the causes of difficulties and to know the most effectual remedies to apply; and often inexperienced instructors, being hard pushed, make mistakes in their methods and do many things contrary to the teachings of the school; yet critical onlookers lay the blame to the school. The mistakes stated above will disappear in time, for the graduates will then have had time to experiment for themselves.

I often feel ashamed to set myself up as an instructor, for, after all my years of hard work in that line, I realize that I have but just begun to get at some of the secrets of the *art*.

The school has been criticised because the "Saumur Notes" were adopted as its text-book on equitation, the critics claiming that it is not *American*. Granting that to be true, who knows enough to write a better method?

The method as outlined in the "Saumur Notes" is the result obtained from a threshing out and remodeling process carried on by men of great experience and ability, covering a period of two hundred years, and with the sole object in view of making a *charger*. It is this method which is used, in all its essentials, in every great riding school on the Continent; and varying so slightly that graduates from the different schools are able, when they meet, to discuss any point of equitation with perfect comprehension, understanding each other without the least difficulty.

England, for the first time, sent two officers to Saumur year before last to be instructed in its methods; and Major Birch (referred to above) states in his book that these officers would be used as instructors upon their return.

The critics state also that "Saumur Notes" is not explicit enough, but they forget that the book contains only an outline of a method serving merely to jog the memory of a student while following the school course under an instructor. No body can learn equitation out of a book alone; in fact, too much theory and too little practice has spoiled many an ambitious horseman. It is better to get a few simple essentials correctly fixed in mind, and then to ride many horses.

In time there will be enough good graduates from this school to disseminate a correct interpretation and understanding of the principles of the book throughout the service, establishing in this manner a fixed method of training. There are undoubtedly many good methods, but one particular method is absolutely necessary in our service where regiments change horses so often and where the necessity of a uniformity of training is so apparent.

I feel that the results obtained in the training of chargers at this school are very satisfactory, considering the time and material at hand, and compare very favorably with those of foreign schools, everything being considered, and for this reason I hope that the method employed at the present time may become a tradition of the school, thus making it possible for every graduate to thoroughly understand every other graduate, as well as every horse, which has been trained under it.

I have heard that the position in the saddle as taught at this school is also much criticised. I say in reply that the position in the saddle is a secondary matter and not worth discussing, provided that the rider with a different position fulfills the conditions of fixity and balance, and maintains his legs in a position always ready for use.

I have heard lengthy discussions on the best way to hold the reins, but, to my mind, it is not the manner of holding them that has much weight, but it is the way the rider uses them.

One of the greatest "bugbears" to many in the service is the fact that student officers ride English saddles. The reasons for their use are manifold; primarily, they are harder to "sit" than any other saddle; and the student who rides them must necessarily acquire a strong seat without the high pommel and cantle to depend upon, and after that has been acquired it really doesn't make any difference what saddle he gets into—he will feel at home. The accustomed use of the English saddle also enables an officer to present a creditable appearance when he gets away from his "McClellan" and saves his comrades the mortification of seeing him thrown in the presence of civilians who expect the cavalry officer to be the acme of perfection in the saddle. The English saddle doesn't make the young horse's back sore, neither does it have to be cinched tight. It requires no blanket to be fixed continually and remains in place, is not stiff, and does not interfere with the suppling of the horse's back and shoulders; it allows one to get close to his horse where he can feel what is going on under him, and it fits almost every back. These, and many other reasons too numerous to quote here, should convince anyone that the English saddle is the most useful and suitable for the school. The position of the rider in other saddles is no different than in the English saddle, or, is as near the same as quarter straps, buckles, iron rings, etc., will permit without cutting one's legs off.

On summing up I wish to state that the position in the saddle, the manner of holding the reins, and every other detail of instruction, as far as conditions permit, have been copied from the Saumur school; and I hope that we may in time see the same results in our service that I observed in the French cavalry.

Touching upon the subject of horses, I wish to state that we have made a great effort to procure good ones for the school, and have succeeded to some extent; but it must be understood that there is not a horse in the school which cost more than the contract price, and few that have cost as much.

It has been the object in each student class to have two types of horses under training: a well-bred western range horse and a registered thoroughbred. The idea being for the student officer to have an opportunity to handle, from the beginning, a totally untrained western horse, and to compare him with the more sensitive thoroughbred, thus fitting himself to handle any kind of a horse. This scheme of having the thoroughbred in the school has met with much opposition from outsiders who argue that student officers should work only with the average type of cavalry horse, since this would be the kind of horse they would be required to handle upon returning to the troop.

My argument in favor of the thoroughbred is this: An officer's taste for riding a good horse should be educated up to a higher standard than exists today in our service, and if he ever learns to ride a perfectly supple thoroughbred he will never throw his leg over anything else. Were the student officer to ride only the average horse while at the school, he would probably never ride a good horse, and never know what he had missed. Then again, the thoroughbred has so many possibilities for advanced training, his constant improvement ever inviting the trainer to demand more of him until most satisfactory results are finally accomplished, while the ordinary cold-blooded horse often strikes a limit where progress and possibilities end. Only within the last two years, or since the racing laws have discouraged the racing men, has the school been able to purchase thoroughbreds, on account of the high prices demanded for them; and I doubt if they can be obtained at contract price after this year.

There has been a great improvement in the horse flesh of the school during the last two years; the young horses in training and those on hand to be trained being quite superior animals. The conditions in this respect being far different now than when the student officers were mounted on horses that

troop commanders wanted to get rid of because they were unmanageable in ranks. This improvement in the horse flesh of the school will soon begin to make itself apparent in a corresponding improvement in the results obtained from the classes. It must be remembered that horses are the tools of a riding instructor, and that, to get good results, he must have good tools.

I have heard it said that the cross-country courses at the school did not amount to very much; that they lacked height. This is so, because they were fitted to the kind of horse flesh on hand; and when horses have as much jumping to do as they have at this school, it is important to try and keep their legs under them, realizing how hard it would be to replace them often; for the school has always had difficulty in obtaining horses suitable for jumpers. Besides, I claim that a man who can ride *any* horse properly over three feet six inches can ride any height that a horse may carry him. Last year the jumps were increased in height; this year they are going still higher, and they will continue to go up, within reason, as the improvement in horse flesh makes it possible.

At this school the great object is, first of all, to train the charger; and next in importance to this, to make bold riders. Any man who has the proper spirit would naturally prefer a cross-country run on a horse that is "up and coming" to the slow but necessary routine of training. And that is why it is so very important to impress student officers with the necessity of more training than cross country, and that the horse should go through all the routine of training before starting in on cross-country work. Young men, when they enjoy a thing, are liable to go to extremes in that particular direction; and most of them prefer cross-country to training and want to put their horses to jumping before they are properly trained, ending up usually in having a crazy horse; the consequence of demanding work of him for which he was not prepared. I claim that a charger should be calm and perfectly obedient to the aids, and should jump boldly any reasonable obstacle at either a slow or fast gait, and this can be achieved only by "waiting for him"—by preparing him gradually and carefully for the work. I don't want to give the impression that the student officer doesn't get

enough jumping while at the school, because, on the contrary, he starts at it a month after his arrival and jumps every day until he leaves. But I do wish to convey the idea clearly that learning a *method* and putting it in practice is the great feature of the course.

When polo was dropped out of the course there were many people who considered this action a blow aimed at polo in the army. But they were mistaken, for every one at the school believes it to be the best game on earth for a cavalryman, and all agree that every regiment should have a team, but that it had no place in the school for many reasons, of which the following are a few: First, and most important, there is no time for it, as reference to the schedule will show. Then if it were compulsory for all there would be many students who would take no interest in it; and if, on the other hand, it were voluntary, a small proportion of the class would become "polo fiends," expending all their energy on the game, and would not be fit to perform the work for which they were sent to the school, and would not take the proper interest in it. I was a "polo fiend" myself once and know the fever. To maintain polo for the student class would require much stable room, many attendants and animals, which could not be supplied without seriously crippling the school in its legitimate work.

Polo, hounds, and every scheme that can be thought of has been tried here, and at last all the frills have been wiped out and the school has begun to make headway in a good serious manner with only the much-needed improvement in the equitation of the army as its goal. I consider that any officer who does not care to give up playing for nine months should not be given a detail to this school.

After several years of experimenting, I feel that at last the school is on a good working basis following upon the lines intended for it by General Carter, its originator, and upon which it should continue without interference, having already gone through enough changes to swamp almost any institution. The principal menace in the past, and will be in the future, is "the man with a fad" who might make it a polo or a cross-

country school—almost anything, in fact, unless the "object" of the school be constantly held steady by unbreakable traditions and by cast-iron orders from the highest authority. The old saying, "a little knowledge is dangerous," is truer in equitation than in almost anything else. If any change were to take place, it should be a removal of the school to a more suitable climate where more work could be done out-of-doors and where it would be easier to "keep" horses. The way our officers work, and how cheerfully they endure the hardships of this climate while going through the school speaks well for their seriousness and desire to learn.

I think the service expects too much of the school at the horse shows, although we feel proud of what has been done, considering the conditions. In the first place, the only individuals at the school during the show season who have had enough experience to compete are the instructors, and they are very hard worked officers and have no time for special work if they do their legitimate duties properly.

All trained horses at the school, the best as well as the worst, are ridden by the student officers with a change of rider every day. This is not conducive to making a show horse even were he of material good enough to compete with the best European product. With the improvement of horse flesh at the school, and the awakening in that line which has taken place recently throughout the service, the show problem will soon be solved, and the United States will then take its long delayed place in International Military Competitions. But the school should continue its uninterrupted grind without being crippled by even the temporary loss of any instructor, or else additional officers should be maintained at the school for that purpose.

I hope my readers will forgive this long dissertation. But anyone, putting himself in my place, will realize my desire that the service should understand the department of equitation in which I have put the best effort of my life, and I only ask that the next time anybody becomes critical of a graduate of the school that he will weigh that individual carefully to determine whether the school or the man is at fault.

NOTE:—Since writing this article I have received the program of the International Military Competition to be held in Rome during May of this year. The requirements for "Training" in this contest read as if they were arranged for the horses of the Mounted Service School. This is a great satisfaction to me because it shows that the instruction at this School is on the proper lines.

The jumping requirements are too severe for us because we have no horses that are up to the demands.

W. C. S.

Since the above article was sent to the printer, we have received from Major F. S. Foltz, 15th Cavalry, for reproduction in the Cavalry Journal, a plan of the course and elevations and dimensions of the obstacles for the above mentioned competition to be held in Rome.

The plan is practically the same, over the same ground, as that reproduced in the Cavalry Journal of September, 1909, and the elevations of the obstacles are practically the same as shown in that number of the Journal, with the exception that four additional obstacles are to be used and, also, that one or two of the jumps are wider and higher.

The four additional obstacles are as follows: An open bar fence on a small mound of earth, between two ditches, the fence being one meter high and the ditches being seven-tenths of a meter and one meter wide, respectively; a white bar gate between wire fences, the gate being four meters wide and about one meter high; up and down a steep mound of earth, the mound being three meters high, one meter wide on top and six and one-third meters at the bottom; and the fourth being a mound of earth, one and eight-tenths meters high, six-tenths of a meter wide at the top and three meters thick at the bottom.

The plans and elevations were furnished Major Foltz by our Military Attache at Rome, Major J. F. Reynolds Landis, Thirteenth Cavalry.

EDITOR.

A CRITICISM OF OUR CAVALRY DRILL REGULATIONS.*—Continued.

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HAVING set forth in my two previous articles in the CAVALRY JOURNAL the system which I think should be followed in writing the commands of a drill regulations, it will not be out of place to state here that whatever system be adopted, whatever rules or principles be followed, there are certain things that should be kept constantly in view, namely: simplicity, brevity, consistency, and clearness.

Now it may be stated as a general rule that a word or words that add nothing to the meaning of a command or commands should be omitted. Take, for instance, the commands, 1. *Forward*, 2. *Column right*, 3. MARCH, from a halt, which appear many times in our cavalry drill regulations. Since the *Forward* is always included in the *Column right*, it is superfluous and unnecessary. 1. *Column right*, 2. MARCH, from a halt is much better because it is simpler, briefer, and just as expressive. Moreover, consistency demands that since the *Forward* is omitted before *Right turn* or *Troop right* from a halt, it should likewise be omitted before *Column right* from a halt. Note, too, how our cavalry drill regulations, as a whole, would be shortened and simplified by omitting this unnecessary *Forward*. Paragraph after paragraph of the text are taken up in describing how changes of direction should be made from a halt that would be entirely eliminated if the commands, 1. *Column right*, 2. MARCH, were used to apply to changes of direction from both a halt and marching.

*Numbers in parentheses refer to paragraphs of the Cavalry Drill Regulations, 1909. To simplify the discussion, the commands are given for movements towards only the right flank.

But there is another point in the application of the commands to which attention should be called. 1. *Column right*, 2. *MARCH*, are the commands which should be invariably used for the change of direction of any kind of a column; and yet in our cavalry drill regulations they are not always so used. Take for instance the squadron in double column of fours; to change direction, the commands are not, 1. *Column right*, 2. *MARCH*, but are, 1. *Right turn*, 2. *MARCH*. (663). In other words, the commands, 1. *Right turn*, 2. *MARCH*, which should be invariably used only for changing the direction of a line of any kind and continuing the march, are here improperly used for changing the direction of a column. And this error naturally leads to mistakes, for if the squadron is marching by the flank from line of platoon columns, a movement similar in a number of respects to a double column of fours, and the major wishes to change direction, he will be very apt to command *Right turn* instead of *Column right*. (658.) That is to say, in one kind of column he must remember, in changing direction, to use certain commands, but in another almost similar kind of column, to use totally different commands; all which would be obviated, if *Column right* were invariably used throughout the text to apply to a change of direction of a column of any kind. And it might be added, although of small consequence, that of these two columns the one with the narrower front changes direction by the commands, 1. *Right turn*, 2. *MARCH*. (See 663 and 658.)

Again, in the commands, 1. *Form echelon*, 2. *On first* (or such) **Platoon*, *MARCH*. (517), the *Form* is unnecessary. *Echelon* is just as expressive and is briefer and simpler. But it may be replied that if we drop *Form* in these commands, we should also drop it in the commands, 1. *Form line*, 2. *MARCH*, (519), which is objectionable in that it makes the preparatory part of the commands too short to be clearly comprehended on the drill ground. The reply is that these commands as given in the text are faulty; they should read, 1. *Form line*, 2. *On first* (or such) *platoon*, 3. *MARCH*. In forming echelon (517), we see that it may be formed on any platoon; and, consequently,

*The capital "P" here is no doubt a typographical error.

to be consistent we should be able to form line on any platoon. Indeed, in the regimental drill we find this principle followed; the commands are, 1. *Form line on* (such) *squadron*, 2. *MARCH*. (805). If the commands under discussion were written in the text, 1. *Form line*, 2. *On* (such) *platoon*, 3. *MARCH*, then we can readily see that in omitting the *Form* the preparatory commands would not be too short to be readily comprehended. Properly written the commands would then be, 1. *Line*, 2. *On* (such) *platoon*, 3. *MARCH*. Attention might here also be properly called to the fact that in forming echelon in the regiment the commands are divided into three parts (see 801); but in forming line in the regiment the commands are divided into but two parts, (804), although the phrase, *On* (such) *squadron*, is a part of both commands.

But as to the commands for forming echelon, there is still some further discussion necessary. The phrase, *On* (such) *platoon*, or, *On* (such) *troop*, or *On* (such) *squadron* is almost invariably used throughout the text to mean that the movement shall be made *on* or *from* this platoon, troop, or squadron. For instance:

1. *On* (such) *troop*, 2. *Extend intervals*, 3. *MARCH*. (659).
1. *On* (such) *troop*, 2. *Close intervals*, 3. *MARCH*. (659).
1. *On* (such) *troop*, 2. *Line of fours*, 3. *MARCH*. (629).
1. *Line of fours*, 2. *On* (such) *troop*, (such) *squadron*, 3. *MARCH*. (787).
1. *On* (such) *troops*, 2. *Close in mass*, 3. *MARCH*. (629).
1. *Line of platoons*, 2. *On* (such) *troop*, 3. *MARCH*. (677).
1. *As skirmishers*, 2. *On* (such) *troop*, 3. *MARCH*. (684).
1. *On* (such) *troop*, 2. *Assemble*, 3. *MARCH*. (691).
1. *Form line on* (such) *squadron*, 2. *MARCH*. (804).
1. *On* (such) *platoon*, to (so many) yards extend (or close), 2. *MARCH*. (563).

In all these cases, and in a number of others that might be cited, the movements are made *on* or *from* the designated platoon, troop, or squadron; but in the 1. *Form echelon*, 2. *On* (such) *platoon*, *troop*, or *squadron*, 3. *MARCH*, the move-

ment is not made *on* or *from* the designated platoon, troop, or squadron, but is made in part *by* them; the designated platoon, troop, or squadron being the first to move forward. In other words, if we form echelon in accordance with our drill regulations on such a squadron, that squadron moves forward, but if we form line on such a squadron that squadron stands fast. This inconsistency in the commands is necessarily confusing and often a source of error. Clearness and consistency require that the phrases, *On* (such) *platoon*, or *On* (such) *troop*, or *On* (such) *squadron*, should have a uniform meaning throughout the text. In the commands for forming echelon, therefore, it would be better to omit this phrase and substitute another for it; and since, in the echelon movement, the leading platoon is defined as the *base platoon*, (see 516), the commands might be written 1. *Echelon*, 2. (such) *platoon the base*, 3. *MARCH*.

Again, to break the squadron from line into column of fours to the front, the commands are, 1. *Column of fours*, 2. *First troop*, 3. *Right forward*, 4. *Fours right*, 5. *MARCH*, (609), which would be briefer, just as clear, and just as expressive, if the *First troop* were omitted; for, since the right of the first troop is always the right of the squadron, the insertion of *First troop* into the commands is unnecessary. Properly written the commands should consist of three parts, as follows, 1. *Column of fours*, 2. *Right forward, fours right*, 3. *MARCH*, and not of five parts as given in the text.

Again, if we wish to halt the squad, platoon, troop, or squadron, the commands are, 1. *Squad, (or Platoon or Troop or Squadron)*, 2. *HALT*. But if we wish to halt the regiment, the commands are not, 1. *Regiment*, 2. *HALT*, but are, 1. *Squadrons*, 2. *HALT*. (753). This, in itself, is not such a great fault, but nevertheless it is one of those many other inconsistencies which, through overtaxing unnecessarily the commander's memory, lead to confusion and error. Then again, too, it is a point that will be very apt to be overlooked by the regimental commander in studying his drill regulations; for, knowing what the commands are for halting a squad, platoon, troop or squadron, it would probably never occur to him but that the commands for halting a regiment should be, 1. *Regiment*, 2. *HALT*; and, consequently, he will give his attention to the study of the

more complicated regimental commands and probably never take note, until his attention is especially called to it, that the commands for halting a regiment are dissimilar to those for halting a squad, platoon, troop, or squadron. And it might be added that "his attention" would most probably never be "called to it" by his subordinates.

Again, to form the squadron front into line from column of fours, the commands of the major are, 1. *Right front into line*, 2. *MARCH*, and the commands of the captain of the first troop are, 1. *Right front into line*, 2. *Trot*, 3. *MARCH*, (614); and to form the squadron front into line from column of platoons, the commands of the major are, 1. *Right front into line*, 2. *MARCH*, but the commands of the captain of the first troop are not, 1. *Right front into line*, 2. *Trot*, 3. *MARCH*, but are, 1. *Right front into line*, 2. *MARCH*. (652). If the *Trot* were put in in both cases or left out in both, there would be little to criticise; but being as it is, it leads to confusion and error. Not that the captain of the first troop, after his attention has been called to the fact, will ever probably forget that the *Trot* is to be uttered in one case and omitted in the other; but that he will very often forget in which particular case it should be uttered; for there is no reason whatever that would warrant its inclusion in one case and not warrant its inclusion in the other, nor is there any reason that would warrant its omission in one case and not warrant its omission in the other. Before passing to another example, it should be remarked here, that since the *Trot* is used to tell in part the manner of executing the movement, it should not, by itself, form a separate part of the commands. If it is put in, the commands should read, 1. *Right front into line, trot*, 2. *MARCH*. Or, if it should be deemed better to change the form of these commands from two to three parts, and the commands of the major be changed to, 1. *Line*, 2. *Right front*, 3. *MARCH*, then the commands of the captain of the first troop should be changed to, 1. *Line*, 2. *Right front, trot*, 3. *MARCH*.

Again, the commands, 1. *On right into line*, 2. *MARCH*, are given in the text for forming a squad, platoon, troop, squadron, or regiment into line from column of fours. If given for a squad, platoon, or troop, each *set of fours* moves

on the right, but if given for a squadron or regiment each *troop* moves on the right. (613, 761). In the regiment, however, if we wish each squadron to move on the right, the commands are, 1. *On right into line by squadrons*, 2. MARCH. (762). Why then should we not in the squadron give, 1. *On right into line by troops*, 2. MARCH, and allow the commands, 1. *On right into line*, 2. MARCH, to mean throughout a movement of on right into line by fours? As the drill regulations stand there is now no way of forming the squadron or regiment on right into line by fours; that is to say, there is no way of forming them on right into line without inverting either the troops, or the squadrons and troops. Now, it is well known that not infrequently the squadron or regimental commander may wish, for review or other purposes, to form his command on right into line without inverting his troops or squadrons and troops. Indeed, there are, at times, serious objections to the inversion of troops, or squadrons, or both, and not the least perhaps of these objections is that an inversion always necessitates the change of the colors from one flank of a troop to another. And even in the squadron this, in the last three years, has become of increased importance, since under G. O. 165, War Department, 1907, squadron colors or standards are now to be carried at squadron drills, and upon all occasions when squadrons are detached from regimental headquarters.

It would therefore avoid an inconsistency and greatly simplify the movements, if the commands, 1. *On right into line*, 2. MARCH, from column of fours, were similarly executed in the squad, platoon, troop, squadron, and regiment; and if the commands, 1. *On right into line by troops*, 2. MARCH, and, 1. *On right into line by squadrons*, 2. MARCH, were made to apply to the movements of troops on the right and of squadrons on the right respectively.

Or if it should be deemed better to change the form of these three commands from two to three parts, then they should be written as follows:

1. *Line*, 2. *On the right*, 3. MARCH.

1. *Line*, 2. *On the right by troops*, 3. MARCH.

1. *Line*, 2. *On the right by squadrons*, 3. MARCH.

In the on right into line of a troop, squadron or regiment, from column of platoons, (503, 651, 745), practically the same criticisms and same remarks apply. In the troop the on right into line is by platoons; in the squadron and regiment it is by troops; and in the latter case the troops would be inverted and the colors would have to change their position from the left of the third platoon of the color troop to the left of the color troop; that is to say, they would have to pass in rear of the other two platoons of the color troop. But if the movements were executed in the squadron and regiment as they are in the troop, there would be no inversion and the colors would come into line in their proper place without any change of position.

We have just seen that under the present drill regulations a squadron or regiment can not execute on right into line from column of fours or column of platoons without inverting the troops; and while it is not insisted that the commands for these movements should be so written and explained as always to permit their execution without inverting the troops, it is insisted that they should be so written and explained as to permit, when desirable, their execution without inverting the troops.

Again, being in line of platoons, to extend or close intervals, the commands are, 1. *On (such) platoon, to (so many) yards extend*, 2. MARCH, and, 1. *On (such) platoon, to (so many) yards close*, 2. MARCH. (563). But being in line of platoon columns, to extend and close intervals, the commands are, 1. *On (such) troop*, 2. *Extend intervals*, 3. MARCH, and, 1. *On (such) troop*, 2. *Close intervals*, 3. MARCH. (659). To say nothing of the fact that in the first example, each set of commands consists of two parts and in the second of three parts, although exactly the same movements are to be executed in each case, it may be remarked that the omission of the word *intervals* in one set of commands and the inclusion of it in the other is a serious fault. It is another of the many instances of putting on the commander the burden of remembering. He must remember not only that the commands are different in the two cases, but that the word *intervals* must be omitted in the

extended order drill, and be included in the close order drill; and this, too, notwithstanding the fact that in each case he is doing exactly the same thing, namely, increasing and diminishing intervals. Properly written, these commands would be:

1. *Extend intervals, to (so many) yards, 2. On (such) platoon, 3. MARCH.* (See 563).

1. *Close intervals, to (so many) yards, 2. On (such) platoon, 3. MARCH.* (See 563).

1. *Extend intervals, 2. On (such) troop, 3. MARCH.* (See 659).

1. *Close intervals, 2. On (such) troop, 3. MARCH.* (See 659).

In this discussion the point has been made that unnecessary words should be omitted from written commands; on the other hand, it should be equally insisted upon that necessary words should not be omitted. For example, the squadron being in double column of fours, to form line to and on the right, (665), the commands are, 1. *Fours right, 2. Left troops on right into line, 3. MARCH.* Inasmuch as it is deemed necessary to designate the *Left troops* in the second part of the commands, since they alone execute on right into line, why should it not be deemed necessary to designate the *Right troops* in the first part of the commands, since they alone execute fours right? It is necessary; and unless this is done, the commands are not clear and, consequently, must lead at times to confusion and error. As soon as *Fours right* is uttered, and before the second part of the commands is uttered, all the troops expect to execute fours right; and not until the second part is uttered do the left troops learn that they are not to execute that command, but, on the contrary, are to execute an entirely different command. As they stand in the text, the commands in effect order a squadron to do a certain thing, then revoke the order in so far as it applies to a part of the squadron, and then order this part to do something totally different from what it was first ordered to do. Properly written, the commands would be: 1. *Right troops fours right, left troops on right into line, 2. MARCH.* Or if it should be deemed better to change the form of the commands from two to three parts, then they should be

written as follows: 1. *Line, 2. Right troops fours right, left troops on the right, 3. MARCH.*

Again, in extended order, if the captain wishes to assemble the line of groups or skirmishers he "takes post or sends the guidon where he wishes to form the troop," and commands: 1. *Assemble, 2. MARCH;* or if he wishes to assemble them by platoons, he commands: 1. *Assemble by platoons, 2. MARCH.* (565). But if he wishes to rally them by troop, he does not command, 1. *Rally, 2. MARCH,* but commands, *RALLY;* or if he wishes to rally them by platoons, he does not command, 1. *Rally by platoons, 2. MARCH,* but commands, *RALLY BY PLATOONS.* (566, 567).

Upon examination of these two commands for rallying a troop or platoon, it will be noted that though each is written in capitals as a command of execution, each is also a preparatory command since "it indicates the movement that is to be executed." (See 9). Why should these commands be written in this way? Why should they not be written 1. *Rally, 2. MARCH,* and, 1. *Rally by platoons, 2. MARCH,* as they are similarly written for the assembly? I am unable to answer; but I venture the opinion that it was thought that by writing them in this form the rally would be more quickly executed. Is this so? Let us see.

Practically all commands for drill movements consist of two parts, a preparatory command or commands, and a command of execution; and soldiers are taught and soon learn that a movement can not begin until the command of execution is given. After the command is given telling them what movement is to be executed, they invariably expect it to be followed by a command of execution; and so it is when the command *RALLY* is given, they naturally expect it to be followed by the command, *MARCH;* and especially is this true in this case, since the command *RALLY* will very probably be given immediately after the soldiers have been practiced two or three times in the commands, 1. *Assemble, 2. MARCH.* Expecting the *MARCH* after the command *RALLY,* the soldiers naturally wait for it, yet the instructor, well knowing the cause of delay, can not utter *MARCH,* for that would be in violation of the drill

regulations. He must then explain that RALLY is not solely a preparatory command, nor solely a command of execution; that it is both; that it is two in one; that it is a sort of a double action command; that it is not followed by MARCH; and that it must be executed the moment it is uttered. The explanation has probably caused a delay of several minutes, but had the MARCH followed the RALLY there would have been no delay.

But this is not all; prompt and correct execution requires every soldier to remember that MARCH is given after *Assemble*, but is not given after *Rally*. If he becomes confused, if he waits for MARCH after *Rally*, he will never execute the movement, or if he anticipates the MARCH after *Assemble*, he will cause confusion and error.

Attention should also be invited to the fact that the majority of the private soldiers of a troop learn their drill on the drill ground and not by studying the drill regulations; and that a spoken command gives the soldier much less information than a written command, since, in speaking it, there is no way to convey to him the fact that it is printed in *italics* or in CAPITALS—no way to convey to him the fact that it is a command of execution and not a preparatory command.

Thus far, in this case, the discussion has proceeded on the supposition that the instructor himself will make no mistakes in giving the commands; but this supposition is improbable, for though he will probably never forget, after his attention has been called to it, that the MARCH is to be uttered in one command and not to be uttered in the other, he will be very apt soon to forget in which particular case it is or is not to be uttered.

Again, since the command for rallying by platoons is, RALLY BY PLATOONS, it would naturally be supposed that the command for rallying by troops would be, RALLY BY TROOPS. But there is no commands printed in the Cavalry Drill Regulations for rallying by troops. There is, however, in paragraph 692 an attempt made to explain the matter, but there is nothing in the paragraph that fixes definitely the form of the major's commands. The words of the paragraph are, "To assemble or rally by troop, the major commands: 1. *Troops*,

2. *Assemble*, 3. MARCH, or causes the *assembly* or *rally* to be sounded." Now, it will be noted that there are but two statements in these quoted words referring to the rally. One reads: "To rally by troop, the major commands: 1. *Troops*, 2. *Assemble*, 3. MARCH." The other reads: "To rally by troop, the major causes the *rally* to be sounded." As to the first statement, it is well known that this can not be the meaning intended, and as to the second statement, it is well known that the *rally per se* is not sufficient. The word *troops* must be sounded also, otherwise there is nothing to indicate the kind of rally, whether by platoons, by troops, or by squadron.

Not from the English of the paragraph then—for nothing can be got out of that—but from inference and a knowledge of tactics, it may be assumed that the trumpeter is to sound *troops* and then follow it by sounding *rally*. But even if this assumption be correct, are we not still in the dark as to the correct form of the major's commands?

Are they, 1. *Troops*, 2. RALLY.

or, TROOPS RALLY.

or RALLY BY TROOPS,

or, 1. *Troops*, 2. *Rally*, 3. MARCH.

How simple this whole matter would be if the commands for *assembling* and *rallying* were written as follows:

1. *Assemble*, 2. MARCH.

1. *Rally*, 2. MARCH.

1. *Assemble*, 2. *By platoons*, 3. MARCH.

1. *Rally*, 2. *By platoons*, 3. MARCH.

1. *Assemble*, 2. *By troops*, 3. MARCH.

1. *Rally*, 2. *By troops*, 3. MARCH.

1. *Assemble*, 2. *On (such) troop*, 3. MARCH.

1. *Rally*, 2. *On (such) troop*, 3. MARCH.

To be continued.

NOTES ON THE PROGENITORS OF CERTAIN STRAINS OF THE MODERN AMERICAN HORSE.

BY VETERINARIAN COLEMAN NOCKOLDS, FIRST CAVALRY.

(Continued from the January, 1911, *Journal of the U. S. Cavalry Association.*)

THE earliest fossil animals known, to which it is possible by a series of modifications to trace the modern horse, are found in the lowest strata of the great lacustrine formations, assigned to the Eocene period, spread over considerable portions of New Mexico, Wyoming and Utah. The *Eohippus* of Marsh, a little animal not much larger than a cat, presents the most generalized form of the perissodactyle type yet discovered, as besides the four well developed toes of the fore feet, found in so many others, it has at least the rudiments of a fifth.

This naturally leads to the assumption that this must in its turn have been represented at a still earlier date by another form with all five toes complete, but direct evidence of this is at present wanting and so must remain another of the palæontological mysteries.

The animal most like the existing horse of the Miocene period was the *Anchiterium*, remains of which have been found in the fossil state in this country as well as Europe; this was succeeded during the Pliocene by the *Pliohippus*.

In these and other forms which flourished during the Cainozoic age the lateral toes, although containing the full number of bones, were much reduced in size, and did not reach the ground, but were suspended to the outside of, and rather behind the large middle one, something like the dew-claws of the dog.

Horses or rather horse-like creatures with feet formed like this were met with in the Pleistocene period, but then for the

first time appeared the true horse, in its development exactly, or nearly so, as we know it now.

Fossil remains of horses, differing but slightly from the smaller and coarser breeds of those now existing, are found in abundance, in the deposits of the most recent geological formations, in almost every part of America.

The metamorphosis of this horse-like animal of the Tertiary Period, to the horse of modern times, has been accompanied by a gradual increase in size.

It is impossible to judge the duration of the period, from the time when the horse became extinct on the American continent, and the date it was discovered, by Columbus, it is certain that the *Equidæ* of America must have once existed in great numbers and then have become entirely extinct.

The first modern horses ever landed in America were brought by Columbus on his second voyage to the West Indies in 1493.

The first landed on the mainland were those sent by Diego Velasquez, the Spanish Governor of Cuba, with Hernando Cortes, to whom he entrusted the conquest of Mexico, and who landed on the Mexican coast on March 4, 1519, with between six and seven hundred Spaniards, eighteen of whom were horsemen, and some pieces of cannon. The noise of the artillery, the appearance of the floating fortresses, which had transported the party over the ocean, and the horses on which they fought, all new objects to the natives, inspired them with astonishment, mingled with terror and admiration. After the conquest of Mexico, Cortes returned to Spain and was again sent out, with instructions to extend his conquests, and in 1536 he discovered the peninsula of California.

Pamfilo de Narvaez, a Spanish adventurer, one of the subordinates of Velasquez in the reduction of Cuba, sailed from that island in 1527 with a force of about 600 men and forty-two horses. He landed, probably, near Tampa Bay, Florida, and after a difficult and perilous journey inland returned to the coast, built rude boats and started for Mexico. The vessel that carried Narvaez was driven to sea in a storm and he perished. His lieutenant, Cabeza de Vaca, and others of the party reached land and made their way across the continent to the Pacific

coast; it is probable that the horses which they had were turned loose at different places along the route to shift for themselves.

During the month of May, 1539, a very richly equipped party of about 600 Spaniards, under the leadership of the Spanish Captain, Ferdinando de Soto, accredited with the honor of having discovered the Mississippi river, landed on the west coast of Florida; from point to point they wandered for four years, the line of their route seemed to have passed through Florida and Georgia, north as far as 35 N. lat., then south to the neighborhood of Mobile, and finally N. W. towards the Mississippi which was reached early in 1541. De Soto died and his body was sunk in its waters.

His men returned by water in roughly hewn boats, which took them to the sea in nineteen days; beyond a doubt their horses were left behind.

A large portion of the Americas were either discovered or conquered during a short period about this time by the Spanish, and in most instances they had horses with them.

Peru was conquered by Francisco Pizarro in 1531, who condemned the Inca, Atahualpa to death by burning, but finally had him strangled. In 1534 Mendoza, with the largest expedition that ever left Europe, entered the River Plata, and after landing, founded Buenos Ayres and explored the country between Paraguay and Peru. Rodrigo de Isla crossed the great plain of Patagonia during 1535. Alonso de Ojeda entered Colombia in 1499, and by the middle of the century it was fairly well settled by the Spanish. Venezuela, sighted by Columbus in 1498, was taken by the Spaniards in 1550. Paraguay was visited by Sebastian Cabot in 1528, who built a fort there called Santo Espiritu, and Asuncion was founded on August 15, 1537, by Juan de Ayolas, which place was made the capital of the Spanish possessions east of the Andes, and from it adventurers started in all directions.

In 1512 Juan Diaz de Solis entered the Plata and landed near where the city of Montevideo now stands, but it was not till 1729 that General Zavala conquered Uruguay, although the Portuguese had established settlements there.

The first Spanish invasion of Chili was led by Diego de Almagro in 1535, but he was compelled to retrace his steps, and

although this country was never really conquered by the Spaniards, they, however, arranged treaties which allowed them commercial relations and to settle in that country.

Texas owes its first settlement to La Salle, in 1685, and Louisiana to the same explorer in 1682. Its first colony, Iberville, was established in 1699. De Soto penetrated Alabama in 1541, which was the same year that he was in Louisiana, and the Spaniards covered a great deal of these territories, establishing missions and settlements, although the French predominated, and so at different times many horses from Spain were introduced at different points.

The horses of Spain, at the time of the discovery and conquest of North and South America, were at the zenith of their glory, their breeding tracing directly to the oriental, dam and sire, as the best thoroughbred does today. The Spaniards had realized the value of the careful selection of sires and dams as regards blood, substance and stamina, for obtaining best results. They had made use of those desert Barbs which had accompanied the Numidian cavalry, used by the Carthaginian family of Barca, the conquerors and rulers of all the Mediterranean and Atlantic shores of Spain, from Carthagen to Cadiz, as well as the Barbs, which the troopers of Hannibal used on their march from the Pyrenees to the Rhone.

These animals were eagerly sought after by foreign monarchs and breeders to improve the breeds of different European countries, as it was well known that they were superior in size and for racing and breeding purposes to the true born desert animal.

The wild horse of our western country and of the Pampas of South America is the direct descendant of the best type of the Spanish horse, the very animal that in a large degree made the thoroughbred what he is today. It is a well known fact that retrogression of breeds occur through excessive inbreeding, want of care, lack of nourishment and bad selection of progenitors, from all of which conditions the horses in the feral state in this country suffered. At the same time the mustang of America, if he can be found in the pure state today, is the result of the survival of the fittest of his race.

If in the place of allowing him to become almost extinct the

mustang had been fairly treated and given half the care that so many of the imported animals have had and his blood had been reinvigorated by the use of carefully selected sires, it is doubtful whether the American Thoroughbred Stud Book would contain the names of such horses as the Morocco Barb, Bryerly Turk, Godolphin Arabian, etc., to head the pedigrees of the horses contained therein.

Instead of this, great cold-blooded Normans or Percherons were in many instances used as a first cross towards improving the breed, and again the resulting monstrosity was bred to the same type, anything to have a colt, which accounts for the hundreds of distortions in the shape of horse flesh that one sees on the streets and in the ranks today.

Anyone that has had to do with a cayuse knows that it is the exception for one that has half a chance, in the shape of feed and care, not to pay for its keep. That in spite of its often being badly formed and disproportionately made, with its ewe neck, cow hocks, bad feet, ragged hips, often coupled too long, and bandy-kneed, there is still left the mark of good blood as seen by the shape and setting of the long, lean head, wide nostrils and fine mane and tail. It is often condemned for viciousness, in the shape of bucking and fighting, which in itself, after the long neglect, shows that the spirit is still there. After breaking, the intelligence, staying powers and ability to live where the more pampered but coarser bred horse would starve is hardly ever praised, but expected as a matter of course; it is the result of heredity.

If judgment had been used for the improvement of this foundation stock, instead of importing a conglomeration of foreign breeds for experimental purposes, we would be the possessors of a type of saddle horses unexcelled by any others for traveling long distances at a good pace and carrying a fair amount of weight on scanty forage.

A French lawyer by the name of M. D'Escarbot brought horses with other domesticated animals into Arcadia in 1604. Two years later the French extended their colonization into Canada and took horses with them. Although the race is somewhat degenerated, most probably because of the inclemency of

the climate, traces of the Norman and Breton can still be noticed in their horses.

When the English ships arrived at Jamestown, Virginia, in 1607, two years after the first settlement was established on the James river, they brought, besides swine, sheep and cattle, six mares and a horse. In 1629 Francis Higginson brought from the county of Leicestershire a number of horses and mares to the plantations near Massachusetts Bay.

New York received its first horses, imported by the Dutch West India company, in 1625. These were probably of the Flanders breed. If so but a slight trace of them is left.

Horses were getting quite plentiful in Virginia as early as 1657, and an act was passed that year prohibiting their exportation.

As early as 1750 the French of Illinois possessed considerable numbers of French horses, and since that time many pure horses of distinct breeds had been imported into this country.

It is quite evident that the original stock of the American unimproved horse is a result of a mixture of breeds, the French, Spanish, Flemish and the English. It was the exception for any one strain to remain intact until recently.

There existed a lamentable carelessness as to the preservation of pedigrees of animals, with the exception of the thoroughbred, which naturally resulted in irretrievable confusion. When the value of blood and hereditary qualities began to be admitted it became the custom to manufacture spurious pedigrees, so that an animal that was pleasing to the eye or that had run well would be used to breed from. It is a well known fact that in no instance has it been known that one of what might be called a life performer has left behind him an animal that has shown any qualities of particular merit.

In New York state the early importation of the thoroughbred, the first in 1763, and the constant support of horse racing, so changed the original Dutch or Flemish stock that the characteristics of her horses resembled those of the English race, with a strong cross of good blood.

The early French horse was brought over before there was a stud book in France, so that the importers gave whatever name to the breed they chose. Many were brought from the

old province of La Perche, some purchased in Paris and some from no one knows where. The best were brought from Limousin and Normandy, and these appeared to have the general characteristics of the Percheron.

The origin of the early French horse is traced from the horses of the cavalry, of the Saracen chief, Abderame, who was defeated, with a loss of some 300,000 warriors slain, by Charles Martel, at Tours, in 732. These horses were of oriental blood from the east and as time went on and the necessity arose for horses that could carry heavy burdens, these horses were increased in size and weight by crossing with draft horses from England and Denmark.

Up to 1820 the heavy horses of France lacked the symmetry and finish which they now possess and a systematic effort was made by the French government to eliminate the coarseness which had been introduced by the free and injudicious use of the draft blood and which succeeded in producing the present type.

The Flemish, Clyde, Shire and, in fact, all heavy types of draft horses, originated, according to most authorities, from the wild black horse of Europe. Pennsylvania was the state in which the draft horse type predominated.

The majority of horses imported in the early times to Virginia, Maryland and the Carolinas were thoroughbreds. This caused a large number of animals required for farm and other work to be weedy and undersized.

In Louisiana and many of the western states the Spanish, French, with a mixture of the English strains, were in the majority.

The Cleveland Bay was a very popular strain in some localities. He originated in the counties of York and Durham, in England, and was what might be described as a heavy, slow coach horse. They were largely employed for farm work and were rather too stiff for hunting and too light for coaching. A Cleveland Bay horse has been known to carry more than seven hundred pounds sixty miles in twenty-four hours. There is still a type of these horses in the United States, which can be looked up upon referring to the American Cleveland Bay Stud Book. In England the Cleveland as a distinctive breed is practically extinct.

In the early days the ambition to produce a horse that was merely used as a draft animal was offset by the use of oxen, which supplied the place of mere weight haulers, and every horse was required to be of some use as a roadster. As a matter of fact, for docility, temper, soundness of constitution, endurance of fatigue, sure-footedness and speed, the American roadster is not to be excelled, if equaled, by any known horse in the world.

There was no distinctive type, although in certain localities two or three families merited reputations for certain peculiar qualities, such as the Narragansett pacers, the families known as Morgan and Black Hawk, the Canadians and Trotters.

Of these the Trotters are the only ones that have developed into a distinctive American type, although the Morgan of a modified type is kept up by the American Morgan register.

The Narragansetts were the only ones that could claim to be held a distinctive family. They transmitted their qualities in line of hereditary descent, without further crosses, with higher or hotter blood. They were descended from the Spanish pacing jennets of Andalusia and became a class by themselves, all natural pacers, but the breed is now extinct.

The Morgan is a well known American strain. There is considerable difference of opinion as to the origin of the Morgan horse. Some authorities advance the opinion that they are the descendants of a horse that was stolen or taken from a British officer during the Revolutionary War; others state that the origin of the breed was a horse named "Morgan," the property of Mr. Justin Morgan, bought by him at Springfield, Mass., in 1795. His sire was True Briton, by an imported horse called "Moretown's Traveler," among whose ancestors are found "English Eclipse," "Childers" and the "Godolphin Arab." True Briton was stolen from General Delancey while with a band of refugee troops on Long Island. The dam of the original Morgan horse was more than half thoroughbred. The horses of this strain attained considerable notoriety throughout the eastern states as good all round general purpose horses.

The Black Hawk strain came from a family in which the thoroughbred predominated.

A type, known as the Conestoga, developed in Pennsylvania. It came of a cross between the English and Dutch draft horse. It was well adapted to draw heavy merchandise over primitive roads, and to the pioneer farmer it was a decidedly useful and well marked variety, but through bad selection and inbreeding has become extinct.

The Canadian, as a special variety of breed, was well known. They were mainly of French descent and usually smaller than the original French Norman horse. They were an extraordinarily hardy race, especially free from diseases of the feet, and well able to withstand the rigors of the northern climate. They rarely exceeded fifteen hands, more often below that height. They were long lived, easily kept, and were noted for their compactness and vigor of constitution. This breed has been lost sight of through the admixture on one hand of the heavy draft type and on the other with the blood of the light roadster.

The only remaining, what might be termed true types of the American horse, are the trotters and the saddlers.

That wonderful production of the American trainer, the trotting horse of modern times, is the result of an admixture of breeds, chosen from amongst the vast array of roadsters. The old long distance trotting horses can trace their descent from the thoroughbreds Abdallah and Messenger, and run back through their sires to old Messenger. There are many that are in no way directly related to the thoroughbred. The development of speed in the trotting horse, through systematic breeding and training of experts in that line of horsemanship, has been and is one of the great industries of the United States. The thoroughbred Messenger was imported into Philadelphia from England in 1788. He was a gray stallion by Mambrino; 1st dam by Turk; 2d dam by Regulus; 3d dam by Starling; 4th dam by Fox; 5th dam by Bay Bolton; 6th dam by Duke of Newcastle's Turk; 7th dam by Bryerly Turk; 8th dam by Taffolet Barb; 9th dam by Place's White Turk. He was 8 years old when imported. He was at the stand for twenty years in the vicinity of New York and Philadelphia, serving a number of thoroughbred mares, but a far greater number of cold-blooded mares. The larger number of the trotters of

today are descended from those cold-blooded mares, although many of the true thoroughbreds from this sire also developed the trotting instinct.

Several reasons can be given that led to the development of the trotter. Previous to the Revolutionary War, although a large number of thoroughbreds were imported, there were regular established race courses only in the states of Virginia, Maryland and South Carolina. The Northerner took but little interest in the breeding of race horses until several years after the war. The result was that the breeds of horses became very much mixed. Those that would have been used for hunting, park and parade purposes in other countries were hitched to light vehicles and driven.

The Puritans looked upon the running of horses as a sinful pastime, and this gait therefore as useless and dangerous, with the result that everything was done to discourage the breeding of a horse which was almost certain to be used for racing.

The trotting gait was useful and not liable to lead young people astray. It was also contended that the practice of running horses in races was cruel. Perhaps it was not because it gave pain to the horses, but that it gave pleasure to the people who upheld it, that racing was prohibited by the Puritans. Anyway, there is more cruelty practiced on the roads and trotting courses daily in matching horses against time and overdriving them against one another than there is yearly on all the race courses in the world. No doubt it was the same in those days as at the present time. The Puritans did much to encourage the improvement of the trotter. From the admixture of the hot blood of the East with the best specimens of the mixed blooded horses of the North has come, when it has been judiciously mingled, an immense number of superior roadsters, horses of courage, endurance and speed such as no other country possesses.

The trotter is usually not a good saddle horse. Hence roadsters have been bred in greater numbers and perfection in the northern and western parts of the United States than in any other place. The comparatively fine condition of the roads in summer make it possible for two or three persons with one horse attached to a light vehicle to travel as rapidly as the

equestrian and far more comfortably in bad weather. This fact has made it difficult in those regions of the states where trotting prevails to procure a handsome, well-broken, well-bitted galloper of stylish action, a good turn of speed and a weight carrier, while it is easy to find an undeniable trotter, of equal appearance and performance, that will go his mile in the thirties, or his fifteen miles in the hour at a square trot.

The popularity of trotting in this country, the great excellence of trotting trainers, drivers and riders arising from that popularity, and the employment of all the very best half and three-quarter bred horses in the land for driving and trotting purposes accounts for the wonderful superiority of the American roadster.

The effect of all this and probably the results of the admixture of breeds has produced the all-purpose horse of America—omitting only the hunter, park or parade horse, for which there is but a limited demand—that cannot be equaled by any country.

The American saddle horse is truly an American product. There were no Puritans or roads for light vehicles in Kentucky when Daniel Boone, a native of Pennsylvania, then living in North Carolina, led a company of men into that state during the year 1769, or when Colonel Knox with his "Long Hunters" explored its middle and southern regions. There were a considerable number of settlers in the state when "the assembly of Transylvania" was organized in 1775. The only means of traveling in those days in Kentucky was by foot or on horseback. Practically everyone rode, and the Southerner, always partial to the running horse, developed the saddle horse from that breed, but the saddlers of those days were not the high stepping, stylish animals of the present.

Some of the best foundation horses of this type came from Canada, where the pace or ambling gait had been encouraged. Some came from the thoroughbreds and half-bloods that were imported from Virginia in 1830. These were crossed and produced a breed more useful for saddle purposes than any bred in Kentucky before. The thoroughbreds of some strains made the best cross with the pacers and native strains for the production of horses with the saddle gaits. Those that were

best suited for the purpose were selected and bred in and in. A horse named Denmark was one of the most famous. Three of his sons were notable under the saddle and winners in the show ring. A horse known as Gaines' Denmark was the best and stands at the head of a family. Many of the best Canadian pacers were crossed with Denmark, and the mingling of the thoroughbred trotting blood and old "side-wheelers" was the foundation of the grace and gaits of the American saddle horse.

Besides the Denmark family, Cabell's Lexington (a Morgan strain), Dremon, Waxy, Eureka, Dillard and others have obtained recognition as saddlers. Cabell's Lexington and Dremon were the progenitors of distinct family types; both showed their Canadian blood by their heavy manes and tails. Dremon and John Waxy, son of Waxy, bore strong resemblance to the Canadian horse, as was shown by their sturdy build.

With such composite blood, Kentucky early became famous for saddlers which were equally good in harness. These horses were the product of the bridle paths of the South and were trained in gaits most comfortable to the rider and easy on the horse—walk, trot, canter, running walk, fox trot and slow pace. Men of the early days in Kentucky had to be constantly in the saddle, often many hours each day, and gaits which the horse and rider could endure for long periods at a time were necessary.

Although the saddler is pre-eminently a creation of Kentucky, many of the Southern states have contributed toward his improvement. He has served his country for more than a century. He carried the chivalry of the South in the Civil War. His superiority was proven, as can be seen by the cavalry records of that time. He was used by Morgan's raiders on their bold dash northward, and during the Revolution the men of "Light Horse Harry" Lee and Marion were mounted on his progenitors.

Many stallions of this class were sent to Missouri, Tennessee and Illinois. Missouri got the most, and is now nearly equal to Kentucky in the number and quality of her saddle horses. Many are now being raised in Ohio, West Virginia, Virginia and Texas.

The first saddle horse came rather by chance than design, but experience with other breeds has taught the Kentuckians that to get the best type of horse for a special purpose it must be bred for that use. This horse has been bred for the riders' comfort, and while he can gallop with a fine open stride and jump well if needed, his peculiar merit lies in what is called in the North "artificial gaits," but what is known in the South as the "natural gaits."

A first class saddle horse is expected to go at command six or eight different gaits. There are several fancy gaits besides which are modifications of the others, depending on the conformation of the animal and the skill of the rider.

The following gaits are recognized for entry in the American Saddle Horse Breeders' Association Register: Walk, trot, rack, canter, running walk, fox trot and slow pace. The single-foot is an intermediate between the trot and a pace.

The type produced by Black Squirrel, whose sire was Black Eagle, is perhaps the best for grandeur and beauty.

The pacer may be considered as belonging to the same class as the trotter. Certainly nothing can be said in his favor as a pleasure horse, although on a smooth road or on the track the pace is a shade faster than the trot. Until recently pacers were chiefly used as saddle animals. The old-fashioned pacer, once so popular for that purpose, had a broken gait like some of the easy movements of the gaited saddler. They lack the beauty of form and are of a poorer conformation than the trotter. The staying qualities of the track pacer are said to be due to the blood of the thoroughbred in him.

Trotters and saddlers may be said to be the only real modern types of strictly American production. The general purpose horses with all their legions run to no special type. The best part of all these is due in some manner, however remote, to the infusion of thoroughbred blood which has at different times gained access to their veins.

Too much cannot be said in favor of the American general purpose horse. Let him be of whatever shape or size he may, he cannot be replaced for the uses to which he is put and the various kind of duties which he has to perform. If it were not for the fact that there are places and uses for animals

that are more sightly, intelligent and possessing a larger amount of controllable spirits it would be useless to look further.

He was and is the right thing in the right place. Compared with the animals used for the same purposes in foreign countries, there is nothing to equal him. He has a disposition that is unique. It is the exception to find a professional horse breaker in this country, while in other countries they are to be found in every village. The American animal is raised gentle. In every city and settlement in the United States one can see horses, saddled or hitched to vehicles, left alone for hours, regardless of weather or conditions. The horse of other countries, under like conditions, would become frightened and bolt. Being behind the bit has its advantages; it does away with the necessity of having to keep a trained driver or rider or an extra man with the delivery wagon to hold the horse, or in tying the animal up every time it is necessary to stop and leave him.

No particular class of men, but in general the whole public, the mechanic, the butcher, the tailor or the grocer at the corner, is just as likely to own his fast nag that can go a mile down in the thirties, or carry him to the park or fair on his back, as the millionaire.

It seems remarkable that horsemanship, although so general, is in such a lamentably low state, especially in the northern and middle states.

In most instances the dealer and owner alike consider that all has been done that can be done, or that it is desirable to have done, when it has been demonstrated that the animal can go fast, without the slightest reference to the how. The style or form of going, the ease or hardship to the rider or driver, is nothing.

It is extraordinary that, however admirable the qualities of their natural gaits, style, action or adaptation for the saddle or harness, the buyer does not meet one in a hundred which has received the slightest artificial education or which has the rudiments of a mouth, that *sine qua non* in a finished animal. They have not the slightest knowledge of paces or the least idea of carrying its crest up, its chin to its chest, or its haunches under it. If the horse has received even the rudiments of an education, it is recommended as something extra, wonderful, as hav-

ing high school manners, etc., instead of being what would be considered in other countries as the usual thing, unless it be an unbroken colt.

In like manner, riders (and this unfortunately is not confined to civilians), if they can pound their beasts along, getting the best possible out of him, laying himself back in his stirrups, hanging on by the reins, or, fortunately for the horse, if the usual curb bit is used, held on by some mechanically built contrivance, designated a saddle, and if with the exceptional saddle and double bridle or plain snaffle, steadying himself by the eternal running martingales, and bearing a dead pull on the snaffle bit, the horseman esteems himself and is esteemed by his admirers a perfect equestrian.

Yet put him on a neatly broken horse, with a spirit that will fire as quickly as gunpowder to the spark, with a mouth of velvet, obedient to the slightest aid; on such a horse, with a curb, no martingale or cavesson whereby to hang on, and ten to one his horse will jump from under him at the first capriole or soubresault. At all events, he will sit him as gracefully as a sack of meal would.

The finished rider finds it hard work and rarely ever succeeds in making the ordinary general purpose horse an efficient mount, but this animal can be ridden by the man whose hands are not independent of his seat, and gives pleasure to the masses as well as allows indifferent riders to be drilled mounted.

The great differences in this chance combination of breeds and his analogy abroad lies in his inferiority of height of the forehead, in the loftiness and thinness of the withers and in the setting on and carriage of the neck and crest, while he is superior in the general development of his quarters, in the let-down of his hams, and in his height behind, often inclining to what is known as goose rump.

This explains the fact that it is not as necessary to use the breast strap on the majority of horses that are ridden for all kind of purposes here. It is the exception to see horses ridden without breast straps abroad.

Perhaps the most noticeable thing in this class of our horses is their surefootedness and freedom from stumbling. It is the exception to see horses with broken knees on our streets,

whilst abroad the majority of animals used for public purposes, as for hacks, light delivery, and livery, both saddle and draft suffer from broken knees to a more or less extent.

These conditions are perhaps due to the larger number of rough pastures, with broken surfaces and stumps still remaining, than are found in the longer cultivated, more finished fields in Europe, which teaches young horses to bend their knees and throw their legs out more freely while playing with their dams in the field, and also to lift and set down their feet more carefully.

This freedom from stumbling may also be due to the animal not being worn out by prior service, as is the case with so many of the foreign general purpose horses, which are often used by rich owners and considerably worn before being sold into more menial service.

The American horse has a better temper and does not suffer from that irritableness, which in some cases amounts to viciousness, that the foreign animal does. Perhaps this is due to the less high strain of blood and the greater degree of kindness with which they are treated when being broken, and the lack of vigorous grooming which any but the running horse and trotter in training gets in this country.

It is certain that the proportion of kickers, bolters, inveterate shiers or balkers, are in an immeasurably smaller proportion in this country than abroad. One hardly ever sees a furious, biting, striking, screaming brute, whom he cannot approach but at the risk of limb or life, in an American horse of any class or condition.

No doubt the way horses are treated abroad, the pampering, high living, excessive grooming and general maintenance of horses in an unnatural and excited state of health and spirits, has an injurious effect on the general temper of the animal.

If it have any injurious effect in provoking the animal to resistance, rebellion or caprice, the rest soon follows, for the rebellion or caprice of the animal constantly calls forth the violence, the injustice and cruelty of the groom.

By these means a casual trick is confirmed into a depraved

habit, and a playful, mischievous creature transformed into a vicious, savage devil.

The general purpose horse of America is superior, not in blood or in beauty, but in hardihood, in speed, in docility and in good temper, to any race of general purpose horses in the known world.

(To be continued.)



SEATS AND SADDLES IN CONNECTION WITH SORE BACKS.

BY MAJOR T. BENTLEY MOTT, FOURTH FIELD ARTILLERY.

THE Cavalry Equipment Board, now in session at the Rock Island Arsenal, having requested suggestions from all mounted officers as to improvements in horse equipments, etc., the following has been submitted for their consideration:

It is impossible for me to comply with the request of the board for statistical answers to the questions which their letter asks or implies, especially with regard to sore backs, yet I may as well give the board the benefit of such knowledge as I have already on this question, especially as during the ten years that I have known and seen something of European cavalry, I have tried to comprehend the good and bad points of their system as compared with our own.

In the first place, I think it is not out of place to remind the board, even though it undoubtedly has already remarked this point, that all appreciations as to horses, saddles and methods are likely to be extremely personal and complicated by prejudices so subtle as to escape our own detection and so tenacious as to frequently upset our fair-minded intelligence. We all start out with preconceived notions without realizing it. For example, it would be almost useless for a partisan of our hooded stirrups to try to convince a French or German cavalryman that it was superior to his own steel stirrup. He would say it is too hideous to think about, and he would refuse, therefore, to think about it impartially.

Similarly, if the advantages of our saddle without leather skirts were presented, the English or French officer would say it soiled the trousers and brought two hot bodies (the man and the horse) into intimate contact. Further argument would be difficult.

On our side, I have observed in many conversations with American officers and enlisted men an equally strong prejudice when discussing the relative merits of the close seat and the rising seat. This attitude has unquestionably changed somewhat in recent years, but the great mass of our officers, I believe, still consider rising to the trot a mere fad, based on the desire to be "stylish" and having no real intrinsic merit. For many years the officer who used the double bridle was subject to the same imputation. "He thinks it swell to use double reins," it would be said, and the fact that each rein led to a different bit, and each bit had its uses, was generally lost sight of.

I beg leave to here insist somewhat on the discussion of the close seat and the rising seat, because if the Board desires to make useful comparisons between our saddle and its effects with European saddles and their effects, it must keep constantly in mind the system of riding used with each saddle.

The Board has on hand, at the arsenal, saddles of all countries. Speaking only of Europe, every one of these, except the Cossack saddle, is intended to be used by a man who rises to the trot. This is important to keep in mind, not only because of the effect upon the horse's back, but because it has a determining influence upon the way of carrying the rifle or carbine.

The Cossack saddle, the seat it gives rise to and the sort of horses—or, rather, ponies—habitually used with it, are familiar to all who have seen the Cossacks in various Wild West shows. It does not seem suited to us, but I know too little of its good qualities to judge intelligently, and I do not think this or any other saddle should be ignored in a thorough and scientific investigation of the question. Its friends should be heard. I can only bring one idea to the discussion: in the Russian army only Cossacks (*i. e.*, irregular or militia cavalry) use this saddle. The dragoons and cuirassiers (regular cavalry) use the European saddle, not dissimilar to the French dragoon saddle. Therefore, this saddle seems condemned in its own country. But it should not be forgotten that Russians, above all, the best class of very intelligent Russian officers, are the

least competent horsemen to be found in any country I am acquainted with, and they rarely ride except when they have to.

All the other saddles and the equipment devised to go with them anticipate that the man should rise to the trot. This has not been a blind following of tradition; on the contrary, it has been a gradual growth, embracing one country after another, until all now accept this system as least fatiguing on man and horse. Even England, which, in this matter as in everything else concerning the horse, has been the model for all Europe, except Southeastern Russia, even England shows a gradual progress of ideas and of practice in this matter. It is not so many years ago since all English cavalry was taught to sit the trot as well as to rise to it, and it was formally prescribed that troops passing in review must sit close.

In recent years, with the abolition everywhere of all movements not essential to the soldier's business in campaign, this requirement has been revoked, and English cavalry now marches past rising to the trot like all Continental cavalry; but I can still remember the jokes and sneers which used to appear at the expense of young soldiers pounding their leather when trying to sit close at reviews.

If I remember correctly, one of the last countries to abolish the close seat and adopt the rising trot was Austria. It is significant that in making this change, the term adopted to describe the rising seat is "leichstreiten," or "easy riding." Anybody interested in this subject would find very instructive the reasons given by the Austrians for adopting the rising seat.

There can be little doubt that this gradual adoption of the rising seat resulted from the exactions of universal service and short-term enlistments. When cavalry soldiers served from seven to fifteen years, it made little difference what seat was employed, for each man was trained a long time before he was considered a competent soldier fit for service, and he generally rode the same horse for five, six or eight years. But when the three-year term of enlistment was almost everywhere adopted on the Continent, means had to be devised which would enable a captain to make fairly serviceable horsemen in the course of one year's hard work.

The solution of this problem is within the memory of all. In the infantry every unnecessary movement was cut out, parades and ceremonies abolished, and the soldier merely made ready for the business of war. In the cavalry, along with the creation of schools of equitation for officers and after much experiment, among other measures for quickly preparing a recruit to take a useful place in his squadron, the rise to the trot was adopted both as a protection to the horse and as a saving of time in instructing the man.

If the detailed reasons which impelled various countries to make this change are desired by the Board, they can possibly be had in reports of commissions and the literature of the subject dating back some twenty years; but I think the above outline can be accepted as giving the fruit of these experiments and studies. Certain it is that while many countries have changed from the close seat to the rising seat, none has done the reverse. The same is true of individuals.

I know many officers of our service who were educated solely to the close seat and who, for one reason or another, began to practice the rising seat. As time went on, they used less and less the close seat and more and more the rising seat, until finally they never, from preference, sat the trot. On the other hand, I have never known or heard of a single case of a grown man who had learned to ride using the rising seat, and who from preference later changed to the close seat. There must be some good reason for these facts.

I may be now excused for citing my own case, as it seems in point. I learned to ride, at the age of 6, sitting the trot—or rather the pace and then the trot. I went to West Point barely 17 years old and graduated believing any man an affected Anglomaniac or a soft, unathletic sissy who rose to a trot. On graduation leave I used to ride the hardest trotting horse I could find, sitting the trot, and I was convinced that all my Virginia friends and old schoolmates must be admiring my magnificent military seat. I rarely thought of the amount of undue pressure I put on the cantle and the horse's mouth; also the fact that I was 21 and had a superabundance of energy trying to find an outlet quite escaped me in my pity for what I considered an effeminate form of riding.

I was merely the average West Point graduate, crammed full of commencement compliments, and satisfied that I had received the most complete education in horsemanship, as well as everything else, that it was possible to acquire on one poor planet.

This state of self-satisfaction continued for six years, when, having bought a really fine War Cry hunter, I began to do some jumping and to practice on the English saddle. For eight years I regularly practiced riding the McClellan, the Whitman and the English saddle. But I found that I gradually grew to dislike the McClellan, and rode either the English saddle or the Whitman, and that on the latter I rose to the trot oftener than I sat it. After living in France and Russia five years and using nothing but the English saddle, I went to Fort Riley, where I resumed riding the McClellan and Whitman as well as the English saddle. Here I diligently experimented with all three in hot and cold weather, and I found that I consumed much greater energy when sitting the trot than when rising, and this on all three saddles. In hot weather sitting made me perspire profusely, when rising did not; in cold weather I used to sit the trot to get warm. As for sitting square and not varying the angle of the body, the line of pressure, I found that when fatigued I was more likely to offend when sitting the trot, and unless the horse had a very good mouth there was more of a tendency to use it as a point of support with that seat.

This observation of my own peculiarities was confirmed by watching the men, who never trot if they get a chance to gallop, especially in hot weather. Orders had to be issued at Fort Riley, for the garrison and for the maneuver camp, prohibiting mounted soldiers from galloping their horses on the hard roads, so general was this tendency. This tendency does not exist in France where enlisted men rise to the trot.

This history of my own case is offered as an illustration. As a man grows older, he naturally takes any given form of exercise less violently than in the superabundance of youthful vigor and enthusiasm. He saves himself. The same thing is true of all men fatigued with previous days of marching and anticipating the tax of subsequent demands. Very few

officers of our mounted service over 50 or 55 years old ride for pleasure; certainly very few had this habit five years ago, and when they did ride, how many of them ever kept up the trot for, say, thirty minutes at a time?

I, for one, believe that these peculiarities of our older mounted officers spring chiefly from the discomfort which the average man of that age experiences when sitting the trot on the McClellan saddle—the only seat and the only saddle known to the vast majority. Of course, I do not forget that most marching is done at a walk, but most pleasure riding is done at a trot, unless soft bridle paths in abundance make much galloping the rule. The man who does not enjoy a trot usually does not enjoy a ride, hence usually such a man never takes one unless forced to; that is, he is not a useful cavalry soldier.

Now, the ideal cavalry saddle is, of course, the one which enables the longest march to be made with the least fatigue to man and beast, but in order that both may be retained so as to be ready for this effort at any moment, it seems important that the same seat be used when riding for exercise and pleasure as is used in campaign. All over Europe officers habitually ride the English saddle when out for pleasure. This, to a certain extent, is a fad modified by the fact that this saddle is lighter; but it makes no *military* difference, because the man uses exactly the same seat on his military saddle.

This is not the case with us. If our officers ride for sport, exercise or amusement on the English saddle, it is a complete change from the military seat, and I can see no advantage in this arrangement. I say this after twenty years of impartial trial. I believe a soldier should be taught one seat and only one: the best all-around seat for his business. While it may vary in details for various occasions, the principle of his seat should remain the same.

As to what is the best all-around seat for our army, opinions will naturally differ; I have given, perhaps at tedious length, my reasons for thinking that our present close seat is and always will be unsatisfactory. I believe that the same considerations which impelled other nations to give up that seat should decide us to abolish it. We should certainly not change because they changed, but the fact that we alone have

retained a seat long since abolished in every other country worth naming, taken together with the fact that a most unsatisfactory situation as to horsemanship has long prevailed in our army, should make us ready to attentively examine the state of affairs in other services where horsemanship flourishes.

If, then, we decide to change our seat and enforce the rise to the trot, we have got to change our saddle. I have not experimented enough to have a fixed opinion, but all that I do know leads me to believe that the present saddle, even with the stirrups hung further forward, is not designed correctly for the rising seat. However, that is a relatively simple matter to arrange when once a decision is reached on the main point, which is, shall we continue to use, teach or require the close seat as at present, or shall we adopt and teach recruits solely the rising seat.

If we continue to use the close seat, comparison with European cavalry in the matter of sore backs, etc., is made more difficult, and the question falls a good deal from the domain of scientific investigation into that of personal impressions. Some years ago I saw it stated that careful experiments had been made by the Cavalry Board in Paris with a specially constructed machine for determining the relative pounding effect on the horse's back of a man sitting the trot and of a man rising to it. The comparison was made with good riders and with poor riders. The results were stated to be favorable to the man who rose to his trot. If I can get the official results of these experiments, I will send them to the Board, but the fact is worth relating as showing the spirit in which the subject was investigated in France.

The term of enlistment of French cavalry soldiers was lately reduced to two years. The vast majority of the recruits have never had a leg over a horse, and yet at the end of six months' training these men give a very good account of themselves, and at the large maneuvers, ten months after enlistment, their hands and seat were positively astonishing to me. This is due to good system and careful and progressive training under instructors who know their business.

If I have dwelt so long upon this matter of the seat, it is because I believe there is no question before the Board so

important to decide. Upon the conclusion reached depends much of the other work this Board is called upon to furnish.

Take now the matter of carrying the rifle or carbine. We will leave aside crossbows, for we have no troops in any way corresponding to them. They carry the carbine hung in a basket on the left side behind the thigh, the rifle being in a similar place on the right side. This is because the custom makes it impossible for a man to carry the carbine on his back.

All other French cavalry, dragoons and light, carry the carbine slung on the back by the ordinary gun sling. It is slung up quite easy to the man and a small leather web holds the stock to the left behind and keeps the gun from jolting

horse suffers less than if this loose weight were hung on one side of his saddle.

It can be seen then how difficult it is to make a useful comparison between the tendency of our saddle and that of the French saddle to make sore backs. The French saddle is much heavier, has a thick padding next to the back and is used with a blanket the same as ours. But the carbine is not slung to it, except in the crossbows, the man has a different seat on it and the rest of the gear is differently arranged. The crossbow, it is true, carries his carbine on the saddle but he is a big man loaded with a heavy coat, sword and scabbard, his horse is a big animal carrying 300 lbs. and carrying what I

important to decide. Upon the conclusion reached depends much of the other work this Board is called upon to furnish.

Take now the matter of carrying the rifle or carbine. We will leave aside cuirassiers, for we have no troops in any way corresponding to them. They carry the carbine hung in a boot on the off side behind the thigh, the sabre being in a similar place on the near side. This is because the cuirass makes it impossible for a man to carry the carbine on his back.

All other French cavalry, dragoons and light, carry the carbine slung on the back by the ordinary gun sling. It is strapped up quite snug to the man and a small leather tab holds the stock to the belt behind and keeps the gun from balloting. This carbine in length and weight is about the same as the one our cavalry was armed with. Now, it would be quite impossible for a man to carry a carbine on his back if he had to sit the trot. He would soon be worn out, for French cavalry marches a great deal at the trot. With the rising seat the carbine thus slung does not bother a man any more at the trot than at the gallop.

Whether a rifle the length of ours would be much more inconvenient to carry thus, I cannot say. The French do not anticipate, as far as I can learn, arming their cavalry with rifles. The matter is not discussed, even in the innumerable military journals. The chief role of French cavalry is considered the combat mounted; fighting on foot is occasional and accessory, and the sentiment for mounted action as opposed to dismounted is now on the increase rather than on the wane. Eight years ago the reverse was the case.

Therefore, no satisfactory answer can be given to the question propounded as to how the rifle would be carried if the French adopted it for their cavalry. However, it is interesting to note that while about one-third of their cavalry regiments carry the carbine hung to the saddle through necessity (cuirassiers), no intention is evident to make the same arrangement for the rest of the cavalry. In other words, the French consider it preferable to carry the gun slung on the man's back, if it be possible, and long experience shows that it can readily be done, complaints are not heard, and undoubtedly the

horse suffers less than if this loose weight were hung on one side of his saddle.

It can be seen then how difficult it is to make a useful comparison between the tendency of our saddle and that of the French saddle to make sore backs. The French saddle is much heavier, has a thick padding next to the back and is used with a blanket the same as ours. But the carbine is not slung to it, except in the cuirassiers, the man has a different seat on it and the rest of the pack is differently arranged. The cuirassier, it is true, carries his carbine on the saddle, but he is a big man, loaded with a heavy steel cuirass and steel helmet, his horse is a big animal, carrying 310 lbs. and costing when 3 years old about \$240. He is as good in blood and conformation as that money will buy, but he does not make as long marches as the lighter cavalry, and comparison with our cavalry is complicated by all these conditions.

Reference was just made to the method of carrying the pack. The best picture of the pack can be found in General Carter's book. I had these photographs taken and they are accurate today. The main things to note (since the Board has on hand all the articles constituting the pack) is the good balance obtained in the weights, both front and rear, as well as right and left, and the extreme lowness and snugness of the whole outfit. I have often watched saddles taken off after a march, and it was to me admirable to see that the saddle and everything attached to it seemed one firm whole. Even the saber is wedged under the end of the overcoat roll so that it does not budge. This roll is made extremely long like a sausage, is rolled as tight as two men can make it, is laid on top of the rear projections of the side bars, and the ends brought around and buckled firmly to the girth. The near end goes *over* the saber just below the hilt. The lariat, canvas bucket, leather pocket for extra horseshoes hang on the off side, balancing the saber. The large leather pockets in front carry the man's kit and grooming kit, while the grain bag is buckled over in front of these pockets, all strapped snug and immovable.

I do not hesitate to recommend as worthy of the closest

study the disposition and system of attachment of the French cavalry equipment.

Since the opportunity offers, I beg leave to record my personal dissatisfaction with the form and place of the cantle roll as made necessary in our service by the equipment furnished. If carried low, under the cantle, it bears directly on the horse's back, not on the side bars, since they do not project to the rear far enough to support it. If carried high, it lifts the center of gravity, which all know is objectionable, and it is next to impossible to make a firm, immovable pack, part and substance of the saddle. In my opinion, if the French way of making and attaching the cantle roll could be adapted to our saddle, it would be a great improvement.

Another difference which complicates comparisons is the girth. Our horse hair cincha with its straps instead of buckles is in my opinion a great improvement over the European girths with buckles, but our cincha is attached to the saddle through the quarter straps that run to the front and rear of the side bars; the girth has one central point of attachment. Theoretically, the latter appears to me a superior arrangement, and experience would seem to show that it has at least one practical advantage. All of us know how our saddle blankets seem always slipping about, especially to the rear, indicating a movement of the saddle on the horse's back advantageous to avoid. This slipping of saddle blankets simply does not exist in the French army, and I can see no more plausible reason for it than that assigned by Lieutenant Gordon Johnson in an admirable article which he lately published in the *CAVALRY JOURNAL*. In view of that article, it seems unnecessary to add more on this point. It should be possible to prove his theory by experiment. I merely wish here to indicate that it appears to be carried out by a comparison of the French cavalry with ours. Of course, the padding on their saddle should not be forgotten, for that alone may account for the phenomenon, but I doubt it.

It is my intention to seek further and accurate statistics on the matter of sore backs in the French cavalry. As yet I have no data to offer the Board, but its letter clearly indicates that the Board realizes the difficulty of getting reliable data on

this subject in any army. It is sufficient to reflect how hard it has always been to get really reliable information in our own regiments.

With reference to the superior conformation of French cavalry horses, however, some generalizations will not be out of place here. With all due allowances made for the inaccuracy of a comparison between things so widely separated as French horses and American horses, I believe it is evident that the bulk of the horses in an average French regiment have better saddle conformation than would be found in the average American regiment. They pay from \$190 to \$240 for troopers' horses 3 years old; purchasing boards buy in the open market and pay higher prices for the same animal than a dealer will give. They get the cream of native horses of the grade purchased. The boards are made up of skillful horsemen with much experience, and I think there is little doubt that better horses with better weight-carrying backs are had than with us. French cavalry horses also get more care and attention from officers who have had a careful education in horse training than do our horses; the grooming is better done and more painstaking care is bestowed on a damaged animal or for the prevention of troubles. At least this is the impression I get. It looks to an outsider as though both officers and men in the French army loved their horses more and were with them more than with us.

The Board's letter states that it proposes to examine every part of the cavalry soldier's equipment, and for that reason I beg leave to suggest a trial of the French combination halter and bridle. We have at last secured the double bridle for the mounted service, and that is an immense gain. In a few years, if hard mouths exist in any number, the troop officers will be solely responsible. The French system of halter and bridle combined is the one I am most acquainted with, but I think that practically the same is used by the Germans and by the Austrians. It is very simple and it is very useful. Ordinary halters are used in garrison stables, but on the march, in campaign, etc., the halter which is part of the bridle is used. A horse under all circumstances has his halter with him, it is not

heavy, it is not ugly; on the contrary, it decidedly helps the looks, especially of coarse bred horses such as make up our mounted service.

When in command of a battery, I tried by every means to have decent looking halters to put on my horses when we went out in field kit, but it was utterly impracticable. I believe that the best solution for this question is the combination halter and bridle. I have heard officers oppose this idea on the score of its being ugly and unnecessary in garrison, but even if this were entirely true, I think the question should be settled solely with reference to its usefulness in the field. It seems to me a heavy halter and a bridle is a good deal of weight for a horse to carry on his head, if it can be avoided. On the march the French cavalry carry the halter strap exactly like a breast strap.

During the grand maneuvers, just finished, I sought in every way to get some useful and definite information in answer to the Board's inquiries. I talked to cavalry generals, colonels, captains and enlisted men. Sore backs, of course, interest the French as keenly as they do ourselves. Like the poor, they are always present. But I could find no reliable statistics giving percentages. The nearest was a statement that in one regiment, after a recent march of twenty-five days, there had been 104 cases of sore back of all kinds. But the question arises, what is a sore back? Some colonels dismount a man the moment there is the slightest indication of injury. Naturally, after twenty-four or forty-eight hours' rest, the back gets well. Others will wait till the horse is really in danger of being incapacitated. One regiment, with a fourth of its men on foot every day, will come in from a long march and show no cases of injury—pass a brilliant inspection—but its serviceability during that march and its capacity for covering long distances quickly were certainly less than another regiment which on coming in showed more cases of real injury, but which kept almost every man in his saddle during the whole march.

The regiment quoted had, say, 400 men; they marched

twenty-five days; this represents 1,000 men marching one day; with 104 injuries during the whole march, we may say that 10 per cent of the horses got sore backs. This, of course, is not a correct way of reasoning, but it gives a standard of comparison—an artificial standard, it is true.

All the officers I talked with agreed that injuries in the French light cavalry were decidedly more numerous than in the dragoons and cuirassiers. As the men and equipment of the former is lighter, the reason for this noticeable fact lies in the conformation of the back. The French light cavalry is all mounted on Tarbes horses—the little wiry Anglo-Arab. He has much more prominent withers and the backbone is distinctly less "furnished" with muscle under the saddle than the heavier horse of the dragoon or cuirassier. Here we have them, a perfect illustration of the effect of conformation on saddle galls. For in the same cavalry evolutions, lasting one or two months, in the same divisions of cavalry, will be found regiments of all three categories. Long experience and universal opinion indicates that the light cavalry suffers most, solely on account of the typical conformation of the horse universally used by this cavalry.

Apart from what is above given, I do not believe that any exact statistics of use to the Board can be had in France. The cavalry certainly does severe marching and the horses are not spared. Every intelligent care is given them, and the men are taught everything that will save their mounts. They know that if a back gets sore, the trooper walks, and that above all things he trooper hates. But for the rest, the horses are not coddled.

For example, the First Division of Cavalry, three brigades, had marched and maneuvered for a month when I joined it on Sept. 14th. On Sept. 13th that division had been saddled from 2 a. m. till 7 p. m. and had made forty-four miles and fought several engagements. They were marched and stationed under strictly war conditions. On the 14th they broke camp at 4 a. m. and did pretty hard riding till 8:30, when I joined them and witnessed and participated in some hard galloping across country of the entire division, followed by hard and fatiguing charges against the Third Division. Later on I examined the

horses of four regiments and they seemed in very good condition of flesh and spirit. I asked about the backs and was told, "Yes, we have some sore backs, but not many." These horses were watered and fed two to three pounds of oats at 2, 3 or 4 a. m. and got nothing more, either of water or food, till 1, 2, 4 or even 6 p. m.

This and the other division had five days more of severe work at maneuvers, long flanking marches, some all-night marches, and then they started back to their garrisons—one or two weeks more on the road.

Every autumn the whole cavalry leave their garrisons and are gone from four to eight weeks, marching, camps and maneuvers. When they get back, the horses which are plainly not up to the work are condemned—that is, each captain picks out 10 per cent of his strength for condemnation. I cannot learn of any great amount of sore backs at the time of this return march.

On one other point I was enabled to confirm the views expressed in my first report to the Board. All French cavalry sat the trot up to 1872. Indeed, officers were strictly prohibited from using the English seat when riding for pleasure. As will be remembered, the French cavalry was changed from top to bottom after the war of 1870, in which war it was not considered to have distinguished itself. As an authoritative writer puts it, "l'esprit de ses chefs semble avoir été atrophie par une education vicieuse, dont l'etude d'un reglement etait l'unique but." The cavalry chiefs did not know how to reconnoitre, and the men and horses certainly did not stand the long marches they now make.

In the serious studies which followed this unhappy condition of affairs, every prejudice, every useless tradition, seems to have been definitely thrown aside, and the commission charged with restoring the French cavalry to a state of sharpened efficiency began at the very bottom and worked upwards; began with the trooper, his horse, his equipment, his seat, his arms, and proceeded through all grades to the general officer, who, in the new regulations, was urged to a spirit of initiative, of offensive, which not one, save perhaps Margueritte and Gallifet, had shown in the recent war.

Much of the most important inspiration of this commission came from that gallant and remarkable man, recently dead, General de Gallifet. In this upheaval, after a bitter experience, the first thing abolished was the close seat at the trot, which was recognized as a tradition and nothing but a tradition, militating against the efficiency of both man and horse. I can learn in no quarter that this action was unpopular or that it was anywhere long opposed, even by the most hidebound conservatives.

Ten years ago, when I first came to know the French cavalry and began to study this question, the service was full of field officers and generals who had served five and ten years under the old regime. I have never heard one of these men express the slightest regret that the close seat had been abolished, and not one of them continued to use it. At present, if anybody suggested its restoration in France, he would be put alongside the man who should urge the advantage of a return to muzzle-loading rifles as a means of saving ammunition.

As I had the honor to represent to the Board in a former report, any number of cases can be cited where individual men, where whole armies, have abolished the close seat for the rising seat, but no case is on record of a nation discarding the rising seat for the close one; and I personally have never seen or heard of a single individual who had done so. This being the case, it seems to me that no question can be as important to the Cavalry Equipment Board, or indeed to our whole cavalry service, as this one: Are we justified by national and individual experience in requiring our soldiers to sit the trot?

My conversations with French cavalry officers confirmed what I wrote you in regard to carrying the carbine. There seems no thought of changing the system, that is, on the back of all troopers except the cuirassiers.

The Board has, perhaps, had sent it Colonel Patterson's device for carrying the rifle.

I venture to call the attention of the Board to the fact that all French troopers, as well as the infantrymen, wear hob-nailed shoes. I believe this a most necessary thing in war, whatever may be the objections in peace. Doubtless the Board

has seen enough of infantry and dismounted cavalry slipping and sliding on the slopes of our maneuver fields in summer to warrant them in finding a real value in hob nails for all men who have to move over grassy or muddy inclines.

A few years ago they began to equip all mounted troops in France with a soft leather leggin, shaped about like a boot. It looks well and seems to give general satisfaction.



ORGANIZATION OF THE STRATEGIC RECONNAISSANCE SERVICE OF THE CAVALRY DIVISION.

A PRIZE-ESSAY.*

BY CAPTAIN NIEMANN, GENERAL STAFF OF SEVENTH ARMY CORPS
(GERMAN).

MODERN war experience has been made the basis of the Field Service Regulations of 1908. The chapters on reconnaissance have been completely revised, but it can hardly be said that they have been brought up to the advanced position of the remainder of the work; this is especially true of the sections on strategic reconnaissance, from which some essential matters have been omitted.

It is necessary, therefore, to devise a theoretical scheme or plan of organization which may serve as a basis for a complete and effective service of this kind.

Efforts have been made, by practical exercises on a large scale, to determine upon an organization scheme that will meet the requirements of the situation and still accord with the general regulations on the subject. These exercises have shown that the method as laid down in regulations, with its aggressive tendencies and systematic extension over well defined zones of operation, is intensely practical, but they have also demonstrated the great difficulties that arise in the endeavor to maintain effective communication between the various elements and to present a coördinated resistance to the enemy's operations.

In the following pages a scheme is presented which accords

*Translated from the Kavalleristische Monatshefte (October, 1910) by Major Paul F. Straub, General Staff, U. S. A., for the M. I. C.

Recommended by Major D. H. Boughton, General Staff, U. S. A., in connection with a study of Sections 42, 43, 44 and 45, F. S. R.

with regulations and which is believed to provide for coordination of all the elements concerned in strategic reconnaissance. An independent cavalry division operating in the enemy's territory is used to illustrate the proposed scheme.

While it is admitted that practical experience alone can furnish an absolutely satisfactory basis, yet a theoretical consideration of the subject is by no means valueless, and the present purpose will be accomplished if this paper serves to stimulate further investigation of the subject.

Let us first consider the question of the extent of grounds to be covered by patrols from their point of departure (the advance), and the distance between the main body of the cavalry division and the patrols (distance).

"The cavalry must endeavor to obtain an insight into the enemy's dispositions at the earliest possible moment." (Felddienstordnung, 133.) This paragraph is usually interpreted as requiring that the cavalry shall make contact with the enemy at the earliest possible moment, which demands that both men and horses shall be pushed to the limit of endurance. As the patrols travel faster than the contact units and the contact units faster than the main body of the cavalry division, a wide extent of ground will soon be left between them.

The following distances may be considered as moderate marches and will be taken as the normal:

Patrol.	60 km.	(air line)
Contact troops.	40 "	
Cavalry division.	30 "	

Assuming a three days' reconnaissance over territory in front of a distant enemy, the following figures give normal advance and distance:

First day marches:

Patrols.	60 km.
Contact unit*.	40 "
Cavalry division.	30 "

**Advance, 60.

***Distance, 30.

*In the German Service, a cavalry squadron of 150 sabers.

**Distance that patrols advance from point of departure.

***Distance between main body of division and patrols.

Second day marches:

Patrols.	60
Contact unit.	40
Cavalry division.	30
Advance, 120.	
Distance, 60.	

Third day marches:

Patrols.	60
Contact unit.	40
Cavalry division.	30
Advance, 180.	
Distance, 90.	

Consequently, on the second day, the contact units are 40 km. in rear of the patrols, and the messengers that are sent back to the contact units at the close of the day's march must cover a distance of 100 km. on that day, and a total of 160 km. during the first two days. On the third day the situation is still more difficult. The distance between patrols and contact units is increased to 60 km., and that between the contact units and the cavalry division reaches 30 km., and messages can no longer be sent back to the contact units by their patrols.

In giving these figures no allowance is made for the fact that as soon as contact is made with the enemy the labor involved will be doubled. The degree of success attained will depend entirely upon the exertion put forth.

It must not be forgotten that patrols and contact units can accomplish nothing if they arrive in the presence of the enemy with exhausted men and horses and without reliable means of communication with their division.

It is especially important that the marches of the cavalry division be moderate, otherwise there would be no strength left to make a spirited attack and vigorous pursuit, and it would thus fail at the most critical time.

If the successful outcome of a strategic reconnaissance is not to be left to chance, the energies of the various elements must be conserved and the distance between them must be kept within reasonable limits.

We must not allow ourselves to be blinded by the fact that with technical means of communication long distances may be bridged; while such means will be used whenever practicable, arrangements must always be made to employ messengers whenever more rapid methods fail.

Wireless telegraphy can only be relied upon for communication between the cavalry division and army headquarters.

The rapidity with which the reconnaissance troops can advance varies with different situations.

In general terms, it may be said that the function of the reconnaissance service is to assure the army a certain freedom of operation.

The army commander alone can properly determine the extent of the zone over which the reconnaissance is to be made, and he must give daily instruction to this effect; but it remains for the cavalry commander to fix the distances between the various elements of his command. In this manner an aimless wandering over the reconnaissance zone is prevented. The army commander is then always in a position to extend the zone or divert the reconnaissance units into other fields.

As stated above, the daily advance of the patrols depends upon the distance covered by the contact units and the cavalry division, the latter two bodies moving in such a manner as will best enable the patrols to reach their designated objective and still retain good communication with their units.

When contact has been made these requirements can only be fulfilled by engaging the enemy.

As a matter of principle, all advanced detachments of the enemy, patrols, larger bodies of cavalry or mixed commands, must be driven back or their line pierced, and at the same time the line of information to the rear must be maintained. This can only be accomplished if all the elements of the reconnaissance service are in condition for battle and so organized as to assume coordinated action and movement.

The width of the reconnaissance zone is also to be determined by the army commander in accordance with the principles enunciated above. Consideration must always be given the fact that a cavalry division can only send out three contact units, one from each brigade, if the fighting efficiency of the division is to be

maintained. However, it is considered admissible to send out in addition officers' patrols into territory not covered by the contact units. If officers' patrols are to maintain communication with these divisions they must not proceed to a greater distance than that of the contact units—consequently they cannot go as far away from the division as patrols of the contact units.

As a rule, the front of the reconnaissance zone of a cavalry division should not exceed 60 km.

Whether this zone is to be covered by two or three contact units is a matter to be left to the judgment of the division commander.

The width of front will depend upon the character of the road system and upon the military importance of certain roads. If, for example, it should be required that the location of the enemy's flank be determined, it would be best to place the greatest force near the outer flank and there also the narrowest front and the closest network of patrols. For the inner flank, where the enemy's reconnaissance detachments will probably be encountered, a system of independent officers' patrols would usually be sufficient.

In determining the organization and formations on the front, strategic considerations must also be taken into account; if the line of advance of the cavalry division is definitely determined, the dispositions necessary for the reconnaissance zone are usually quite obvious. However, it must be borne in mind that changes in the situation are liable to occur from day to day and commanders must always be prepared to take the necessary steps to meet them.

Some caution should be used at first and all the available contact units should not at once be sent out; at the same time a close network of patrols is necessary. Contact units are to be reinforced by officers' patrols, so that all the main roads leading towards the enemy can be covered.

The customary procedure of assigning several roads to a single patrol can be properly carried out only under exceptional circumstances.

It is quite obvious that if a close network of patrols is sent out, the fighting strength of the contact units is reduced. The manner in which this loss in strength may be in part compensated

for by calling in the "near patrols" (those charged with the duty of security) will be shown later.

Special difficulties arise in making dispositions to cover the front of the reconnaissance zone during an advance continuing for several days; if it becomes necessary to reconnoiter a wide extent of country on the flank, a daily change in dispositions becomes inevitable. The manner in which preparation therefor is to be made will be illustrated below.

Let us now consider what is required to coordinate all the elements in the reconnaissance zone. As a rule, the patrols are 30 km. or more in advance of the contact units, and the patrol leaders have been instructed where messengers are to be sent or where an automobile relay, or a reporting center,* may be found in case the contact unit does not reach its designated objective point.

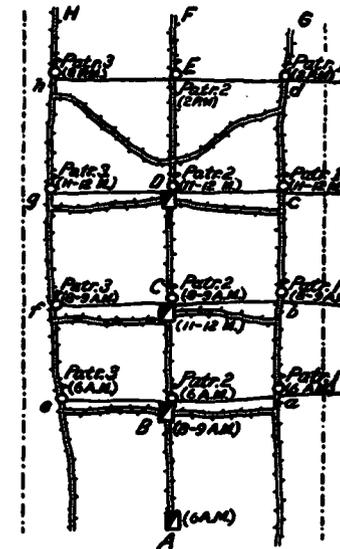
While on the march the commander of the contact unit does not count on receiving reports from patrols and he therefore sends out a succession of intermediate patrols. Finally, security patrols are necessary to assure the safety of the contact unit itself.

The result of these arrangements is that the contact unit is materially reduced in strength and is so far away from the advanced patrols that it can no longer perform its function as supports and as a reporting center.

The situation is quite different when the patrols are not more than 10—20 km. off, and in a way also perform the functions of near (security) patrols, their movements conforming to that of the contact unit.

The following example typically illustrates the proposed plan (Sketch 1):

*If it is impossible to place the contact squadrons in direct communication with the main body of the cavalry, or if it is impracticable to bring the communications of several reconnoitering detachments into a common center, it may then be advisable to establish special reporting centers. (Feldienstordnung 133.)



♠ Patr. 1 - Patrol 1
 ■ Contact unit
 --- Limits of reconnaissance zone
 Sketch No. 1

On the night of August 1st a contact unit remains at A; its patrols are 10 to 15 km. in advance on the line a-B-e. No contact, as yet, has been made with the enemy. On August 2d the patrols are to be pushed forward to the line d-E-h, and on the night of August 1st the contact unit commander sends out the necessary complement of messengers, and the following information and directions to patrol leaders:

"This command (contact unit) will march at 6 a. m. tomorrow toward A and will make the following halts:

From 8 to 9 a. m., at B in Section a-e.

From 11 a. m. to 12 m., at C in Section b-f.

At 2 p. m. and after, at D in Section c-g.

From 8 to 9 a. m., the patrols will remain in observation in Section b-f.

From 11 a. m. to 12 m., in Section c-g.

From 2 p. m. and after, in Section d-h.

Reports (negative also) will be sent to me at C and D, and at B in case contact is made with the enemy. Should I be unable to reach C or D, I will attempt to send word to C not later than 1 p. m., and to D not later than 3 p. m. Your messengers must be instructed as to where they may rejoin the patrol. Should you receive no word from me by early morning of August 3d you will remain in Section d-h until noon, and then try to re-establish communication via the road on which you advanced."

In practice, the directions may be made more brief if the commander of the contact unit and the patrol leaders have a previous understanding as to the manner in which the reconnaissance is to be carried on.

Let us now consider the course of events on August 2d, assuming that contact has been made with the enemy.

At 7 a. m. Patrol No. 1 encounters a hostile patrol between a and b and sustains severe losses. The survivors, one officer and three men, with the enemy in pursuit, arrive at a at 7:30 a. m., where they succeed in repulsing him.

The officer sent two men with a report to B and then again proceeded towards b. The contact unit commander received the report at B at 8:30 a. m., and immediately sent out a reserve patrol via b-c to d. Meanwhile the leader of Patrol No. 1 arrived at b at 9 a. m., and at 10 a. m. observed approaching from the direction of c a hostile troop, which soon passed by and on through b, going in the direction of a. He then proceeded to C and reported his observations to the contact unit commander.

It was evident that the passage of the enemy through the line could not now be prevented. By means of visual signals, communication was established with the cavalry division and the facts were reported, as it then became a function of the division itself to take proper steps to meet the enemy. The commander of the contact unit must content himself by sending a stationary patrol to c with instructions to interrupt the enemy's messenger service.

The contact unit commander found two men of Patrol No. 2 with three severely wounded men and a prisoner at C. The men reported that Patrol No. 2 surprised and fired upon one of

the enemy's patrols coming from D at 9 a. m. Furthermore, two men of Patrol No. 3 reported that their patrol approached one of the enemy's at about 8:30 a. m., but succeeded in avoiding it.

The contact unit arrived at D at 2 p. m., and there found two men, each from the 1st, 2d and 3d patrols, with negative reports.

By 4 p. m. reports had been received from all three patrols on the line d-h, stating how far they had advanced and where they expected to spend the night. The leaders of the three patrols returned to their patrols that evening with instructions for the next day's service, and with sufficient men to complete their complement.

Should the contact unit commander desire to communicate with the patrols during the course of the day's march, he must do so during the halts from 8 to 9 a. m., or from 11 a. m. to 12 m. If the distance between patrols and contact units does not exceed 15 km., reports can be delivered by messengers in an hour.

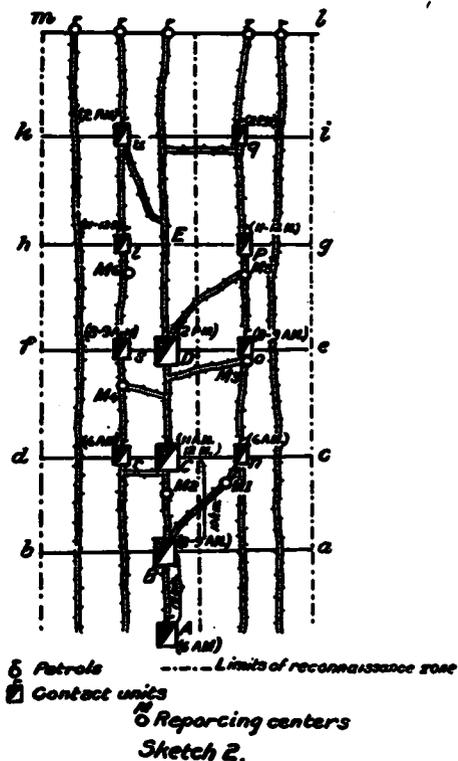
If the contact unit commander is not too far away, he is always in a position to increase the number of patrols, replace losses in action, or to call in patrols no longer needed. It is clear that if the patrols are not too far away, special "near" patrols will not be needed, a point and a flank patrol being all that is necessary. A most careful study of the map is required in order to determine proper places for the longer halts of contact units and patrols.

The places selected as halting points for the patrols must be near the road upon which the advance is made and should afford a good view of the surrounding country and that is near a good defensive position; it should, if possible, be near cross-roads, leading to parallel roads upon which patrols are advancing.

In the enemy's territory messengers are beset with many difficulties; they must avoid the enemy's patrols and go around towns. They will rarely have maps and will only be guided by simple road sketches and by detailed instructions from their commander. It is therefore of great importance that they be afforded every facility to enable them to keep their bearings and go by the shortest routes.

It is to be understood that patrols as well as contact units are not to cover the distance between the long halts in one continuous march, but in several stages according to the character of the terrain. Likewise the movements of patrols, contact units and the cavalry division must be in accord, or, more precisely stated, the movements of the contact units are regulated by those of the division, and the movement of patrols by their contact unit.

A typical presentation thereof is about as follows (Sketch 2):



A cavalry division arrived at A on August 1st; about 20 km. in its front on the line c-d, at n and r, respectively, are two contact units whose patrols are about 10 km. further on

in the line e-f. On August 2d the patrols are to be pushed on to the line l-m.

The division will march towards D via B and C.

On the afternoon of August 1st the following instructions were given to contact units:

"Patrols are to be pushed forward tomorrow to the line l-m.

The division will march at 6 a. m. from A to B, and it is the intention to halt at B from 8 to 9 a. m., at C from 11 a. m. to 12 m.; from and after 2 p. m., at D.

The contact units will remain in observation in

Section e-f from 8 to 9 a. m.

Section g-h from 11 a. m. to 12 m.

Section i-k from and after 2 p. m.

I shall expect reports from commanders of contact units concerning the manner in which they expect to proceed, and at what places they intend to establish reporting centers during halts. An effort will be made to advance armored motor vehicles (communication relays) to M1 and M2 by 8 a. m., to M3 and M4 by 11 a. m., and to M5 and M6 by 2 p. m.

As visual signals cannot always be relied upon, reports (including negative reports) must be sent back by each contact unit from each section.

Should the enemy's cavalry in force be encountered by a contact unit it must retire on the division, but maintain constant contact with the enemy."

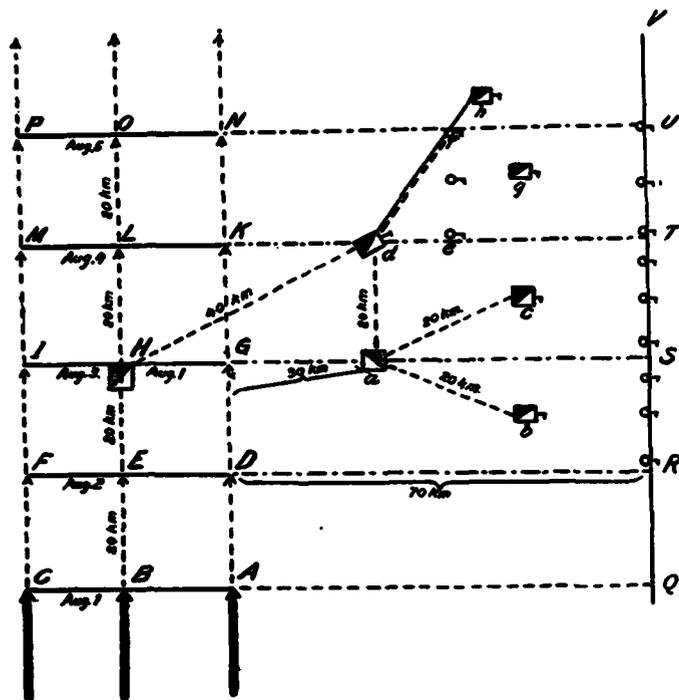
Many would be inclined to disapprove the instructions contained in the last paragraph. There is some merit in the opinion that under such circumstances the contact unit should swing around the enemy's flank and maintain its communication with the patrols. But it must be admitted that in case our cavalry is defeated further reconnaissance to the front would be of very doubtful utility. Under such circumstances it would be better to facilitate the reconnaissance service of an adjacent district by giving assistance in protecting the line of information to the rear.

Should the enemy be defeated, pursuing troops would soon

In compliance with these instructions, another contact unit with the necessary patrols was at once sent out from the cavalry division into the district I-F-G-K. The contact unit reached d—about 15 km. distant—and the patrols arrived on the line i-m. Contact unit "b" was ordered to withdraw its patrols and to send other patrols into the district H-I-F-E, as far as the line h-i, and to go itself to c.

Contact unit "a" was directed to draw in its patrols and to rejoin the division at a definitely stated hour on August 2d at I.

The situation is very similar to that which arises when it becomes necessary to protect the flank of an advancing column by an extensive reconnaissance. And, as shown in the following example, a systematic method of relieving and replacing of reconnaissance elements must be instituted (Sketch 4):



Sketch 4

An army has reached the line A-B-C, on August 1st; its cavalry division has arrived at H, 40 km. in advance.

It is the intention of the army commander to advance in the direction N-O-P, and to arrive on the line D-E-F, on August 2d; on the line G-H-J, on August 3d; on the line K-L-M, on August 4th.

The cavalry division was charged with the duty of protecting the right flank by reconnoitering the country as far as the line R-S-T-U-V, 70 km. distant.

On August 2d, contact unit "b" was sent into the district D-R-S-G to reconnoiter as far as R-S. Contact unit "c" to the district G-S-T-K, and to reconnoiter as far as S-T.

Preparation was made for reconnoitering the district K-T-U-N, on August 3d, by sending a third contact unit to d, whose patrols are to arrive on line e-f on August 2d.

The cavalry division follows the contact units and arrives at a on August 2d.

On August 3d, contact unit "b," with its patrols, was withdrawn. Contact unit "c" remains in its district, and contact unit "d" advances to g, and its patrols to line T-U. The cavalry division will proceed from a to d, and thence send out an additional contact unit to h, in the next district.

The great importance of proper intervals and distances between the elements in a strategic reconnaissance is always apparent. In order to maintain effective connection between the various elements, the distance between patrols and contact unit must be kept between 10 and 20 km., and that between the contact unit and the division 20 to 30 km.

The most practical depth of the reconnaissance zone must therefore be from 30 to 40 km., and the front not over 60 km.

For a reconnaissance service extending over several days, the ordinary marching distance of the various elements may be taken to be about as follows:

First day:

Patrols	60 km.
Contract unit	45 "
Cavalry division	30 "

Advance	60
Distance	30

Second day:

Patrols.	40
Contact unit.	40
Cavalry division.	35
	<hr/>

Advance.	100
Distance.	35

Third day:

Patrols.	30
Contact unit.	30
Cavalry division.	30
	<hr/>

Advance.	130
Distance.	35

The distances given will usually assure freedom of operation for the army. Should the force take a broad from a narrow formation (*Vormarsch aus dem Anfmarsch*) the reconnaissance service will have several days to gain its proper distance. Should it be necessary at once to institute a reconnaissance service for an advancing army, the infantry columns would gain about 60 km. in distance in three days; during the same time the territory extending 70 km. to the front or to the flank can be reconnoitered, which assures the army two or three days' freedom of operation. The situation in this respect is much more favorable, when, as is usually the case, the cavalry can begin operations from an advanced position. In conclusion a short description will be given of a method that may be used to gain distance and interval, which, however, must be modified to meet the special solution in each case.

When the enemy is at a distance, the contact units and the patrols may be sent to their position by the shortest line, so as properly to cover their front. On the other hand, if immediate contact with the enemy is anticipated, the formation will have to be made on the line of the division.

The situation is especially difficult if it becomes necessary to carry the reconnaissance service through the enemy's frontier guards.

Should the frontier guard be strong and the terrain difficult, it would hardly be possible for patrols to advance, and the entire

offensive powers of the contact units must be used to force a passageway and to form the chain of patrols afterwards.

Should the contact units not be strong enough for the purpose, the cavalry division itself will have to be employed.

Whether an attempt should be made to force a passage at one or at several places is a matter of tactical judgment. In any case the strategic reconnaissance service cannot be put in operation until the enemy's boundary line is forced.

Such a variety of situations may arise in actual campaigns that it is not possible to cover the entire subject in theoretical discussions; nor can practical exercises be extended to cover the entire field. The organization of the strategic reconnaissance service must always remain a system of makeshifts.

THE CAMPAIGN OF 1777.*

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It was Polonius who, on an occasion familiar to all, cautioned his son to "beware of entrance to a quarrel"; and, for the benefit of one that way inclined, the caution might well have been broadened so as also to include historical investigations and inquiries. For, as respects such, not only are they proverbially provocative of that special and peculiarly acrimonious form of quarrel, known as historical controversy, but any field, no matter with what lightness of heart entered upon, is apt to develop into the boundless. It has so proved with me in the present case.

Chancing to be in London a little over a year ago, I failed to meet Sir George Trevelyan, just then on the point of leaving his North of England country home for the Continent. Long in correspondence on topics connected with his *American*

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Revolution, I now wished more particularly to see Sir George that I might suggest for his consideration a point of view bearing on our war of independence, which seemed to me to have hitherto escaped the investigators. As we could not arrange a meeting, I wrote that I would, after I got home, send him a memorandum on the subject I had in mind. This memorandum I a few months later undertook to prepare. As is invariably the case, the topic grew on my hands until finally it assumed the proportions of a treatise in miniature; and, as such, I submitted it as a paper at the May meeting of the society. Finding a place in our *proceedings*,* in that form it at last reached Sir George Trevelyan.

Beginning thus with what was meant to be a brief inquiry, suggestive only and confessedly superficial, into the cause of Washington's apparent failure to make any effective use of cavalry in the Revolutionary operations, I was incidentally led to notice what seemed to me the somewhat unsatisfactory, not to say radically bad, strategy on both sides—British even more than American—which marked the campaign of 1777—that of Saratoga and about Philadelphia; yet in the so-called "standard" histories—and their name is legion—I found no reference to the subject, much less any explanation of strategic shortcoming, as a feature in the campaign manifestly open to criticism. And thus I found myself step by step drawn into the preparation of a second paper, supplementary to that of last May. This paper, relating to the "Defective Strategy of the Revolutionary Campaign of 1777," I now propose to submit.

In doing so, however, I feel it incumbent to say a few words of a personal and explanatory character. I want, for reasons which as I proceed will become very apparent, to enter a formal *caveat*. Venturing on what for an American historical investigator is notoriously delicate ground, I do not want to have my reason for so doing misunderstood, or unnecessarily to invite hostile criticism. So to speak, I wish to qualify. I neither profess to have made any careful study of our Revolutionary material, nor hold myself forth as an expert in military

**Proceedings*, XLIII. 547-588.

matters or an authority on strategic problems. As to the Revolutionary campaigns I have read only the accepted narratives thereof; I have felt no call, nor have I had the leisure to burrow down into what are known as the original sources. As to war and operations in warfare, while a soldier neither by vocation nor training,—indeed distinctly disavowing any natural bent that way,—I only claim to be not without experience therein. Passing nearly four years in active service (1862-1865), I have participated in memorable operations, and been present at some engagements—Antietam, Gettysburg, the Wilderness and Petersburg among others. Having been one in a column on the march, I have also stood in the line of battle. Among other incidents I well recall the deep breath of relief I, though but a regimental officer, drew when one day in May, 1863, a rumor crept through our camp at Aquia Creek, opposite Fredericksburg, that "Stonewall" Jackson was dead from wounds accidentally inflicted by the weapons of his own followers. "He at least," I thought, "will not again come volleying and yelling around our flank!" Accompanying Sedgwick's corps, and marching fast towards the sound of the cannon, it was given me to halt close behind the line of battle on the evening of the second day at Gettysburg. Later, I accompanied the headquarters of the Army of the Potomac from the Rapidan, through the Wilderness, across the James, to Petersburg. I therefore may claim a certain familiarity with the practical, every-day side of military life and active warfare. Moreover, I have had occasion to observe and even study military movements on the ground and at the time, being personally as well as very immediately interested in their outcome. Having actually seen an energetic enemy roll up a line of battle by an unexpected flank attack, I have waited anxiously for tidings of a co-operative movement known to be in process fifty miles away. Having thus myself slept in bivouac, seen armies in battle formation, and heard the sharp zip of the minies and the bursting of shells as they hurtled through the air, I may claim, while in no way an expert in either strategy or tactics, to be not altogether a "bookish theorick."

One other preliminary. The present paper is meant to be suggestive only. Asserting myself nothing as conclusively shown, my wish and hope are to invite by what I say, perhaps to provoke, a more thorough investigation by others of recognized competency. To use the words of the late Sir Leslie Stephen when entering on the discussion of a subject of quite another sort: "The topic (with which I am about to deal is old and has been carefully investigated and much discussed); and it would be presumptuous in me to speak dogmatically. I wish, however, to suggest certain considerations which may perhaps be worth taking into account; and, as I must speak briefly, I must not attempt to supply all the necessary qualifications. I can only attempt to indicate what seems to me to be the correct point of view, and apologize if I appear to speak too dogmatically, simply because I cannot waste time by expressions of diffidence, by reference to probable criticisms, or even by a full statement of my own reasons."*

Carefully premising all this, I now proceed to the subject in hand. In our great Civil War the thing known as "strategy" was first and last much, and not always over-wisely, discussed; the most popular definition of the term, and the one generally accepted among the more practically experienced, being that attributed to the Confederate leader, Nathan B. Forrest. A somewhat uncouth Tennessean, taught, like Cromwell, in the school of practical warfare and actual fighting, General Forrest is reported to have remarked that, so far as his observation went, the essence of all successful strategy was simply "to get there fust, with most men." With all due respect, however, to General Forrest,—unquestionably a born soldier of high grade,—while his may be accepted as a definition so far as it goes, it hardly covers the whole ground. The getting "there" first with most men is all right; but using this expression the word "there" implies also another word, "Where?" Put in a different way, there is a key to about every military situation; but that key has to be both found and properly made use of. When found and properly utilized, there is apt to result what in chess is known as a check, or, possibly, a checkmate. Strat-

**Social Rights and Duties* (1896), i. 91-92.

egy, therefore, is nothing more nor less than the art of playing, more or less skillfully, a complicated game of chess with a considerable, not seldom with a vast, area of broken country as its board, on which geographic points, cities and armies are the kings, queens and castles, while smaller commands and individual men serve as pawns. In the present case, therefore—that of the Revolutionary campaign of 1777,—as in every similar case, it is essential to any correct understanding of the game and its progress to describe the board, and to arrange the pieces in antagonism upon it.

The board of 1777 was extensive; but, for present purposes, both simple and familiar. It calls for no map to render it visually comprehensible. With the Canada boundary and Lake Champlain for a limit to the north, it extends to Chesapeake Bay on the south,—a distance of approximately four hundred and fifty miles. Bordering on the ocean, this region was almost everywhere vulnerable by water, while its interior depth at no point exceeded two hundred and fifty miles, and for all practical purposes was limited to one hundred miles; Oswego, on Lake Ontario, being the farthest point from New York (250 miles) on the northwest, and Reading the farthest point westward (100 miles) from the Jersey coast. Practically New York City was at the strategic center,—that is, where movement was concerned, it was about equidistant from Albany and Fort Edward at one extreme, and from the capes of the Delaware and the headwaters of Chesapeake Bay on the other. In either sphere and in both directions the means of communication and of subsistence were equally good, or equally inadequate or insufficient. Philadelphia, the obvious but unessential military objective at the South, was practically one hundred miles from New York; while Albany, the equally obvious but far more important military objective at the North, was one hundred and fifty miles from it. The average day's march of an army is fifteen miles; by a forced march thirty miles or more can be covered. From New York as a strategic starting point, Albany was therefore a ten days' march distant, while Philadelphia was three less, or a march of seven days.

Such being the board on which the game of war was to be played, it remains to locate the pieces as they stood upon it.

June was that year well advanced before active operations were begun. After the brilliant and redeeming Trenton-Princeton stroke with which Washington, in the Christmas week of that year, brought the 1776 campaign to a close, Sir William Howe had drawn the British invading forces together within the Manhattan lines, and there, comfortably established in winter quarters, had awaited the coming of spring and the arrival of reinforcements and supplies from England. Washington had placed himself in a strong defensive position at Morristown, there holding together as best he could the remnants of an army. Nearly due west of the town of New York, and about twenty-five miles from the Jersey shore of the Hudson, Morristown was a good strategic point from which to operate in any direction, whether towards Peekskill,—the gateway to the Hudson Highlands on the road to Albany, fifty miles away,—or towards Trenton, forty miles off in the direction of Philadelphia. When, therefore, Sir William Howe, moving with that inexplicable and unsoldierly deliberation always characteristic of him, began at last to bestir himself, the situation was simple. Washington's army, some seven thousand strong, but being rapidly increased by the arrival of fresh levies, was at Morristown, waiting for Howe to disclose a plan of operations; General Israel Putnam, quite incompetent and with only a nominal force under his command, made a pretense of holding the Hudson Highlands, the stronghold of the Patriots, in which they had stored their supplies, "muskets, cannon, ammunition, provisions and military tools and equipments of all kinds."*

*Fisher, *Struggle for American Independence*, II. 101. In the present paper this work is used as the standard and for recurring reference because of its detailed and systematic citations. In the preface to his narrative (p. x) Mr. Fisher takes occasion to lament the "great mistake" made by the historians of our Revolution "in abandoning the good, old-fashioned plan of referring to the original evidence by footnote citation." No pretence at all is made of original or deep research in the preparation of this paper; but a perusal of the, so-called, standard histories has not in all cases tended to inspire confidence in either the technical knowledge or unbiased temper of those responsible for them. Indefatigable as investigators, they reach conclusions not unseldom open on their face to grave question, and yet fail to indicate systematically the sources of their information or the evidence from which judgment was formed. Mr. Fisher's work is not open to this criticism. Continued reference is therefore here made to it as the readiest indication of original authorities, documentary material, and contemporary evidence generally.

Farther north, General St. Clair, with some thirty-five hundred men, all told, occupied the defenses of Ticonderoga at the foot of Lake George, a strategic outpost erroneously supposed to be well-nigh impregnable, and hence utilized as a sort of arsenal and supply depot; in point of fact, however, it was, in face of any skillfully directed attack, wholly untenable. Here, accordingly, had been collected a great number of cannon—some one hundred and twenty pieces—and a large amount of ammunition, together with a quantity of beef and flour.* Elsewhere the patriots had nothing with which the British commanders would be compelled to reckon. Opposed to this half-organized, poorly armed, unclad and scattered muster-field gathering, numbering perhaps an aggregate of fifteen thousand, insufficiently supplied with artillery and with no mounted auxiliary force, the British arrayed two distinct armies counting, together, thirty-three thousand effectives; eight thousand under General Burgoyne in Canada and twenty-five thousand under Sir William Howe in and about New York. Perfectly organized and equipped, well disciplined and supplied, they had a sufficient artillery contingent, though few cavalry; and what of mounted force they mustered was ill adapted to American conditions. The British control of the sea was undisputed, but ineffective as respects blockade.

Thus, making full allowance for every conceivable drawback on the part of the British, and conceding every possible advantage to the Patriots, the outlook for the latter was, in the early summer of 1777, ominous in the extreme. To leave their opponents even a chance of winning, it was plain that the British commanders would have to play their game very badly. And they did just that! Displaying, whether on land or water, an almost inconceivable incompetence, they lost the game, even though their opponents, beside failing to take advantage of their blunders, both fundamental and frequent, committed almost equal blunders of their own.

*Fisher, II. 64. Writing after the news of the capture of the place by Burgoyne had reached him, but prior to the holding of a court of inquiry, General Greene thus expressed himself in a letter dated August 11, at the Crossroads near Philadelphia: "if it was necessary to evacuate [Ticonderoga], why had it not been done earlier? If the stores and garrison had been saved, the loss of the place had been inconsiderable."—Greene, *Life of Greene*, I. 432.

What has in recent years come to be known as the General Staff was then as yet undreamed of as part of a military organization; but, viewed from a modern General-Staff standpoint, the contrast of what actually was done on either and each side in that campaign with what it is obvious should have been done, affords a study of no small historical interest. Such a contrast is also one now very easy to make, for not only is hind-sight, so called, proverbially wiser and more penetrating than fore-sight, but a century's perspective lends to events and situations a proper relative proportion. That becomes clear which was at the time obscure. For instance, the merest tyro in the study of the conditions on which great military movements depend can now point out with precision and confidence the errors of policy and strategy for which Napoleon was responsible in 1812 and 1813, and which lured him to destruction. What is obvious in the case of Napoleon less than forty years later is, of course, even more obvious in the case of Sir William Howe and General Washington in 1777.

Coming then to the point now at issue, the military policy and line of strategic action Howe would have pursued had he, in May, 1777, firmly grasped the situation and risen to an equality with it, are now so manifest as to be hardly open to discussion; they need but to be set forth. Having a complete naval and a great military superiority, he would have sought to open from his base at New York, and securely hold, a connection with Montreal and Canada by way of the Hudson and Lake Champlain, thus severing his enemy's territory and, in great degree, paralyzing his military action. The means at disposal with which to accomplish this result were ample—Howe's own army, twenty-five thousand strong at New York, operating on the easy line of the Hudson, in full co-operation with the fleet could easily open the route, and insure the invading column constant and ample supplies. In close contact with an open and navigable river, there need be no fear of a repetition of the tactics of Concord and Lexington. Beyond any question, Sir William, leaning on Lord Howe's arm as he advanced on this line, would be able to connect with the army of Burgoyne, eight thousand strong, moving down from Montreal. His single other military objective would then be the

Patriot army under Washington, in every respect inferior to the force at Howe's own disposal; and this army it would be his aim to bring to the issue of pitched battle on almost any terms, with a view to its total destruction or dispersal. If he succeeded in so doing, the struggle would be ended, he holding the dividing strategic line of the Hudson; if, however, he failed to get at and destroy Washington's army, he would still hold the line of the Hudson, and the navy under Lord Howe then seizing for permanent occupation some controlling point on Chesapeake Bay, the brothers Howe could securely depend on the blockade* and the gradual securing of other strategic points to bring to their opponent sure death through inanition—or, in the language of General Charles Lee in the "Plan" of operations prepared by him during his New York captivity, and then submitted to Howe, would "unhinge and dissolve the whole system of (Patriot) defense."† Such a policy and strategy, at once aggressive and passive, was not only safe, but obvious. Secure in control of the sea, Howe had but to divide his opponent's territory, and then destroy his army or starve it out.

The policy and strategy to be adopted and pursued by the Patriots were, on the other hand, hardly less plain. With no foothold at all on the sea, except through a sort of maritime,

*The crushing influence of an effective blockade on the revolted Provinces, and the inexplicable failure of Admiral Lord Howe to establish or maintain such a blockade were at the time very forcibly set forth and dwelt upon by the Philadelphia renegade and exiled loyalist, Joseph Galloway, in his pamphlet entitled "A Letter to the Right Honorable Lord Viscount H—e, on His Naval Conduct in the American War," London, 1779. Galloway shows that the naval force put at Lord Howe's disposal was more than ample for an effective blockade; that to establish and maintain such a blockade was wholly practicable; and, finally, that had one been thus established and maintained "the whole commerce of the revolted Colonies must have ceased. Their army and navy must have been ruined, from the utter impracticability of procuring for them the necessary provisions, clothing and supplies. Their produce must have perished on their hands." Salt, for instance, was almost wholly imported. In Philadelphia "this commodity, which before the rebellion was commonly bought for 15 to 20 pence now (1776-77) sold from £15 to £20 in currency of the same value." To the same effect, "Salt, four dollars per bushel (hard money); butter, one dollar per pound; sugar 1 s. 6 d. per pound, or six dollars Continental money; beef, very poor, from 1 s. 6 d. to 2 s. 6 d. per pound; flour not to be purchased."—Reed, *Life and Correspondence of Joseph Reed*, I. 331.

†N. Y. Hist. Soc., *Lee Papers*, IV. 408.

letter-of-marque militia, on land they were hopelessly out-classed—outclassed in numbers, in organization, in weapons, in discipline and in every form and description of equipment. They had three things only in their favor: (1) space, (2) time and (3) interior lines of communication, implying mobility. In any pitched battle they would necessarily take the chances heavily against themselves. Their manifest policy was, therefore, to fight only in positions of their own choosing and with every advantage on their side, striking as opportunity offered with their whole concentrated strength on an enemy necessarily more or less detached, and his detachments beyond supporting distance of each other. Put in simpler form, and drawing examples from actual experience, Bunker Hill, Lexington and Concord pointed the way so far as policy and positions were concerned, and Princeton and Trenton perfectly illustrated the system of harassing and destroying segregated detachments. On the other hand, the bitter lessons received on Long Island and in and about Manhattan in 1776 should have taught the Patriot leaders that, face to face in ordered battle, their half-equipped, undisciplined levies, when opposed to the European mercenaries, stood just about the chance of a rustic plough-boy if pitted in a twelve-foot ring against a trained prize fighter. It would be a simple challenging of defeat.

Such, as is now apparent, being the manifest and indisputable conditions under which each party moved, and must win or lose the game or in it hold its own, it is not, I think, passing a too sweeping criticism to say that every one of these conditions was either ignored or disregarded equally, and on both sides, throughout that momentous campaign. In other words, British or Patriot, it was a campaign of consecutive and sustained blundering. The leisurely fashion in which it was opened has already been referred to. Washington, holding together with difficulty what was hardly more than a skeleton organization, remained prudently in his lines at Morristown. There, his army as a military objective was apparently within Howe's grasp all through the months of April and May,—practically at his mercy. It could easily have been maneuvered out of its positions, and dispersed or sent on its wanderings;

it continued to hold together only so long as its antagonist failed to avail himself of his superiority and the situation. Howe, meanwhile, in his usual time-killing way, was perfecting his arrangements in New York; Burgoyne, at Montreal, was similarly engaged. Not until May was well advanced and, what is for that region, some of the best campaigning weather in the whole year was over, did Washington voluntarily emerge from his winter-quarters, and, so to speak, look about to see what his opponent might be up to; for, that he must be up to something, seemed only likely. That opponent had, however, apparently not yet roused himself from his winter's lethargy, and it was not until June was half over that he at last gave signs of active life. Burgoyne at the same time (June 17) moved on his path to Ticonderoga, the first stage in his march to Albany. Now was Howe's opportunity. It dangled before his eyes, plain and unmistakable. Washington's army should have been his objective. Only seven thousand strong, Howe could oppose twenty thousand to it (Fisher, II. 11) either for direct attack or purposes of maneuver. Washington's army disposed of or held off, Howe, following the dictates of simple common sense, would then have turned his face northwards, and marched, practically unopposed, to Albany, by way of Peekskill. Coöperating with the British fleet, Clinton four months later did this, with four thousand men only; capturing on his way "vast supplies of muskets, cannon, ammunition, provisions and military tools and equipments of all kinds which the Patriots had stored in their great stronghold," the Hudson Highlands (Fisher, II. 101). Howe thus failed wholly to avail himself of what was obviously the opportunity of a good soldier's lifetime. Both what he did do and what he failed to do were and remain enigmas to both friends and foes. As a strategic operation it resembled nothing so much as the traditional and familiar movement of the unspecified King of France. Howe marched his twice ten thousand men over into New Jersey; and then marched them back again. Well might Stedman afterwards plaintively ask: "Why did he not march round either on the north or south to the rear of that enemy, where he might have been assaulted without any other hazard than

such as must, in the common course of war, be unavoidably incurred?"* The query to this day remains unanswered; but, certainly, the British commander did not then make any considerable effort to bring matters "to the issue of pitched battle on almost any terms." Severely criticised for his conduct shortly after, Howe simply said: "I did not think it advisable to lose so much time as must have been employed upon that march during the intense heat of the season" (Fisher, II. 12). The march in question could not very well have been made to cover much more than fifty miles; though it might have implied some discomfort from heat and dust. Washington was wholly unable to account for his opponent's proceedings; those who participated in the subsequent midsummer marchings and fightings of our Civil War have been unable to account for them since. Howe's explanation is puerile; at the time the English critics referred to his doings as Howe's "two weeks' fooling in New Jersey."

This military "fooling" over, Howe next evacuated New Jersey altogether, leaving the astonished Washington and his army free to go where they liked and to do what they pleased, quite unmolested; but, instead of turning his face north, and marching up to meet Burgoyne, thus making secure the Hudson line of communication with Canada, the British commander next shipped his army on a mighty fleet of transports, gathered in New York Bay, and, after idly lingering there some precious weeks, sailed away with it into space. The contemporary verdict on these performances was thus expressed by a participant, in language none too strong:

In the spring and summer it is impossible for the mind of man to conceive the gloom and resentment of the army, on the retreat from the Jerseys, and the shipping them to the southward: nothing but being present and seeing the countenances of the soldiers, could give an impression adequate to the scene; or paint the astonishment and despair that reigned in New York, when it was found that the North River was deserted, and Burgoyne's army abandoned to its fate. All the former opportunities lost through indolence or rejected through design, appeared innocent when compared with this fatal movement. The ruinous and dreadful consequences were instantly foreseen and foretold; and despondence or execration filled every mouth.

Had there been no Canada army to desert or to sacrifice, the voyage to

**History of American War*, I. 288.

the southward could only originate from the most profound ignorance or imbecility.*

Disappearing from sight on the 24th of July, on the 30th the British armament was reported as being off the entrance of the Delaware River; again vanishing, not until the 21st of August did it at last make its appearance in the Chesapeake. Howe's objective then was apparent. He was moving on Philadelphia,—the town in which the Congress was holding its sittings,—the seat of Government,—the Capital of the provinces in rebellion!

As a move on the strategic chess-board this further proceeding on the part of Sir William was at the time incomprehensible; nor has it since been accounted for. Had he marched to Philadelphia overland (ninety miles), he would at least have relieved Burgoyne by keeping Washington's entire available force occupied; possibly he might have brought on a pitched battle in which every chance would have been in his favor. He would also have been free at any moment to countermarch north, with or without a battle. Electing to go by sea, when he got into Delaware Bay the Admiral in command of the fleet apparently bethought himself of Sir Peter Parker's dismal experience before Charleston just a year before, and did not like to face on a river water-front the guns of the several forts below the town covering obstructions in the channel; so, instead of landing his army at Wilmington, and proceedings thence to Philadelphia, Howe had recourse to another of those flanking movements to which, after his Bunker Hill frontal experiment, he always showed himself addicted. The front door to Philadelphia being closed, he made for the back door, sailing south around Cape Charles and up Chesapeake Bay to what was known as the Head of Elk, close to Havre de Grace, some fifty

**View of the Evidence relative to the Conduct of the American War under Sir William Howe, etc.*, 152. A copy is in the Mauduit pamphlets, No. 8 in Volume I.

"Sir Henry Clinton, in his manuscript notes to Stedman's *American War*, says, 'I owe it to truth to say there was not, I believe, a man in the army, except Lord Cornwallis and General Grant, who did not reprobate the move to the southward, and see the necessity of a coöperation with General Burgoyne.'"—Fisher, II. 71.

miles southwest of Philadelphia; Wilmington being at that time not only wholly unprotected and perfectly accessible, but lying on the Delaware almost exactly half the distance from Philadelphia to the Head of Elk, and, as every one making a trip from New York to Washington now knows, on the direct road between the two first-mentioned points. By this move, very cunning of its kind, Sir William Howe unquestionably, though in most unaccountable fashion, flanked the defenses of his objective point, which now lay at his mercy; but the move had taken him as far away from the line of the Hudson as he could conveniently and comfortably, at that hot season of the year, arrange to get, and had consumed four weeks of precious time. But, with Sir William Howe, time was never of moment! Such a thing is not to be suggested, and, in the case of Sir William Howe, is inconceivable, but had he deliberately and in cold blood designed the ruin of Burgoyne,—as was, indeed, charged by his more hostile critics (*infra*, p. 961),—he would not have done other than he did. He not only took himself off and out of the way, but, by hovering in sight of the mouth of Delaware Bay and then sailing southward, he gave Washington the broadest of hints that he need apprehend no interference on Howe's part with any northward movement the Patriots might see fit to decide upon. Theirs was the chance! The blunder—for disloyalty and treachery, though at the time suspected (Fisher, Chap. IX), are not gravely alleged—the blunder of which the British general had now been guilty was, in short, gross and manifest; so gross and manifest, indeed, that it could only be retrieved by a blunder of equal magnitude on the part of his adversary. This followed in due time; meanwhile, Howe, wholly losing sight of his proper immediate objective—Washington's army—had moved away from the sphere of vital operations,—the severance of New England from New York and the Middle States,—and made himself and the force under him practically negligible quantities for the time being. Off the board, he was out of the game.

Even now, any plausible explanation of Howe's course at this time must be looked for in the mental make-up and physical inclinations of the man. Of him and them, as revealed in the record, something will be said later on in this paper. It is

sufficient here to observe that if, as held from the beginning of time, it is one of the distinctive traits of a great soldier to detect the failings of an opponent so clearly as to be able immediately to take the utmost advantage of them, Washington now certainly did not evince a conspicuous possession of that particular trait.

The explanation, at once most plausible as well as charitable, of Howe's performance is that, during the winter of 1776-77, he had conceived an exaggerated and wholly erroneous idea of the importance of the possession of Philadelphia as a moral as well as strategic factor in the struggle the conduct of which had been entrusted to him. There were, indeed, good grounds for believing that a large and influential element in the population of the middle provinces—New Jersey, Pennsylvania and Maryland—were distinctly of loyalist proclivity, and that they only needed countenance and protection to assert themselves (Fisher, II. 54). Doubtless also Howe counted largely on his own personal magnetism and kindness of temper, as elements of political conciliation. He then, in his military operations, proceeded to discard every sound strategic rule and consideration in favor of moral effect and social influence. He also seems to have looked on Philadelphia as if it had been a Paris or a Berlin or a Vienna; and he recalled the vital importance of those capitals in the wars of Marlborough and Frederick.—the legendary past of the British army. He was accordingly under an obsession; possessed by what was from a strictly military point of view a pure delusion. Thirty-five years later one infinitely greater than Howe suffered in the same way, but with results far more serious. In his work, *How England Saved Europe*, W. H. Fitchett says (iv. 81) of Napoleon's Russian campaign, "Russia, like Spain, to quote Professor Sloane, 'had the strength of low organisms.' Its vitality was not centered in a single organ. It could lose a capital and survive." If this was true of Russia, as Napoleon in 1812 to his cost found, it was yet more true of the American federated States in 1777, for, practically, in Revolutionary warfare Philadelphia in itself, in that respect wholly unlike Albany, was of no more strategic importance than any other considerable town. When, therefore, Howe carried off the bulk and flower of the army of British

invasion and set it down in Philadelphia, he made as false a move as was possible in the game assigned him to play.

It then remained for his opponent to avail himself of the great and unlooked-for opportunity thus offered him,—to call a check in the game, possibly even a checkmate. This Washington wholly failed to do; on the contrary, he actually played his opponent's game for him, redeeming Howe's blunders by the commitment of blunders of his own fortunately less fatal in their effect though scarcely in nature less gross. When Howe, after disappearing with his armament below the sea-line on the 24th of July, reappeared off the mouth of the Delaware on the 30th of the month, and his general objective thus became obvious, the relation to each other, and to the game, of the remaining pieces on the military chess-board would seem to have been plain. No matter where Howe now went, it was settled that he was not going up the Hudson. That made clear, he might go where he pleased. Using a shallow artifice, he tried to induce Washington to think he was going to Boston, thence to make a juncture with Burgoyne. Silly, is the term to apply to such a weak invention of the enemy.* Why go to Boston to march overland to Albany, when the shorter way by the Hudson lay open before him? Had he really proposed so to do, Washington might pleasantly have bade him God-speed, and pointed out that his best route lay through Lexington and Concord, or, possibly, up Bennington way. Under conditions similar to those then confronting Washington, it is not difficult to imagine the nervous energy or "stern contentment" with which Frederick or Wellington, or still more Napoleon with his "tiger spring," would have contemplated the arrangement of the strategic board. The game would have been thrown into their hands. His opponent had hopelessly divided his forces beyond the possibility of effective mutual support, and Washington held the interior line. On which of the three should he pounce? And this question seemed to answer itself. Howe was not only too strong for successful attack, but, for every immediate strategic purpose, he had made of himself a negligible quantity. Placed where he had put himself, or plainly

*Irving, *Washington* (Geoffrey Crayon ed.), III. 164.

proposed to put himself, he could not greatly affect results. Clinton, at New York, was equally negligible; for, while the force—some six thousand men—left there with him by Howe was not sufficient properly to man the defenses, much less to assume a dangerous aggressive, the place was secure under the protection of the British fleet. There was no victim ripe just yet for sacrifice in that quarter. There remained Burgoyne. He could incontinently be wiped from off the face of the earth, or, to speak more correctly, removed from the chess-board. That done, and done quickly; then—the next!

Extrication by retreat was now no longer possible; Burgoyne was hopelessly entangled. His bridges were burned; he had to get through to Albany, and thence to New York, with destruction as his sole alternative. Six weeks before (June 17) he had set out on his southward movement, four days after Howe had crossed from New York into New Jersey for his "two weeks' fooling." On the 5th of July Burgoyne occupied Ticonderoga; on that day Howe, his "two weeks' fooling" over, was loading his army on the transports anchored in New York Bay, and Washington was observing him in a state of complete and altogether excusable mental bewilderment. What move on the board had the man in mind? Clearly his true move would be up the Hudson; but why load an army—foot, horse and artillery—on ocean transports to sail up the Hudson? The idea was absurd. But, if Albany was not Howe's destination, what other destination had he in mind? At length, July 24, he put to sea—disappeared in space. In the interval Burgoyne had made his irretrievable mistake. Hitherto his movements had been in every respect most successful. Winning victories, capturing strongholds and supplies, he had swept on, forcing the great northern barrier. He had now the choice of two routes to Albany. He could go by water to the head of Lake George on his way to Fort Edward, capture it and in ten days be in Albany; or he could try to get there by constructing a military road through the woods. He elected the latter, plunging into a "half-wilderness, rough country of creeks, marshes and woodland trails." Beside removing obstructions and repairing old bridges, he had to build forty new; and one of these "was a causeway two miles long across a

swamp."* To withdraw was now impossible; the victim was nearing the sacrificial spot. He occupied the hastily evacuated Fort Edward on the 30th of July. On that same day "the people living at Cape Henlopen, at the entrance of Delaware Bay, saw the ocean covered with a vast fleet of nearly three hundred transports and men-of-war" (Fisher, II. 18). It was Howe's armament. He was not bound for Albany! From that moment, strategically and for immediate purposes, he was for Washington as if he did not exist. He might go where he willed to go; he was outside of the present field of vital operation—clean off the chess-board.

Did Washington see his opportunity, and quickly avail himself of it, Burgoyne was now lost—hopelessly lost. He might indeed get to Albany; but Washington could get there "fust with most men." Washington had now twelve thousand men. A large portion of them were militia, and the militia were notoriously unreliable whether on the march or in battle; as Washington expressed it, under fire they were "afraid of their own shadows"; and so, teaching them how to cover the ground rapidly and well was mere waste of time. They would, of course, have had to be left behind to occupy the attention of the enemy. There would remain probably some eight thousand marching and fighting effectives. Schuyler had forty-four hundred men with him when (July 30) he abandoned Fort Edward, and the militia were pouring in. A month later Gates, who relieved Schuyler in command, had seven thousand (Fisher, II. 89). Here was a force fifteen thousand strong, if once united, and Burgoyne, when he emerged from the wilderness, could muster less than five thousand. It was the opportunity of a lifetime; unfortunately, Washington did not so see it, failed to take full advantage of it. Instead, he had recourse to those half-way measures always in warfare so dangerous.

The possibility of such a move on the part of his adversary had indeed occurred to Howe, and, apparently, to him only; so, just before sailing from New York, he wrote to Burgoyne, congratulating him on his occupation of Ticonderoga (July 5), and added: "Washington is awaiting our motions here, and has de-

*Fisher, II. 65; Trevelyan, Pt. III. 123.

tached Sullivan with about twenty-five hundred men, as I learn, to Albany. My intention is for Pennsylvania, where I expect to meet Washington; but if he goes to the northward, contrary to my expectations, and you can keep him at bay, be assured I shall soon be after to relieve you."* The letter containing this extraordinary assurance of support did not reach Burgoyne until the middle of September. It lends a touch of the grotesque to the situation. Washington might with perfect ease have effected a junction of his own army with that under Schuyler, and crushed Burgoyne, three weeks before Howe's missive reached him.

That, as Commander-in-Chief, Washington had ample authority to undertake such a diversion without previously consulting Congress or obtaining its consent thereto, did not admit of doubt. The question had already been raised, and it had once for all been settled; "all American forces were under his command, whether regular troops or volunteers, and he was invested with full powers to act for the good of the service in every part of the country." The conditions were now exactly those pre-figured by Charles Lee the year before at Boston, when he said to Washington: "Your situation is such that the salvation of the whole depends on your striking, at certain crises, vigorous strokes, without previously communicating your intention."[†]

When Howe was descried at the mouth of the Delaware (July 30), Washington was still in central New Jersey, in the neighborhood of the Raritan. Clinton, with some six thousand men only, in New York was looking for reinforcements, which did not reach him until October (Fisher, II. 100). Meanwhile he was powerless for aggression. He could be safely disregarded. Albany was only one hundred and fifty miles away; if taken leisurely, a pleasant ten days' summer march. It was a mere question of shoe leather, and in all successful warfare shoes are indeed a prime factor. So much is this the case that when, some thirty-five years later, Wellington, attending to every detail which contributed to the effectiveness of his army, was preparing for that final campaign in the Peninsula which

*Fiske, *The American Revolution*, I. 308.

†N. Y. Hist. Soc., *Lee Papers*, IV. 262.

culminated one month later in the complete overthrow of the French under King Joseph, directed and dry-nursed by Marshal Jourdan, at Vittoria, it was prescribed that every British infantry soldier should carry in his knapsack three pairs of shoes, with an extra pair of spare soles and heels (Fitchett, III. 358). Such an ample provision of foot-wear would in the summer of 1777 have probably been beyond the reach of Washington's Quarter-master-General; but, shortly before, shoes sufficient it is said for twenty-five thousand troops had arrived safely at Portsmouth, sent out with other munitions of war by French sympathizers (Fisher, II. 10). New England, moreover, was then a community of cordwainers, and the coarse cowhide foot-wear of the period could, if called for, have hardly failed somehow to be forthcoming. In any event, the march of one hundred and twenty-five miles towards Chesapeake Bay actually made at that time was in degree only less destructive of sole leather than one twenty-five miles longer to Albany. As to the operation from any other point of view, it was exactly the experience and discipline the Patriot army stood most in need of. As every one who has had any experience in actual warfare knows, there is nothing which so contributes to the health, morale and discipline of an army as steady and unopposed marching over long distances. In our own more recent experience Sherman's famous movements through Georgia and the Carolinas afforded convincing illustration of this military truism. Nothing, on the other hand, is so bad for the morale and physical health of a military force, especially one hastily levied, as long hot-weather tarrying in any one locality. For instance, at the very time now under consideration, while Washington was waiting near the Falls of the Schuylkill for Howe's movement to reveal itself, we are told that the sanitary arrangements of the Patriots were "particularly unfortunate," and in the "hot August weather a most horrible stench rose all round their camp" (Fisher, II. 18; Green, I. 440).

Had Washington, straining on the leash, broken camp and set his columns in motion for Peekskill on the Hudson during the first week in August, by the 20th of a month of easy marches he would have joined Schuyler, and the united armies, fifteen thousand strong, would have been on top of Burgoyne. At

that time Gates had not yet assumed command of the Northern Department (Fisher, II. 88). Lincoln and Stark were wrangling; and Schuyler was issuing orders which both refused or neglected to obey (*Ib.*, 80). The battle at Bennington was fought on August 14. Out-flanked, surrounded, crushed by an overwhelming superiority of force, his enemy flushed with victory, Burgoyne's camp everywhere searched day and night by rifle-bullets, while cannon-balls hurtled through the air (Trevelyan, Pt. III. 189-190), a week at most would have sufficed; the British commander would have had to choose between surrender or destruction. Events would thus have been precipitated seven weeks, and the early days of September might have seen Washington moving south on his interior lines at the head of a united army, flushed with success and full of confidence in itself and its leader. Rich in the spoils of Burgoyne, it would also have been a force well armed and equipped, especially strong in artillery; for, indeed, even at this interval of more than a century and a quarter of time, it leads to something closely resembling a watering of the American eyes and mouth to read at once the account of the parade of Washington's so-called army through Philadelphia on its way to the Brandywine during the latter days of August, 1777, and the schedule of the impedimenta turned over by the vanquished to the victors at Saratoga fifty days later. Of the first Fisher says (II. 19): "The greatest pains were taken with this parade. Earnest appeals were made to the troops to keep in step and avoid straggling. . . . To give some uniformity to the motley hunting-shirts, bare feet, and rags, every man wore a green sprig in his hat. . . . But they all looked like fighting men as they marched by to destroy Howe's prospects of a winter in Philadelphia." This authority then unconsciously touches the heart of the strategic blunder in that march being perpetrated by adding: "With the policy Howe was persistently pursuing, it might have been just as well to offer no obstacle to his taking Philadelphia. He merely intended to pass the winter there as he had done in Boston and New York." Mr. Fisher does not add that this half-organized, half-armed, half-clad, undisciplined body twelve thousand strong was on its way to measure itself in pitched battle against eighteen thousand veterans, British and

German, perfectly organized, equipped and disciplined, in an effort doomed in advance to failure—an effort to protect from hostile occupation a town of not the slightest strategic importance! It was in truth a very sad spectacle, that empty Philadelphia parade of victims on the way through a dark valley of death and defeat to Valley Forge as a destination. The cold, hard military truth is that the flower of that force—eight thousand of the best of the twelve thousand—should then have been at Saratoga, dividing among themselves the contents of Burgoyne's army train—"a rich prize," consisting, as Trevelyan enumerates (Pt. III. 194), almost exclusively of articles which the captors specially needed. "There were five thousand muskets, seventy thousand rounds of ball-cartridges, many ammunition wagons, four hundred sets of harness, and a fine train of brass artillery,—battering guns, field guns, howitzers, and mortars;—forty-two pieces of ordnance in all." This surrender actually occurred on October 18; it might equally well have been forced in early September, and the united, victorious and seasoned army which compelled it might on the 8th of that month—the day Howe landed at the Head of Elk on Chesapeake Bay—have been hurrying forward, well advanced on its way back to confront him.

That Washington had at this juncture no realizing sense, or indeed any conception of, that fundamental strategic proposition of Frederick and Napoleon—the value and effectiveness in warfare of concentration and mobility through utilizing interior lines against a segregated enemy—was now made very manifest. For a time it was supposed that the far-wandering and elusive British armament might have Charleston for its destination. The Congress now (August 1) conferred on Washington plenary powers as to the Northern Department. Instead of acting on this empowerment instantly and decisively, in the way the situation called for, Washington excused himself on the singular ground that the situation in the Northern Department was "delicate" and might involve "interesting consequences."*

*Irving's *Washington*, III. 172. [Washington's letter declining to make this appointment is in *Writings of Washington* (Ford), IV. 3, and shows so curious a position for one in plenary command of the army to take, that it will bear quoting: "The northern army in a great measure has been considered as

He then called a council of war to advise on the general strategic situation and the line of action best calculated to meet it. Assuming that Howe's objective was Charleston, the council decided in favor of a movement toward the Hudson.* As such a "movement might involve the most important consequences," Washington, instead of acting, sent a letter to the President of Congress, requesting the "opinion of that body" (Irving, III. 183). Congress gave the seal of its approval to the conclusion of the council. When every one had thus been consulted and all

separate, and more peculiarly under their [Congress'] direction; and the officers commanding there always of their nomination. I have never interfered further than merely to advise, and to give such aids as were in my power, on the requisitions of those officers. The present situation of that department is delicate and critical, and the choice of an officer to the command may involve very interesting and important consequences." With the resolution of Congress the delegates in Congress from New England wrote urging the appointment of Gates. But Washington declined to make an appointment, and Gates received his assignment from Congress. The relations between Washington and Gates had tended to become cool since Gates went to Philadelphia "for his health," in December, 1776. There he paid assiduous attention to Congress, so that when the spring opened he was much averse to resume his office of Adjutant-General, as Washington earnestly desired. He pleaded that he had commanded the last campaign at the second post upon the continent, and expected something better than the Adjutant-Generalship. He gained his point and never resumed his former office, for which he was well fitted, but was ordered to Ticonderoga in March, and returned to Philadelphia when Schuyler resumed the command of the Northern Department. After his defection in March the men around Washington distrusted him, and his conduct after the surrender of Burgoyne, in so reluctantly returning the troops of which Washington had stripped his own army to send to his aid, justified the suspicion of his personal ambition. The special mission of Hamilton to hasten the march of those loaned corps is instructive on this point, and is told in his correspondence. After the Conway exposure, Gates ceased to hold any of Washington's esteem. It is a curious speculation how much of this jealousy and difference could have been avoided had Washington exercised the power that was undoubtedly his, and which Congress urged him to exert, a power that could have been used by his taking his army to Albany and winning for himself the credit of Burgoyne's destruction and a united and devoted army. W. C. F.]

*"To counterbalance the injury which might be sustained in the South [did Charleston prove to be the objective of Howe's armament] the army under his [Washington's] particular command ought, he conceived, to avail itself of the weakness of the enemy in the North, and to be immediately employed, either against the army from Canada, or the posts of the British in New York as might promise most advantage."—Marshall, *Life of Washington*, III. 134. [The council of war was held August 21, 1777, and the minutes are printed in Ford, *Defences of Philadelphia*, 41. W. C. F.]

possible advice solicited and received, the northward movement was initiated. But at just that juncture Howe appeared in the Chesapeake. That Philadelphia was his objective now became certain; and immediately the northern movement was countermanded. The grounds on which it was countermanded were thus set forth by Washington himself: "The state of affairs in this quarter will not admit of it. It would be the height of impolicy to weaken ourselves too much here, in order to increase our strength (in the Northern Department); and it must certainly be considered more difficult, as well as of greater moment, to control the main army of the enemy, than an inferior, and, I may say, a dependent one; for it is pretty obvious that if General Howe can be kept at bay, and prevented from effecting his purpose, the successes of General Burgoyne, whatever they may be, must be partial and temporary" (Irving, III. 173-174). In other words, the advantages of concentration were to be ignored, and no use made of time and interior lines in the striking of blows,—now here, now there. It is quite safe to say that neither Frederick, twenty years before, nor Napoleon, twenty years later, would have viewed that particular situation in that way. They, with all their strength concentrated in one solid mass, would have struck Burgoyne first, and then Howe. They would hardly have weakened themselves by sending Morgan to help "hold Burgoyne at bay"; and then insured the loss of Philadelphia, a thing in itself of no consequence, by confronting Howe with half of an army, which, as a whole, was insufficient for the work.

As Irving shows with a delightful *naivete*, the significance of which Fiske wholly failed to appreciate: "Washington was thus in a manner carrying on two games at once, with Howe on the seaboard and with Burgoyne on the upper waters of the Hudson, and endeavoring by a skillful movement to give check to both. It was an arduous and complicated task, especially with his scanty and fluctuating means, and the wide extent of country and great distances over which he had to move his men."* To attempt to carry on "two games at once" on the chess-board of war, especially with "scanty and fluctuating means," is a somewhat perilous experiment, and one rarely attempted by

*Washington (Geoffrey Crayon ed.), III. 180-181, Chap. XIII.

the great masters of the art. But with Sir William Howe for an opponent, almost any degree of skill would suffice; opposite him at the board blundering did not count.

In the next place, the extreme slowness of movement which characterized all the operations of this campaign, whether British or Patriot, is by no means their least noticeable feature. Neither side seems to have known how to march in the Napoleonic or Wellingtonian sense of the term, or as the grenadiers of Frederick covered space. Philadelphia, for instance, was only ninety measured miles from New York; it was Howe's objective, by way of the Head of Elk. Taking twenty-eight days (July 24-August 21) to get to the Head of Elk, Howe then spent nine more days in landing his army and setting it in motion; finally, having won a complete victory on the Brandywine on the 11th of September, it was not until September 26 that he occupied Philadelphia, only some twenty miles away from his successful battle-field. In all sixty-five days had been consumed in the process of getting into Philadelphia from New York. On the other hand, the Patriot movements were no more expeditious. In sending reinforcements to Gates, Morgan, then at Trenton, received from Washington orders to move north, August 16; the distance to be covered was approximately two hundred miles, and the riflemen did it at the rate of ten miles a day. Reporting to Gates, September 7, Morgan was actively conspicuous in the subsequent operations, which dragged on through forty days. Burgoyne capitulated October 17, and Washington was then in sore straits after Germantown (October 4); but not until November 1 did Morgan even receive his orders to return, and it was eighteen days more before he at last reported back at Whitemarsh; having, quite unopposed and under pressing orders for haste, covered some two hundred and fifty miles in eighteen days—an average of fourteen miles a day. Under the circumstances he should certainly have covered twenty. He had then been gone ninety-four days in all; under Wellington, Frederick or Napoleon, thirty at most would have been deemed quite enough in which to finish up the job, with a court-martial and dismissal from the service the penalty for dilatoriness. Not until eighteen days after the capitulation at Saratoga was official notice thereof communicated to Congress; and it was the 20th of November—

five full weeks—after Burgoyne's surrender before the longed-for reinforcements from the Army of the North put in an appearance. "Had they arrived but ten days sooner," wrote Washington, "it would, I think, have put it in my power to save Fort Mifflin and consequently have rendered Philadelphia a very ineligible situation for the enemy this winter."* They ought to have been back in Howe's front ten weeks earlier; and, even as it was, allowing for both Gates's inexcusable procrastination and Putnam's wrong-headed incompetence (Irving),† they had moved to Washington's relief in a time of well-understood crisis at the rate of about twelve miles a day. Marching in the Peninsula towards Talavera (July 28, 1809) to the assistance of his less hardly pressed chief, General Crauford's famous Light Division, moving over execrable roads under an almost intolerable midsummer sun, covered sixty-two miles in twenty-six hours; only seventeen men having fallen out of the ranks.‡ Four years later

*Irving, *Washington*, III. 371.

†*Ib.* 363-367.

‡Napier, B. VIII. Chap. II. This seems incredible, yet Napier's statement is explicit; and on such a point his authority may not be questioned. Vague but alarming rumors of disaster to Wellington had reached Crauford, whose troops after a march of twenty miles, were huddled near Malpartida de Placencia, who at once broke camp to hurry to his aid. On the road the advancing division was met by a swarm of panic-stricken fugitives from the battle-field. Napier goes on: "Indignant at this shameful scene, the troops hastened rather than slackened their impetuous pace, and leaving only seventeen stragglers behind, in twenty-six hours crossed the field of battle in a close and compact body; having in that time passed over sixty-two English miles in the hottest season of the year, each man carrying from fifty to sixty pounds weight on his shoulders." They "immediately took charge of the outposts." It is difficult to see how this was possible. The movement involved a night march through a mountainous country and over rough roads. In continuous marching over fair roads in a reasonably easy country, two miles an hour is a satisfactory average rate of progress for a column of infantry; three for one of cavalry. Three miles an hour is very rapid marching. General Crauford, it is true, had reduced marching to a science, and got out of his men all there was in them; but, even so, making no allowance for a forced whole-night march, twenty-one of the twenty-six hours in this case specified must have been devoted to actual movement at the unexampled rate of three miles an hour. Troops in motion must halt at stated intervals for food and rest. In this case, apparently, there may, or must, have been one long halt of, possibly, three hours, in which to get a little sleep, the men dropping in their tracks; there must then have been two halts of, say, an hour each for food and rest; any remaining time—one or two hours—would scarcely have sufficed for the

(1813) Wellington, in a campaign of six weeks conducted in a Spanish midsummer and over Spanish roads, marched his army six hundred miles, passed six great rivers, gained one decisive battle, invested two fortresses, and drove from Spain a homogeneous army of French veterans a fifth more numerous than his own conglomerate command.* As Napier in recording these events truly observes, "the difference between a common general and a great captain is immense, the one is victorious when the other is defeated."

This, however, was thirty years subsequent to the Howe-Washington campaign in Pennsylvania; but, just twenty years

necessary brief halts to close up the column, and to give the men a chance to shift their packs and relieve themselves, and fill the canteens.

Incomparably the best and most dramatic infantry march I personally ever witnessed was that of the Sixth (Sedgwick's) Corps of the Army of the Potomac on the 2d of July, 1863, hurrying to the support of Meade, very hardly pressed by Lee on the Second day of Gettysburg. Breaking camp at 9 p. m. of the 1st, and marching all the next day, under a Pennsylvania July sun, the corps, moving in solid column, covered some thirty-four miles. The leading brigade was then double-quickened into position to help hold the Little Round Top against Longstreet.

In each of those cases, that in Spain in 1809 and that in Pennsylvania in 1863, both officers and men knew how to march. I may claim to have participated in the march last-mentioned; as the First Massachusetts Cavalry was then temporarily detached from the brigade, under orders to report to Sixth Corps headquarters. Its marching directions for July 2 were to follow immediately in rear of the corps, and permit no straggling whatever. That day the regiment had practically nothing to do; there was no straggling. My recollection is that, in the saddle at sunrise (4 o'clock), we reached the field of battle at about 4 p. m. As respects speed, solidity and spirit, the infantry march could not have been improved upon; and the deployment of the column, as it reached the rear of the line of battle at the crisis of the day's fight, was the most striking and impressive incident I remember to have witnessed during my period of service.

On this subject of infantry marches, however, I am not experienced. I therefore print as an appendix to this paper (p. 964, *infra*) a private letter to me from Colonel C. F. Morse, at the close of the War of Secession the commanding officer of the Second Massachusetts Infantry. Colonel Morse had probably as long and varied an experience with a marching and fighting infantry regiment as any Civil War officer now surviving; for, in the Army of the Potomac until the autumn of 1863,—after Gettysburg,—he subsequently participated with his regiment in Sherman's famous marches, both that to the Sea and that through the Carolinas. He is therefore, what I am not, an unquestionable authority on all points connected with this most important factor in practical warfare.

*Napier, *History of the Peninsular War*, B. xx. Chap. VIII.

before, Frederick had set a yet higher standard of concentration and mobility with which all military men were familiar in 1777. Berlin, the capital of Prussia, was raided and occupied by the imperialists on the 17th of October, 1757, and a contribution levied upon it. Frederick was then at Leipsic, eighty miles away. His confederated enemies were pressing in upon him from every side. Twenty days later (November 5) he routed the French at Rossbach on the western limits of his kingdom; and then, turning fiercely to the east, fighting battle on battle and announcing his determination to assault Prince Charles and his Austrians "wheresoever and whensoever I may meet with them," on the 5th of December he won his great victory of Leuthen in Silesia two hundred miles from Rossbach, the odds in numbers engaged being some three to one against him. In that campaign (1757) concentrating his strength, throwing his whole force from side to side of his kingdom regardless equally of distance or of odds, he executed a multiplicity of complicated movements, fought seven pitched battles, and occupied one hundred and seven different positions. After Leuthen, without a moment's hesitation investing Breslau, with its garrison twenty thousand strong, he compelled its surrender December 19, and then, and not until then, was what was left of his war-worn and foot-sore battalions permitted to go into winter quarters. Two years later (September, 1759) during the darkest hours of Frederick's seemingly hopeless struggle for existence, his brother, Prince Henry, "a highly ingenious dexterous little man in affairs of War, sharp as needles,"* evaded Marshal Daun, who had everything fixed to destroy him on the Landskron, near Gorlitz, at break of day, and marching in fifty-six hours through fifty miles of country "wholly in the Enemy's possession," fell upon

*Carlyle, *Frederick the Great*, B. XIX. Chap. vi. From a literary point of view most remarkable, and indisputably a work of genius, Carlyle's *Frederick* as a military narrative is undeniably irritating. In almost every page of his very striking account of the Second Silesian War, it is apparent that the narrator was wholly devoid of familiarity with the details of matter-of-fact warfare. Had it been Carlyle's fortune to have himself lugged a knapsack and musket a few hundred miles, to have passed a winter or two in camp, and to have participated in half a dozen battles, his narrative would have been altogether other than it is, and vastly more instructive as well as realistic. Carlyle's *Frederick* smells of the lamp; Napier's *Peninsular War*, of the camp-fire.

the Austrian General Wehla, and killed or captured his entire command, utterly wrecking the imperialist plan of campaign for that year. This was conducting military operations on great strategic lines and in strict conformity with the fundamental rules governing the game; but it contrasts strangely with the performances in America exactly twenty years later.

Bearing in recollection such military performance and possibilities, conducted on interior lines to well-considered and attainable objectives under correct strategic rules, it is interesting to consider what Washington actually did in 1777. As will be seen, it is not unsafe to say that during the four months—August to November—every sound principle whether of policy or strategy was on the Patriot side either disregarded or violated,—and this the "standard" American historian to the contrary notwithstanding; unless, indeed, the confessed aim and object of American history are to devise excuses, to formulate panegyrics, and, under an overruling sense of patriotism, further to contribute to the varied, if in substance somewhat monotonous, apostolic renderings of the great original Weems dispensation. On this point, however, something remains presently to be said.*

Recurring then to the 24th of July, when Howe, putting out to sea from Sandy Hook, disappeared below the horizon, the pieces on the strategic chess-board, as already seen, stood as follows: Washington with some twelve thousand men, probably eight thousand of whom were marching effectives, was at Middlebrook on the Raritan. He held, it has been seen, the interior line, practically just midway between Peekskill, on the Hudson, and Philadelphia, on the Delaware,—one hundred and seventy miles from Albany to the north, and one hundred and forty from Elkton, at the head of Chesapeake Bay, to the south. From the

*Referring to this topic, Mr. Fisher, in the prefatory matter to his *Struggle for American Independence*, truthfully observes (vi, ix): "Our histories are able rhetorical efforts, enlarged Fourth of July orations, or pleasing literary essays on selected phases of the contest. . . . Although we are a democratic country, our history of the event which largely created our democracy has been written in the most undemocratic method—a method which conceals the real condition; a method of paternalism which seeks to let the people know only such things as the writer supposes will be good for them; a method whose foundation principle appears to be that the people cannot be trusted with the original evidence."

military, operating point of view the two places were practically equidistant, Albany being two days' march further off than Elktion. Clinton, it will be remembered, had been left by Howe to hold the British base at the mouth of the Hudson, with hardly force enough (six thousand men) for the purpose. For the time he was a mere pawn in the game. Burgoyne, with some seven thousand effectives, was slowly approaching Fort Edward, which the Patriots abandoned, and he occupied, July 30. In his front, forty miles only from Albany, was Schuyler, with some forty-five hundred demoralized men. Howe, with the bulk of the British army, some eighteen thousand, had disappeared,—his whereabouts and destination were matters of pure conjecture. To the strategic eye of Washington two things only were clear; while the advance of Burgoyne must at any cost be checked, Howe must be watched and, if possible, circumvented. As respects the first, he was right; as respects the second, he was in error, and because of that error Washington now made two egregious and, as the result showed, well-nigh fatal mistakes. Instead of going himself at the head of the whole effective part of his army, he, in the face of an enemy already superior in every respect, divided that army, sending a large detachment, some three thousand strong including Morgan's riflemen—the very kernel and pick of his command—to reinforce Gates, now (August 16) in charge of the Northern Department, he himself, in his pest-hole of a summer camp near Philadelphia, continuing his anxious watch for Howe. It may have been generous, but it was not war; and, within less than a week (August 21) after he had thus depleted his previously insufficient strength, Howe put in his appearance at the Head of Elk (Fisher, II. 22). With his divided force to risk a pitched battle under such circumstances was to disregard the first strategic rule for his conduct, and, in so doing, to invite disaster and defeat; yet that was just what Washington did. When, in 1812, after Borodino, Kutuzof, the Russian commander-in-chief, was urged to risk another battle before abandoning "the holy Ancient Capital of Russia" to the hated invader, Tolstoi says that he put the case thus to the Council of War,—“The question for which I have convened these gentlemen is a military one. That question is as follows,—The salvation of Russia is her army. Would it be

more to our advantage to risk the loss of the army and of Moscow, too, by accepting battle, or to abandon Moscow without a battle?” Tolstoi tells us that a long discussion ensued. At last, during one of the lulls which occurred when all felt that nothing remained to be said, “Kutuzof drew a long sigh, as if he were prepared to speak. All looked at him;—‘Eh bien, Messieurs, je vois que c'est moi qui payerai les pots casses,’ said he. And, slowly getting to his feet, he approached the table: ‘Gentlemen, I have listened to your views. Some of you will be dissatisfied with me. But—he hesitated—‘I, in virtue of the power confided to me by the sovereign and the country, I command that we retreat.’” * Half a loaf is proverbially better than no bread; and this homely domestic aphorism holds true also of military operations. The Russian General-in-Chief merely recognized the fact. Strategically, and from the American point of view, the battle of the Brandywine ought never to have been fought; on that point there is no disagreement. It is, however, argued that it was a political and moral necessity,—that a meddling and impracticable Congress compelled it out of regard to an unreasoning public sentiment. As Marshall, a contemporary authority and himself then serving in a Virginia regiment under Washington, assures us (*Washington*, III. 144, 152, 164)—“Their inferiority in numbers, in discipline, and in arms, was too great to leave the Americans a probable prospect of victory. A battle, however, was not to be avoided. Public opinion, and the opinion of Congress, required it. To have given up Philadelphia without an attempt to preserve it would have excited discontents.” If such was indeed the case, † the decision announced by Kutuzof to his Council of War in 1812 would have been very apposite in the mouth of Washington in 1777. As the result of the battle, he actually did lose Philadelphia, and should properly have also lost his army; for, in addition to the fact that it ought never to have been fought at all, the battle of the Brandywine, while well and skillfully fought by the British, was very badly and blunderingly fought on the side

**War and Peace*, Pt. XI. Chap. IV.

†To the same effect Irving, *Washington*, III. 241. This subject will again be referred to in a subsequent part of this paper, p. 956, *infra*.

of the Americans. They were out-maneuvered, surprised, out-fought and routed. That the chief Patriot army—the mainstay of the cause of Independence—was not on that occasion utterly destroyed was, indeed, due wholly to the indolent forbearance of Howe. It was one of the pithy aphorisms of Napoleon that the art of war is to march twelve leagues in a single day, overthrow your enemy in a great battle, and then march twelve leagues more in pursuit. Sir William Howe met neither requirement; but it was in the last that he failed most conspicuously. As Galloway, the Philadelphia loyalist, with the best conceivable opportunities for forming an opinion, wrote of him, "Howe always succeeded in every attack he thought proper to make, as far as he chose to succeed" (Fisher, II. 27). In this respect Brandywine was a mere repetition of Bunker Hill and Flatbush. Of two French officers who took part in the operations on the Brandywine, one (Lafayette) observes, "Had the enemy marched directly to Derby, the American army would have been cut up and destroyed; they lost a precious night" (Irving, III. 256); the other (Du Portail) wrote, "If the English had followed their advantage that day, Washington's army would have been spoken of no more" (Stedman, I. 387). But Howe would not do it. If he had pursued Washington, it was said, and inflicted a crushing defeat, he might have left part of his force to occupy Philadelphia, and marched the rest to the assistance of Burgoyne. This was what the ministry had expected (Fisher, II. 28). As matter of cold historic truth Washington had, in the great game of war, played into his opponent's hands.—done exactly what that opponent wanted him to do, and what he ought never to have done.* He had permitted Howe to draw

*In his defense of his proceedings, after resigning his command and returning to England, Howe claimed that so far as Burgoyne was concerned, his Chesapeake Bay expedition was a well-designed and altogether successful movement, fully accomplishing its intended purpose. "Had I adopted the plan of going up Hudson's-river, it would have been alleged, that I had wasted the campaign with a considerable army under my command, merely to ensure the progress of the northern army, which could have taken care of itself, provided I had made a diversion in its favour, by drawing off to the southward the main army under General Washington." Therefore, acting upon the advice of the admiral, Lord Cornwallis and other general officers, believing that Washington would follow him, he "determined on pursuing that plan which would make the most effectual diversion in favour of the northern army,

him away from his true objective,—the army of Burgoyne,—then to divide his force, and, finally, in the sequence of so doing, to venture a pitched battle which he had not one chance in ten of winning. Great in ministerial circles were the gratulations when news arrived in London that Howe's false move had been thus retrieved by a move equally false on the Patriot side. "I confess," wrote Lord George Germain,—and one can even

which promised in its consequences the most important success, and which the Secretary of State at home, and my own judgment upon the spot, had deliberately approved."—*Parliamentary History*, xx. 693, 694. And in his *Observations upon a Pamphlet entitled "Letters to a Nobleman,"* 61, Howe repeated the assertion. "I shall ever insist, and I am supported by evidence in insisting, that the southern expedition, by drawing off General Washington and his whole force, was the strongest diversion [in favor of the northern army] that could have been made." Incidentally, it is not improper here to say that nowhere does Howe appear so well as in his parliamentary defense of his conduct while in command in America, against the attacks of those categorized by Burke as "hireling emissaries and pensioned writers." Howe's statement was measured, dignified and plausible. Burke at that time prepared the review of History, Politics and Literature for the *Annual Register*. In his review, for the year 1779, is found (p. 146) the following endorsement of Howe's belief: "The drawing of General Washington and his army, near 300 miles from the North River, to the defence of Pennsylvania, was the most effectual diversion that could have been made in favour of the northern army; and at the same time held out the greatest probability, that the desire of protecting Philadelphia would have induced him to hazard a general action; an event so long and so ardently coveted, as the only means which could tend to bring the war to a speedy conclusion, and which every other measure had been found incapable of producing." Further on Burke made the following statement in regard to Lord George Germain's confidence in the loyal sentiments entertained by a large portion of the population of Pennsylvania. Referring to the "American Minister," he states that "he placed much of his dependence in the firm persuasion, that the well-affected in Pennsylvania were so numerous, that the general would be able to raise such a force there, as would be sufficient for the future defence and protection of the province, when the army departed to finish the remaining service."

[Burgoyne believed that he had saved Howe's army. Upon his making terms with Gates, Burgoyne wrote a private letter to Howe explaining that his orders obliged him to hazard his corps for the purpose of forcing a junction, "or at least of making a powerful diversion in your [Howe's] favor, by employing the forces that otherwise would join General Washington." And a few days later he returned to the subject. "If my proceedings are considered in one point of view, that of having kept in employment till the 17th October a force that joined with Mr. Washington in operation against your Excellency, might have given him superiority and decided the fate of the war, my fall is not to be regretted."—*Burgoyne to Howe*, October 20 and 25, 1777. Hist. MSS. Com., *American Manuscripts in the Royal Institution*, I. 140, 143. W. C. F.]

now almost hear a deep-drawn breath of relief in the words,—“I confess I feared that Washington would have marched all his force towards Albany, and attempted to demolish the army from Canada, but the last accounts say that he has taken up his quarters at Morristown after detaching three thousand men to Albany. If this is all he does he will not distress Burgoyne.”* Thus while himself wandering off with an utterly false objective—Philadelphia—in view, by supreme good fortune Howe had not only induced Washington to follow him, but also in so doing to give the British leader a chance at his true objective, Washington’s own army. In the final outcome, it is difficult to see how blundering could have gone further. Out-manuevered and out-fought, twice beaten in pitched battles neither of which under the circumstances he ought to have risked, Washington presently crawled into his winter quarters at Valley Forge, while Howe ensconced himself comfortably in Philadelphia. Yet months before, Charles Lee, then a prisoner of war in New York, had traitorously but truly advised Howe, “In my opinion the taking possession of Philadelphia will not have any decisive consequences” (Fisher, II. 75).

The actual strategy of the campaign of 1777 has now been passed in view, and its merits or demerits on either side tested by the application to them of the acknowledged principles of a sound policy or rules of correct strategy, laid down in the full light of subsequent events and with our knowledge of conditions then existing. The result has been stated. On neither side was the great game played with an intelligent regard to its rules; but, taken as a whole, the mistakes committed and the blunders perpetrated on the British side clearly and considerably more than counterbalanced those on the Patriot side. On each side they were bad; but in Burgoyne’s capitulation the British lost so to speak a Queen, while in Howe’s failure to destroy Washington’s army after his victory on the Brandywine the British threw away the chance of mating their adversary’s King, by no means impossibly of calling a checkmate.

Charles Lee was second to Washington in command of all the American armies. Captured, or rather ignominiously bagged,

*[Lord George Germain to General Irwin, August 23, 1777. Hist. MSS. Com., Report on MSS. of Mrs. Stopford-Sackville, I. 138. W. C. F.]

by the British at Baskingridge, December 13, 1776, Lee passed the entire year 1777 a prisoner of war in New York, not being released in exchange until May, 1778. While in New York, Lee experienced a change of heart as respects the conflict in which he was a participant; and, with distinctly traitorous intent, drew up a plan of operations for the guidance of General Howe. One feature of this plan has already been referred to. Charles Lee was not a man who inspired either confidence or respect. So lightly did his former British army associates regard him that when his capture was announced and the disposition to be made of him as a prisoner of war was mooted, it was contemptuously observed by “one of the wisest servants of the Crown” that he was so constituted that “he must puzzle everything he meddles in, and he was the worst present the Americans could receive.”* Lee, nevertheless, did have a certain military instinct as well as training, and it is a curious fact that in “Mr. Lee’s Plan—March 29, 1777,” found in 1858 among the Howe papers, a scheme of operations was outlined in close general conformity with the principles set forth in the earlier portion of this paper. Holding New York as a base, the navy was also to secure the control of Chesapeake Bay; and then, cutting New England off from the Middle Provinces, was to rely on gradual inanition to dissolve the Patriot levies. So self-evident did this strategic proposition seem to Lee that up to the 15th of June, 1778, three days only before Howe’s successor, Clinton, abandoning Philadelphia in the summer following Brandywine, began his march to New York, Lee at Valley Forge insisted, in a long letter addressed to Washington, that the plainly impending move of the British commander would be in the direction of Lancaster, Pennsylvania, with a view to maneuvering the Patriot army out of its strong position at Valley Forge and forcing it to a trial of strength under conditions less advantageous to it; and then, whatever the result, Clinton purposed to take possession of some convenient tract of country effectually protected by the British command of the sea, and, by so doing, to unninge the whole machine of resistance.†

*N. Y. Hist. Soc., *Lee Papers*, IV. 402.

†*Lee Papers*, II. 401.

The French alliance, jeopardizing as it did for the time being—and until Rodney's victory (February 19, 1782)—the British control of the sea, had in June, 1778, introduced a new and controlling factor into the strategic situation, in obedience to which Clinton made his move from Philadelphia to New York. But until the news of Burgoyne's capitulation reached Europe (December, 1777), resulting in the Franco-American alliance (January, 1778), it is difficult to detect any point of weakness in "Mr. Lee's Plan." If put in operation at any time during 1777 and systematically pursued, it could hardly have failed to work. The British commander had at his disposal an ample force with which to do anything, except generally occupy the country. Had he seen fit in June, 1777, to move up the Hudson by land and river to effect a junction with Burgoyne, the Americans, as their leaders perfectly well knew, could have offered to him no sort of effective opposition. "Nothing under Heaven can save us," wrote Trumbull, "but the enemy's going to the southward."* Chesapeake Bay, with Hampton Roads as a depot and arsenal, next lay at the mercy of the British fleet. Wilmington, carrying with it a complete control of the Delaware and the whole eastern shore of Maryland, did not admit of defense; neither, as events subsequently showed, did Charleston or the coast of the Carolinas: and the interior was subsidiary to the seaboard controlling points. The Patriot army, if left to itself, behind an effectively blockaded coast, could not be held together because of a mere lack of absolute necessities in the way of food, raiment and munitions. All the British had to do was, apparently, to hold the principal points of seaboard supply and distribution, and a single line of interior communication—New York Bay to Lake Champlain—and then—wait! How utterly and completely they failed to adopt this policy, or to act on these strategic lines, is matter of record. They not only threw away their game, but they lingered out eight years in doing it.

Turning now to the other side, the conclusion to be reached is not greatly better. The record does not need to be recalled in detail: at the South, Brandywine (September 11), Paoli

*Fisher, II. 71.

(September 20), Germantown (October 4), Fort Mifflin (November 15), and Valley Forge (December 9)—all in 1777. An undeniably bad and ill-considered record, with a most wretched termination. At the North it was better, though somewhat checkered; Ticonderoga lost (July 5), Fort Edward abandoned (July 30), Bennington won (August 14), Fort Montgomery and the Hudson Highlands lost (October 6), winding up with the Saratoga capitulation (October 17).* Assuming now that the game had been played quite otherwise than it was played, and more in accord with the rules of "good generalship," it is possible, knowing as we do the characters and temperamental methods of those responsible for the movements made, approximately to predicate results. As already set forth, and for ulterior reasons once more briefly summarized, they would have been somewhat as follows:

On July 30 Howe's armament appeared at the entrance of Delaware Bay, and again vanished. Had Washington been endowed with the keen military instinct of Frederick or of Napoleon, that one glimpse would have been enough. Holding the interior line, Washington would have realized that Howe had made himself for an indefinite but most vital period of time a purely negligible military quantity. Burgoyne, on the other hand, had compromised himself. There would have been one tiger spring; and, before the British commander realized his danger, he would have been in the toils. The next move would have been a logical sequence. Working on interior lines and applying either Frederick's or Napoleon's pitiless mobility to the situation, eighteen days would have seen the Patriot army either striking savagely at Clinton in the absence of a protecting fleet, or back on the Delaware.

What Frederick or Napoleon would now have done, if placed in the position of Washington at that time, it would be foolish

*Writing to his brother from Valley Forge, January 3, 1778, Greene summarized the 1777 campaign: "You mention my letter to Governor Cook, in which I pronounce the division in the British force as a fortunate circumstance for America. The events of the campaign have verified it. . . . Our army, with inferior numbers, badly found, badly clothed, worse fed, and newly levied, must have required good generalship to triumph over superior numbers well found, well clothed, well fed, and veteran soldiers. . . . The limits of the British government in America are their out-sentinels."—*Life of Nathanael Greene*, I. 545.

to undertake to say; for Frederick and Napoleon were men of genius, and, when the critic or theorist undertakes to indicate the path they would have followed under any given conditions, one thing only can safely be predicated—the conclusion reached would be far from the mark. Not impossibly, however, if a guess may be ventured by a tyro—and in the case of Frederick such a move would have been very characteristic—the morning after Burgoyne's capitulation, the head of the Patriot column would have been in motion towards Albany. Surveying the chess-board, and the character and location of the pieces upon it, Frederick might have argued somewhat as follows: Howe is in Philadelphia; if I now strike swiftly and heavily at Clinton in New York, Howe, suddenly awakened to the fatal mistake he has made, and his imperiled base, will be sure to hurry by the shortest route to Clinton's rescue; and I, abandoning New York, will then meet him, with every man and gun I can muster, at a point I will myself select in New Jersey; but "I propose to fight him wheresoever and whensoever I can find him." Clinton's turn would have come next.

Wellington, on the other hand, if similarly circumstanced, would not improbably have from the outset observed Howe's performances with the same "stern contentment" with which he observed the mistaken move of Marmont at Salamanca. He would have been not ill pleased to have his opponent establish himself in Philadelphia, thus dividing his command, and placing himself in an isolated spot far from his base and of no strategic importance. Looking into the necessary subsequent moves in the game, Wellington would have seen that Howe once in Philadelphia must as a military necessity possess himself of the forts on the Delaware; he had to communicate with the British fleet. Those forts were held by Patriot garrisons, and, after the bagging of Burgoyne, their capture must be effected under the eyes of a united and well-equipped covering force awaiting its opportunity, in no degree depleted by defeat. To a hawk-eyed commander, and that Wellington unquestionably was, such an opportunity could hardly fail to offer itself; and the equivalent of Germantown would then have been fought under wholly different auspices. It would have been fought to cover the defenses on the Delaware. It is useless to venture a surmise as to the

probable outcome of such a trial of strength. One thing only can safely be predicated of it, a victory won under those conditions would have cost Howe heavily. Not impossibly half his army would have disappeared.

Unfortunately, until too late, Washington did not see this latter situation in any such light. On the contrary, during the aimless marching and countermarching which followed the disaster on the Brandywine (Irving, III. 368-369), when no doubt longer existed of Howe's ultimate occupation of Philadelphia, Marshall says (*Washington*, III. 154, 155): "To the requisitions for completing the works on the Delaware, the general answered that the service would be essentially injured by employing upon them at this critical juncture, while another battle was contemplated, any part of the continental troops; that, if he should be enabled to oppose the enemy successfully in the field, the works would be unnecessary; if not, it would be impossible to maintain them." As the actual result showed, this conclusion was wrong at each point; the enemy was not successfully opposed in the field, and the forts should have at once been completed, to be firmly held under the watchful eyes of a covering and as yet unbeaten army.

It is related of the Duke of Wellington that, on the day following one of his Peninsular battles, he gruffly observed to an old Scotch regimental commander, "How's this, Colonel, I hear that some French cavalry got inside your square yesterday?" To which he received the no less gruff reply, "Is that so, your Grace; but ye didn't happen to hear they got out again, did ye?" It was easy enough for Howe, after Brandywine, to get into Philadelphia; it was for Washington to see that, once in, it was not equally easy for Howe's army to open communications with the British fleet.

Speaking generally, however, and making no attempt to peer too curiously into the infinite might-have-beens, the situation of the pieces on the strategic chess-board in September, 1777, and after Brandywine, was comparatively simple. Certain moves, become military necessities, may safely be predicated as having been inevitable; for "Unless they had complete control of the Delaware to the sea Philadelphia was nothing but a death-trap for the British" (Fisher, II. 44). Had the game

therefore been played by the Americans skillfully and in accordance with the rules, Howe would have been permitted to march into the trap there, then to find the door between him and his fleet very firmly barred. In other words, avoiding a pitched battle like Germantown, but maneuvering for delay, the Patriots should have perfected and provisioned the defenses, throwing into them strong garrisons of the more reliable troops, under their most resolute commanders. The covering army should then menacingly have watched; for Howe would have been compelled at any cost to possess himself of the works. Nothing of the sort was done. When at last a force of some two hundred men was thrown into Fort Mifflin, it was found to be "garrisoned by thirty militia only." The whole military situation had been misconceived;* but Howe, after Germantown, most characteristically gave his opponent two weeks' time in which to do the long-neglected obvious, and in some slight degree save the gravely jeopardized Patriot situation. With Germantown fought on October 4, not until the 19th did the British commander address himself to the imperative problem of securing the defenses on the Delaware. Two weeks of time very precious to his side had been wantonly wasted. Fortunately for him his adversary had also failed to improve them. Delays were equally divided; for, far to the north, Burgoyne, who should have been wiped off the board six weeks at least before, had capitulated on October 17; but not for over two weeks yet (November 1) did Morgan and his riflemen receive orders to rejoin Washington, and they found him at Whitemarsh, November 18. The campaign was then over. Such dilatoriness does not admit of satisfactory explanation. Warfare was not then, nor can it ever be, successfully conducted in that way.

Apparently, Washington's still divided army had as a fighting unit been used up in two ill-considered and hopeless battles, that on the Brandywine (September 11) and that at Germantown (October 4), and was equal to no aggressive action during

*"It had been impracticable for the commander-in-chief to attend personally to these works, and they were entirely incomplete. The present relative position of the armies gave them a decisive importance."—Marshall, *Washington*, III. 175.

the month of Howe's operations against the forts (October 22–November 15). A golden opportunity was thus lost.

It is hardly worth while further to consider what might have been the outcome of that campaign, with Howe still in command of the British, had the Patriots pursued a more active and intelligent course. But, had the fundamental rules which should have governed the game been grasped and observed, it is by no means beyond the range of reasonable possibilities that the conflict might, even as it was, have then been brought to a triumphant close. Burgoyne disposed of even by the middle of October, a united and seasoned Patriot army, equipped with Burgoyne's stores and strengthened by his excellent field batteries, might have confronted Howe in his Philadelphia death-trap; and they would then have been in position to assail him fiercely when he tried to open the securely fastened door which stood in the way of all communication with his fleet. Even as it was, those defenses—neglected, half-finished only, ill-garrisoned, unsupplied and unsupported—held out six weeks, checking the more important operations against Washington's depleted and twice beaten army. During that time Howe was in great danger of being starved out of Philadelphia, as his army had to be supplied by flatboats running the gauntlet of the forts at night, and never had more than a week's rations on hand.* Under these circumstances it was small cause for surprise that as the days crept on the extreme gravity of the situation "was apparent in the countenance of the best officers, who began to fear that the fort would not be reduced":† in which case was it at all impossible that Howe might in one season have shared the fate of Burgoyne, the tactics and mobility of Princeton and Trenton having been enlarged and developed to cover the broader strategic field between Philadelphia and Saratoga? In such case Yorktown would have been anticipated by exactly four years.‡

**View of the Evidence relative to the Conduct of the American War under Sir William Howe, etc.*, 114.

† *Letters to a Nobleman [Howe] on the Conduct of the War in the Middle Colonies*, 81. Greene, writing November 4, said: "The enemy are greatly discouraged by the fort holding out so long; and it is the general opinion of the best of citizens that the enemy will evacuate the city if the fort holds out until the middle of next week."—*Life*, I. 504.

‡ Trevelyan, Pt. III. 289; Fisher, II. 30. •

Again, and finally, reviewing the campaign of 1777, it is almost undeniable as an historical and strategic proposition, that, either in its early stages or in the course of it, decisive results as respects the entire conflict were within the safe and easy reach of either party to it, who both saw and took advantage of the conditions in his favor and the opportunities offered him. Had Howe gone up the Hudson in June and effected a junction with Burgoyne on the land side, while with the navy the British seized Hampton Roads and blockaded the Delaware from Wilmington, further resistance would have been almost completely paralyzed, and the Patriot army must apparently have dissolved from inanition. There would have been no visible alternative. On the other hand, when Howe, at the crisis of the campaign, disappeared in space, leaving the field free for his opponent, Saratoga, the Philadelphia death-trap and the defenses of the Delaware offered almost infinite strategic and tactical possibilities.

It remains to forestall, and, if possible, in advance meet the criticisms which may not improbably be made upon the views herein taken and the conclusions reached. In the first place it will almost inevitably be urged that due allowance has not been made for the earlier and less matured conditions existing in 1777, as compared with those of the present time or of 1861-65. In the Revolutionary period the country was in no way self-sustaining; the present means of information did not exist; the roads and channels of communication, when as yet not still unmade, were at best crude and inadequate; and, consequently, such military mobility as that suggested, while practicable for Frederick, was impossible for Washington.

The reply to this criticism is obvious and conclusive. In answer to a call of great exigency from Albany after the evacuation of Ticonderoga (July 4) Washington, in presence of the enemy—dividing thereby a force at best insufficient—sent Glover's brigade and Morgan's riflemen, in all some 3000 of his most effective troops, to confront Burgoyne. They covered the ground with a fair degree of rapidity, and rendered valuable service. There is no apparent reason why what was accomplished by this large detachment with no serious difficulty should have been impracticable for the commander-in-chief with the

bulk of his army. Four years later, when the operation suggested itself to him, Washington moved a larger force through a more difficult country a yet greater distance in less time; and he did it with no particular trouble. A French contingent, some fifteen hundred strong, then proceeded from Newport, Rhode Island, through Connecticut, crossed the Hudson above New York, and marched down to the Head of Elk on Chesapeake Bay; this in midsummer and early autumn. Apparently, those composing this array had a highly enjoyable outing.* Accompanying the movement of the allied forces from the Hudson to Yorktown, Washington, with his companions, is said to have at times got over sixty miles a day.† During the intervening four years he had obviously improved both in strategy and mobility. In effecting on interior lines this really fine concentrated movement against a divided enemy, the American commander had, also, knowingly left Philadelphia quite uncovered from the direction of New York, where Sir Henry Clinton lay with 18,000 idle effectives at his disposal. (*Ib.* 421.) Both sides had at last got to a realizing sense that Philadelphia was a mere pawn in the game, the loss or taking of which signified nothing. The sudden concentrated move on Cornwallis at Yorktown was, on the contrary, called checkmate to King George.

In their deeply suggestive and intensely interesting story, *Le Conscript de 1813*, which, now become a classic, excited some fifty years ago such world-wide attention. Erckmann-Chatrian describe the veteran sergeant Pinto observing through the vanishing mist the allied armies about to attack Napoleon in flank and cut his column in two, on the morning of Lützen (May 2, 1813); as he does so, "le nez en l'air et la main en visière sur les yeux," he remarks to the conscript at his side—"C'est bien vu de leur part; ils apprennent tous les jours les malices de la guerre." A similar observation might have been

*The entire distance, land and water, traversed by Rochambeau's command in this movement was 756 miles. Setting out from Providence June 18, Yorktown was reached October 28. The actual road-marching distance was 548 miles, which were covered in thirty-seven days, or at an average rate of fifteen miles a day. The American army set out from Dobbs Ferry August 20 and reached Williamsburg, 492 miles, September 14, having covered on an average twenty miles a day.

†Bancroft (*Cent'l Ed.*), vi. 424.

applied by Sir Henry Clinton to Washington and his movement in September, 1781. Meanwhile the conditions under which operations were carried on had not greatly changed since July, 1777; it was Washington who had developed.

Another objection urged will not improbably be to the effect that Washington's military action was, in July, 1777, hampered. From considerations of *prestige* and on political grounds (Irving, III. 241), he could not afford to leave Philadelphia and the Middle Provinces even temporarily uncovered, no matter what great and speedy results might by so doing be secured in the North. In the first place be it observed, Washington never suggested any such move as that against Burgoyne, leaving Philadelphia uncovered to await its outcome; nor accordingly did Congress in any way hamper him as respects making it. On the contrary, he seems to have acted wholly on his own volition and in accordance with his own best judgment, and is himself on record to this effect. (P. 935, *supra*.) But, even assuming the contrary, the extreme unwisdom, not to say weakness, of allowing clergymen, politicians, editors and citizens generally to influence campaign operations has been generally admitted ever since September 3, 1650, and that day's experience of Leslie's Scotch army at the hands of Cromwell, near Dunbar. Really masterful captains do not give ear, much less yield, to such influences. On the other hand, it is matter of record that Washington was noticeably given to holding councils of war, ever seeking advice and showing a somewhat excessive deference to public opinion. He did so on Long and Manhattan Islands in 1776; and again before Philadelphia, in 1777; by so doing in both cases jeopardizing gravely the cause he was there to protect. He did so knowingly and avowedly; for difficult as it is of belief, he seems actually for a time to have held himself bound to follow the opinion of the councils he had called in all cases where it diverged from his own.* As to the strategic

*In March, 1777, Washington sent Greene to Philadelphia to reach a distinct understanding with the Congress on this subject, among others. The question was then formally raised, and the following recorded: "*Resolved, that General Washington be informed that it never was the intention of Congress that he should be bound by the majority of voices in a council of war, contrary to his own judgment.*"—Greene, I. 348; *Journals of the Congress*, March 24, 1777.

importance of Philadelphia, Washington in the summer of 1777 seems himself to have been laboring under as great a delusion as that which possessed Howe. It apparently never occurred to him that Philadelphia could most certainly be either saved or rescued by a sudden, concentrated blow struck just north of Albany. Greene, far and away the ablest of his lieutenants, also shared in the costly delusions; but with a saving hesitation due to his keener military instinct. "I think it," he wrote, on August 14, 1777, "an object of the first importance to give a check to Burgoyne, . . . [but] Philadelphia is the American Diana, she must be preserved at all events. There is great attention paid to this city; it is true it is one of the finest upon this continent, but in my opinion is an object of far less importance than the North River."* So, less wise than Kutuzof in the next generation, Washington sacrificed an army in hopeless conflict to save "the American Diana"; and, when the "Diana" in question fell a prey to the ravisher, it was in due time discovered that she was not worth saving, but, on the contrary, only a Delilah, and rather in the nature of a "death-trap" to the foreign possessor. Having, so far as the record shows, been in no respect hampered in his action, but following the dictates of his judgment, "his own valiant spirit" and "the native ardor of his character" (Irving, III. 241, 242), but, unfortunately, in pursuance of a thoroughly unmilitary plan, Washington lost Philadelphia and reduced his army to impotence from repeated defeat. He then presently did what he should have done four months before, abandoned Philadelphia to the enemy and elsewhere sought salvation for the cause. Even this, however, was done only after the holding of yet other useless councils of war.

These grounds of criticism anticipated, and perhaps in degree overcome, the final and fundamental objection to the views here advanced remains; and that objection, already alluded to, is in reality at the basis of all others, and consequently the one most difficult to overcome.

At the threshold of his *Life of Columbus*, Washington Irving, in a tone so earnest as to amount almost to indignation of utterance, lays down this canon for the guidance of historical

*Greene, I. 435.

investigation: "There is a certain meddlesome spirit, which, in the name of learned research, goes prying about the traces of history, casting down its monuments, and marring and mutilating its fairest trophies. Care should be taken to vindicate great names from such pernicious erudition. It defeats one of the most salutary purposes of history, that of furnishing examples of what human genius and laudable enterprise may accomplish.* This in the case of Columbus; but the same, or a very similar, canon of criticism is leveled at all those who since have ventured, or even now venture, in any way or degree to dissent from that sweeping and altogether indiscriminate estimate of Washington, whether as a man, a patriot or a captain, emanating first from Mason L. Weems, as early as 1800, and since greatly elaborated by a large and devoted school of investigators and biographers, of which Weems must ever remain the unacknowledged head. Of this school Irving is himself, perhaps, the chief and most respected exponent. Such have established a cult—almost a creed. To dissent from it in any respect may not indeed be proof of moral turpitude, but is with them suspiciously suggestive of intellectual weakness. In our historical literature this cult has been carried to such a point as to have become a proverb in Europe. Bagehot, for instance, in alluding to some exaggeration of statement, says it would be as absurd as "to describe a post-boy as a sonneteer describes his mistress, or as the Americans stick metaphors upon General Washington."† This almost theological desire to preserve the Washington legend in undiminished lustre, above all doubt and beyond limitation, has gone to the extent even of a systematic suppression of evidence and consequent falsification of history. In some well-established cases this has been advanced as a patriotic duty. A striking instance is afforded in the *Life of Greene* by his grandson. Among the papers consulted by G. W. Greene in the preparation of his work were the Pickering mss., in the possession of our Society. He there found this anecdote, Timothy Pickering being Adjutant-General of Washington's army during those operations about Philadelphia in the autumn of

**Columbus* (Geoffrey Crayon ed.), I, 71.

†*Literary Studies*, I, 126.

1777 which have just been passed in review: "On one of these dreary nights," writes Pickering, "as the army marched upwards on the eastern side of the Schuylkill, in its rear I fell in with General Greene. We descended the bank of Perkiomen Creek together, and while our horses were drinking, I said to him: 'General Greene, before I came to the army, I entertained an exalted opinion of General Washington's military talents, but I have since seen nothing to enhance it.' I did not venture to say it was sensibly lowered, though that was the fact; and so Greene understood me, for he instantly answered in these words precisely: 'Why, the General does want decision; for my part, I decide in a moment.'"

The biographer of Greene then adds this delightful comment and *naïve* confession, breathing in its every word the whole spirit of the Weems school and Washington cult: "That Greene did decide, after a careful examination of facts, with marvelous promptitude, is asserted by all who knew him, and proved by all his independent acts. Still, I could wish that he had never permitted himself to call Washington's decision in question; for the hereditary reverence I have been trained up in for that wonderful man, and which Greene's precept and example have made traditional in his family, renders it difficult for me to enter into the feelings of those who, acting with him, and loving and revering him, and putting full faith in his civic talents, still permitted themselves—as Hamilton and Pickering and Steuben are known to have done—to doubt his military talents."

Then follows, in a foot-note: "I have been counseled not to repeat this anecdote; but, as I interpret the historian's duty, the suppression of a characteristic fact is a practical falsehood. Greene saw faults in Washington, but saw too that they were outbalanced by his virtues. Lafayette tells us that Washington's 'reluctance to change opinion' led him to expose himself and his suite to a serious danger. Did Lafayette look up to him with any the less reverence?" (I. 468-469.)

Further comment is unnecessary. Volumes could not express more; but, followed in that spirit,

"Science is a blind man's guess
And History a nurse's tale."

Finally, as to the two opponents confronting each other at the chess-board of the Kriegspiel which has now been passed in review—Howe and Washington. Of Howe it is not easy to find much that is pleasant or anything commendatory to say. Trevelyan, after his kindly fashion, tries to part from him with a few pleasantish words (Pt. III. 284-287), but does so with at best indifferent success. He says of him that he was "an indulgent commander; who lived and let live; and who, when off duty, was as genial to his followers, high and low, as on the actual day of battle he was formidable to the enemy." But, when it came to presenting an estimate of Sir William Howe, Charles Stedman enjoyed far better opportunities for so doing than Sir George Trevelyan; and, if the cold historical truth is the thing sought, Stedman's measured but stern indictment (*History* I. 308-309, 381-384) of the British commander should be read in close conjunction with Trevelyan's words of friendly farewell. A man of unquestioned physical courage, as a soldier Howe was a very passable tactician. Face to face, on the way to a field of battle or on that field itself, he never failed both to out-manuever and to out-fight Washington; but, on the other hand, he had no conception of a large strategy, or of the value of time and energy as factors in warfare. Most companionable, he was lax in morals, physically self-indulgent and indolent in the extreme. In no way either thoughtful or studious, he was without any proper sense of obligation, personal or professional; and, moreover, there is reason to suspect that he was somewhat disposed to jealousy of those who might be considered in the line of succession to him,* especially of Sir Guy Carleton and General Burgoyne, who chanced both to be his seniors, the last by no less than seven years. Receiving at Bunker Hill a severe lesson in his over-confident attempt at a frontal attack, he afterwards showed a fair degree of skill in a recourse to flanking tactics; but, judged by the higher standards of this sort of work both before and since, what he accomplished was in no degree memorable. As a man of 30 he led Wolfe's famous scaling party at Quebec on the morning of September 13, 1759; but in 1777 he was 48 years old, and, becoming heavy in per-

*Fisher, Chap. LIX. with authorities cited.

son, had apparently lost any mental or physical alertness he might once have possessed. Certainly, it cannot be claimed that during the campaigns of either 1776 or 1777 he evinced the possession of either personal character or professional skill. In 1777 his failure to grasp the controlling factors of the situation was so gross as to excite surprise at the time, and afterwards to defy all efforts at explanation either by himself or the historian. It remains to this day a puzzle, or worse; for, in plain language, his course, as already intimated, was suggestive at least of jealousy and disloyalty, if not of actual treachery. If he did not intentionally betray him, he wantonly abandoned Burgoyne to his fate. A man, in short, of the Charles II type, he set the worst possible example to his subordinates, and did much to debauch and demoralize the army entrusted to him. Altogether, it can hardly be denied that, in 1777, he was, in mess-room parlance, a rather poor shote.*

*Charles Lee was two years Howe's junior, Howe in 1775 being 48 and Lee 46. They had probably known each other before the Revolutionary troubles. Both had served in America during King George's War, Lee having been with Braddock at Fort Duquesne (1755), and Howe with Wolfe at Quebec (1759). They probably knew each other. Lee was a prisoner of war in New York, where Howe was in command, from December, 1776, to April, 1778, and the two doubtless then saw more or less of each other. Subsequently, Lee, writing to Benjamin Rush from the camp at Valley Forge, June 4, 1778, gave to his correspondent the following pen-and-ink sketch of Howe, who had then shortly before laid down his command and gone to England: "From my first acquaintance with Mr. Howe I liked him. I thought him friendly, candid, good natur'd, brave and rather sensible than the reverse. I believe still that he is naturally so, but a corrupt or more properly speaking no education, the fashion of the times . . . have so perverted his understanding and heart, that private friendship has not force sufficient to keep a door open for the admittance of mercy towards political Hereticks. . . . He is besides the most indolent of mortals. . . . I believe he scarcely ever read the letters he signed. . . . You will say that I am drawing my friend Howe in more ridiculous colors than He has yet been represented in—but this is his real character—He is naturally good humor'd and complacent, but illiterate and ignorant to the last degree unless as executive Soldier, in which capacity He is all fire and activity, brave and cool as Julius Caesar—his understanding is, as I observ'd before, rather good than otherwise, but was totally confounded and stupify'd by the immensity of the task impos'd upon him—He shut his eyes, fought his battles, drank his bottle, had his little whore, advis'd with his counselors, receiv'd his orders from North and Germain, one more absurd than the other, took Galloway's opinion, shut his eyes, fought again, and is now, I supposed, to be call'd to account for acting according to instructions; but I believe his eyes are now open'd."—*Lee Papers*, II. 397-398.

Washington, on the other hand, impresses one throughout as being a clear-headed, self-centered Virginia planter and gentleman of the colonial period, noble-minded, serene and courageous, upon whom, at the mature age of 43, had been imposed the conduct of a cause through the command of the simulacrum of an army. A man of dignified presence and the purest morals, his courage, both moral and physical, was unquestioned; but, frequently puzzled and hesitating, he showed a proneness to councils of war in no way characteristic of the born commander of men. As a strategist, he was scarcely superior to Howe; while, as a tactician, Howe, mediocre as in this respect he indisputably was, distinctly and invariably outclassed him. Washington fought two pitched battles in the 1777 campaign, neither of which can be justified under the circumstances; and both of which he lost. His strategy was at the time and has since been characterized as Fabian, yet in every one of his campaigns he evinced a most un-Fabian reluctance to abandoning any position, even though of no strategic importance, or perhaps incapable of successful defense. It was so at Brooklyn and on Manhattan Island in 1776; and, again, on the Delaware in 1777. In both cases he was, in fact, altogether too ready to fight. That the tools with which he had to work were poor, unwieldy and altogether too often unreliable does not admit of question; but it is the part of great commanders to make good such deficiencies in unexpected ways. This Washington failed to do. What he lacked is obvious, though then it could not have been forthcoming—a trained and experienced Chief of Staff, a man who would have been to him what Gneisenau was to Blücher in 1815, and what A. A. Humphreys was to General Meade during sixteen months of the Army of the Potomac. Among the Revolutionary officers Greene unquestionably would most nearly have met the requirements of the place; but Greene, though naturally a soldier, was self-taught and lacked experience. It is doubtful if he had any correct idea of the functions of a staff, and he certainly was not familiar with the details of a complete military organization, even to the degree that organization had attained prior to the wars of Napoleon. But, probably, it is fortunate no such position then existed; for, had it existed, some foreigner would almost certainly have been se-

lected to fill it; and it would be difficult to name any foreigner, adventurer or otherwise, who in the American service has ever yet really understood either American conditions or the American as a soldier. Almost invariably such bring to their task European notions and formulas; and such do not apply. Essentially a volunteer, a ranger and a rifleman, the American soldier has an instinctive dislike for the European martinet; and, curiously enough, Washington himself neither understood nor used the American soldier as did Greene and Morgan in the Revolution, Jackson in the War of 1812, or Grant, Sherman and Sheridan, on the one side, and Lee, Jackson and Forrest on the other in the War of Secession.

In one respect, however, and a most important respect, Washington was supremely and uniformly fortunate,—his luck as respects those opposed to him in the game of war was notable and uniform. Gage, Howe, Clinton fairly vied with each other in their low level of the British commonplace—what Stedman most happily terms “monotonous mediocrity.” Finally, as has elsewhere been said, Washington, courageous and enduring, confident himself and inspiring confidence in others, great in saving common sense, was unequaled in the possession of those qualities which go to make up what men know, and bend before, as character.

Not only in this respect, but in his other limitations as well as attributes Washington is irresistibly suggestive of William of Orange. Each evinced throughout life and under most trying conditions the same overruling sense of duty and obligation,—the same steadfastness and serenity in presence of adversity, an equal saneness of judgment and patient confidence in the cause to which fate had devoted him. As a soldier, William did not excel. Confronted in Alva with a really capable military opponent, he never won a battle, and his campaigns were utter failures. The Spaniard in fact did with him almost as he pleased; yet the Dutchman was indomitable. Though between the Duke of Alva and Lieutenant-General Sir William Howe, of course, no comparison can be instituted, it was much the same in this respect with Washington. Neither William nor Washington evinced in his career the possession of any highly developed military or strategic instinct; in both

also there was a noticeable absence of aggressive will power; and, moreover, of that dangerous and ill-boding arbitrariness of disposition almost invariably the concomitant of an excess of will power. In Washington as in William there was likewise noticeable a certain lack of intellectual alertness, amounting at times almost to a slowness of apprehension.

By universal admission there is no more considerable, as well as admirable, figure in all modern history than William the Silent; and, while he stands forth as the great historical prototype of Washington, it may not unfairly be asserted the latter suffers nothing in a comparison with him.

KANSAS CITY, November 2, 1910.

DEAR MR. ADAMS:—I have your letter today asking as to the rate of marching by infantry troops. With good roads and no unusual obstructions infantry would make an average of about two miles an hour, and fifteen miles a day was a good march. This would mean from nine to ten hours on the road. On a well regulated march it was the usual custom to march for an hour, then halt for ten minutes, and at noon rest for one hour. On the march from Atlanta to Savannah we averaged very close to fifteen miles a day for twenty-two days' actual marching. This march was conducted with great skill and precision, using all available roads over a width of some thirty miles of country. Both roads and weather were very good. The advance guard would start at daylight, getting into camp by 3 or 4 o'clock in the afternoon, and the rear would camp by dark or soon after. In the Carolinas it was very different; weather and roads were both bad, and we often made not more than eight or ten miles in an entire day. One occasion I remember very well, when my regiment was rear-guard. We started about 9 o'clock in the morning behind the ammunition train and reached the camp of the brigade at 7 the next morning, just as the latter was moving out of camp on its next day's march. All through the night we had been pulling wagons out of the mud, and only marching continuously for a few minutes at a time.

In all of the marches through Georgia and the Carolinas it was the custom in each division for the brigades in turn to have the advance. Similarly in each brigade several regiments had the advance successively, and if an entire corps marched by one road for several days the different divisions took their turn in the lead. The regiment that led the entire column had the easiest time of all, and the further you were in the rear, the slower and more tedious was the march. It was not unusual on special occasions in all active campaigns to make twenty miles in a day and at times as much as twenty-five miles, but the rate of marching rarely exceeded two miles an hour. A single regiment marching by itself could make two and a half miles, but any more rapid rate meant a strung out column and straggling. In the well regulated marches of the western armies it was customary when the leading regiment of a brigade was halted for a rest for the following regiments to file into fields on the side of the road, close up on the leading regiment and then

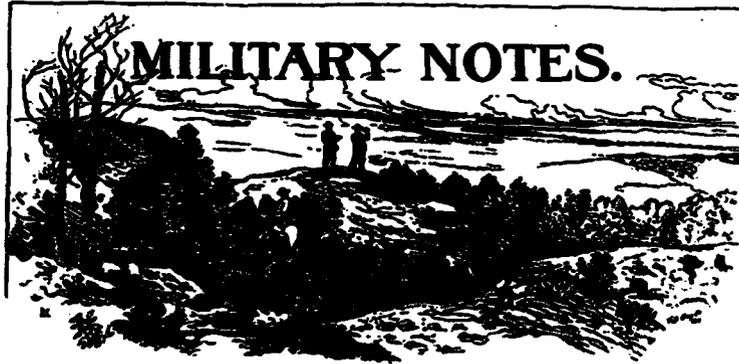
move out successively at the end of the rest. In the first year of the war the marches were generally very badly conducted, owing to the inexperience of the mounted officers from the colonels up. It was a common thing for the commander of the leading regiment to start off at a three mile an hour gait, which would seem very moderate to him and to the leading files of the right company, but the rear of the regiment would be having to double quick part of the time to keep up, the column would be strung out to twice or more its normal length, and the road would be lined with stragglers. Colonel Gordon, who was a nervous, impetuous man, though an able commander on the field of battle, did not at all times use good judgment in marching the regiment. He was always well mounted on a spirited, quick-stepping horse, and, starting on a march in the early morning, would often take a good three mile an hour gait, which the leading files and companies would keep up with fairly well for a time; but the rear companies would soon be in trouble, and the consequence would be much straggling. Lieutenant-Colonel Andrews and Major Dwight, from their positions in the rear of the regiment, profited by his errors, and were much better when at the head of the column; but the captains of companies, who had learned their lesson by experience on foot, knew best of all how to conduct a march when they became mounted officers and in command. No one without actual experience can possibly understand how the slightest obstacle in the road, a small brook or fallen tree, will disorganize a marching column, and these are the occasions when a skillful officer at the head will understand how to conduct a march so as to have his men well closed up at all times, and not put too great a burden on the file closers. In considering the rate of marching of infantry, you have to bear in mind that each man in our war was carrying his rifle, about nine pounds, sixty rounds of ammunition, say five pounds, his equipment, a shelter tent, a blanket or overcoat, often an extra pair of shoes, and one to three days' rations in his haversack, a canteen, a tin cup and frying pan; altogether twenty to twenty-five pounds.

In our experience we had many exceptional, long and hard marches. When Banks retreated from the Shenandoah Valley in May, 1862, we started from Strasburg at about 11 A. M. after being under arms at daylight, and reached the Potomac at Williamsport, about 10 or 11 o'clock the next night. Fighting all the afternoon and evening of the first day as rear guard, which saved our trains from Jackson, then after lying on our arms in front of Winchester for about three hours, going into battle at daylight for three or four hours, and then retreating to the river. The distance from Strasburg to the Potomac is fifty-six miles, but we covered two or three miles more in making an attack on the advance of the enemy at Kernstown.

The march from Winchester to the river was practically without a halt for the thirty-six miles, as the enemy was close behind for nearly the entire distance, though his pursuit was not at all vigorous.

Truly yours,

C. F. MORSE.



CAVALRY EQUIPMENT.

Referring to the November number of the *CAVALRY JOURNAL*, page 550, we find this statement: "Some officers pretend that it (the stirrup-hood) offers a great protection against cold in the North and against mesquite, etc., in the South."

Why "pretend"? Are those who differ in opinion with your contributor necessarily insincere? If so, dishonesty is becoming somewhat widespread, as I find that a very large majority of the older officers and of the old and experienced soldiers do believe that the stirrup-hood is a very great protection, as above stated, and they have no desire whatever to part with it.

And what are we offered in place of it? "It should be of non-corrosive steel, ample in size, and with a fairly wide tread. By not cleaning the non-corrosive steel, it will become so dim as not to be specially noticeable."

The advocate of the substitute stirrup himself points out two of its weak points: (1) Being of steel and "ample in size," it will also be ample in weight. (2) The non-corrosive

steel is "specially noticeable." It reflects light somewhat like a nickel-plated saber-scabbard. To obviate this it must be kept dirty. But this plan has been repeatedly tried with nicked scabbards and bits, and has always failed. Nothing short of paint will answer the purpose, and that soon gets partially rubbed off. To these two very serious objections, I will add another, viz: (3) It affords no protection against cold winds or chapparal to the foot, which the tapidero most certainly does. In all these respects, the proposed stirrup is very inferior to the present stirrup.

But its advocate thinks it is less "unsightly." That, of course, is a matter of opinion. If true, those who prefer appearances to utility and good service would prefer it. But, when so dirty as not to reflect the light of the sun, would it not also be "unsightly"?

Then what will we gain by the swap? We will eliminate a "fad"; and, in place of it, we will have a different fad, and one that reflects vanity instead of utility.

So far, we do not seem to have gained much by this species of elimination. But our advocate says: "The fact that the cowboys from northern Montana to southern Arizona, have practically discarded the antiquated tapidero should be sufficiently decisive for us. Nothing connected with the appearance of a cavalry horse is so unsightly as these huge pieces of leather swinging below the animal's belly."

Upon this point, the animus of the advocate is shown by the single word "unsightly." No other point is made against the tapidero and even this one is a matter of opinion.

In the opinion of the present writer, any reference to the cowboy as a model for the cavalryman is simply a waste of words. His business and his equipment, naturally and properly no doubt, differ from ours in a thousand ways. If, however, he has acted with wisdom and judgment in discarding the stirrup-hood, why not also ascribe the same qualities to him in retaining the pistol and lariat? Or is he a model of wisdom only when it suits our convenience?

The Cavalry Equipment Board has recently submitted the question of the troopers' foot-gear to a vote. Why cannot the

stirrup-hood question, and perhaps others, be settled in the same manner? Gentlemen need have no fear that cavalry officers do not know what they want in these respects. Very few indeed are they whose minds are not fully made up on all the much-talked-of questions such as stirrups, bits, lariats, pistols, saddles, etc., etc. We lack only the means of expressing decisively our opinions on all such points. There is great danger that a few over-zealous enthusiasts will succeed in getting their hobbies adopted in place of really valuable portions of the present equipment, that have stood the tests of long and hard service successfully, and that are popular with the great majority of experienced officers. In only too many instances, these gentlemen are keeping quiet while the faddists occupy the center of the stage and both wings in addition. But, while these gentlemen will not write essays nor make speeches, they will vote if given the opportunity. And this is the way, and the only way, to find out what the cavalry service wants.

Our author is one of those who wishes to discard the pistol. He says: "Some might claim that the pistol would be our only weapon for meeting cavalry armed with the lance. I would answer that by saying the rifle (or carbine), held in one hand, would be equally good or better for the first onslaught, after which the saber would be a match for the lance in close quarters." In other words, having thrown away his pistol, he now believes that, while riding in the charge, he will be compelled to use his clumsy, unwieldy rifle, weighing 8.7 pounds, as a pistol, "held in one hand"; and he believes that it will be "equally good or better" than the pistol for this purpose.

If any other cavalryman believes this proposition, by all means let him try the experiment. It is thought that there is not today, in our army, nor in any army, a single troop that can, in this manner, accomplish anything excepting a waste of ammunition. Other conditions being equal, or anything near equality, the victory of the lancers would be a foregone conclusion. If this is the best argument for discarding the pistol, we may still hope that it will be retained; and we may continue our efforts to get a larger caliber, that will stop an enemy, to replace the toy now in use. It is, of course, well known that, re-

cently, our cavalry officers voted, almost unanimously, for the pistol of .45 caliber, to take the place of the present issue.

The present cavalry equipment is the result of many decades of experience. Among those who were instrumental in devising it, were many distinguished men, who took part in many campaigns and in much hard fighting. That it is excellent is proved by the fact that our cavalry has repeatedly used it in campaigns of many months' duration; and, at the close thereof, has brought in animals and equipments, nearly all in good condition. That it is susceptible of improvement is not to be doubted. But, in deciding how and where this shall be done, the Equipment Board will scarcely accept unsupported statements of opinion as arguments; nor is it likely to be intimidated by the assumption that "Whatever is wrong"; and that our only salvation lies in discarding our well-tried equipments and replacing them with something from Europe.

General von Bernhardt, considered by many to be the greatest authority on modern cavalry, is quoted as saying: "The most interesting and instructive campaign for the service of modern cavalry appears to be the American War of Secession, which is, however, almost unknown in Germany, where there is a lack of opportunity to study it." In the last year of that war, the total number of cavalymen was far in excess of one hundred thousand. They rode horses, and they carried carbine, pistol, and saber. Their deeds on many fields show that they were proficient in the use of all four. Yet, the critic of our present equipment says: "It simply is not possible to properly instruct the average man in one enlistment in the use of his four arms—horse, rifle, saber and pistol."

The equipment, most vigorously condemned by our critic, is precisely what pleased the Civil War cavalymen most, and what they have left to us as the result of their experience. I repeat that this equipment should not be lightly cast aside, unless condemned by men of considerable experience in active campaigning, *who will give reasons for their opinions.*

"BOOTS AND SADDLES."

GRANT'S IDEA OF THE PISTOL.

A PROPOS of the revival of the Saber and Revolver question, it may be well to recall General Grant's opinion on the subject.

I find in the *Army and Navy Journal* of March 31, 1888, an account of a meeting of General Grant with Kaiser Wilhelm. The General tells the story and says: "I spoke of two changes I would make if I organized another army, namely, the abolishment of the saber and bayonet. My argument was that for fighting power a pistol would surpass either while the weight of the saber and bayonet should be given to ammunition and rations." E. S.

WHY REVOLVERS?

WE have been trying for many long years to justify the issue of the revolver to the ranks of our Cavalry.

I have had thirty-one years of this experience and I know that attention had been concentrated on the revolver as a charging weapon long before I joined.

At my first station we had every man (except the relief on post) in ranks every day; few of our men were in their first enlistment, and still fewer were recruits; the steadiness of our horses may be inferred from the fact that we often fired blank volleys with the carbine, mounted, in line, and hampered by the top-heavy helmet.

Our prescribed record practice required a charge of a platoon in line, boot to boot, firing five shots per man from the revolver, straight to the front.

This is the charge of the revolver enthusiast, and, even under the favorable conditions noted, this is how it worked.

For a month we trained for it individually, horses and men,

with very slight damage to the target, and such damage almost entirely attributable to the fifth shot, fired as near to the target as permissible.

The horses became steadily more nervous, although in this individual work their heads were swung out of the line of fire, and, by the time the platoon firing came, there was a long list of animals barred as too dangerous for the ranks.

Finally, the twelve or sixteen men, on selected horses—(the requirement of using their own mounts notwithstanding),—were lined up for the record charge, and, with many an injunction to hold the fire unless the front was clear, they were launched on the hundred yard dash.

Most of the men fired their five shots, high angle fire;—then they counted eight or ten holes in the targets, congratulated each other that no one had been hurt, and turned their horses over to the next platoon.

The failure of this firing to the front and its danger brought about the substitution of the individual fire to the right and left front, at five targets placed at 25, 20, 15, 10, and 5 yards from the track, thus simulating the approach to the enemy.

Since those days we have had plenty of experience, and have fired untold ammunition in developing the mounted pistol shot. How many sure ones have we?

Buffalo Bill's cowboys, of The Wild West, wear two revolvers apiece, but they never show the public what they can do with them from the back of galloping horses. Instead, they take the easier task of breaking glass balls with a Winchester rifle loaded with small shot.

On the plains, the cowboy talks of shooting the insulators off the telegraph poles at a run, but he declines a challenge to hit three poles in succession, galloping by at ten yards.

Thus much for the effectiveness of the revolver used from the charging horse.

The chief objection to it is, however, that it operates to deprive the trooper of his most important charging weapon, the horse.

The pistol man will naturally swing off, preferably to the left, as he approaches the front of the enemy, so as to get the

full effect of his revolver practice; he does not want contact where his pistol will strike no farther than the enemy's steel or his lunging horse.

The swordsman spurs straight home to strike with his horse, his safety increases with his speed, his blow, with the square of his velocity; he can only lose by delay; neither in the charge, the pursuit, nor in the mêlée does he fear a friendly shot in the back.

We are the only cavalry armed with the pistol, we have too many arms, we can not learn, in our limited time, to use all four of them. Let us learn then to use the horse, the rifle, and the saber, and lighten our load by discarding the revolver and its ammunition.

Officers, sergeants, and trumpeters, who should carry no rifle, must of course retain the revolver as their fire arm.

FRED S. FOLTZ,
Major 15th U. S. Cavalry.

PRICES AND SPECIFICATIONS FOR FRENCH OFFICERS' HORSES, 1911.

BY AN OFFICER ABROAD.

BY decision of the Minister of War, the price to be paid for officers' mounts next year has been raised from an average of \$280 to \$308. The Minister states that he has been actuated by the desire to make the price allowed for officers' horses bear a more correct ratio to that which is paid for troopers' horses than has been the case in the past.

In purchasing horses for the army, three distinct categories are recognized: Cuirassier horses, dragoon and artillery horses, and light cavalry horses. The maximum price allowed to be paid for any officers' horse of the first category is \$352; of the second category \$300; of the third category \$270.

The standard of height, that is, the average to which the

majority should conform, is given as fifteen hands, two and one-half inches for cuirassier horses; fifteen hands one-half inch for dragoon and artillery horses; fourteen hands three and one-half inches for light cavalry. These heights are a slight reduction from the former ones, and they have met with distinct approbation as being a reaction against the former prejudice in favor of considerable height in saddle horses. The question of weight has not been definitely decided and has been left to the appreciation of the buyers. The principle, however, seems accepted as laid down by the "Société Hippique Française" that a good horse for useful work at fast gaits ought to weigh about five times what he carries. This, however, of course is a mere indication, for as was justly remarked by the President of the Horse Congress in Paris in 1910, a good judge of a horse often takes into account personal coefficients which entirely escape measurement.

The age of all these horses when bought is approximately 3½ years.

The French government decided last year to mount all of its officers except generals, and to abolish the former indemnity paid to officers who mounted themselves. This it has done in the interest of economy as well as to insure by its own means that every man shall have a horse suitable to the duty he is required to perform. For example, infantry captains and surgeons are mounted on horses which cost the government from one-half to one-third of what it has paid for a cavalry or general-staff officer's mount, for perfectly evident reasons.

If we take the life of an officer's horse at eight years, it can be seen that it costs the government about \$38 a year to mount its cavalry officers on horses which are splendidly suited to work in campaign and which encourage horsemanship and riding throughout the mounted arms.

Our government pays \$150 a year to its officers to mount themselves, and there are probably not 50 officers in our whole service who own horses as good as the average ridden by French cavalry officers.

REGULATIONS FOR THE PURCHASE OF HORSES
FOR MILITARY SERVICE IN CHINA.

RULES FOR CHOOSING HORSES FOR THE ARMY.

1. With broad and level foreheads; straight-up ears; long and protruding eyes; level and straight noses with big nostrils; thick upper and hanging lower lip; small and well held up heads; thin and arched necks; broad chests; long upper and short lower parts of fore legs; between the legs there should be at least a foot's distance; long and thin hind legs, and both legs should be close together; thick, round and strong hoofs; in trotting the hind feet should follow in the footsteps of the front; long and soft manes; wide groins; place for saddle should be curved; big girths—it looks from both sides like a triangle; high and square rumps, and both sides must be round and steep; high tail bones; big and strong joints; short and strong bodies.

2. The above specifications are general, for all horses. Those for the Cavalry, Artillery and Transport specifically as follows:

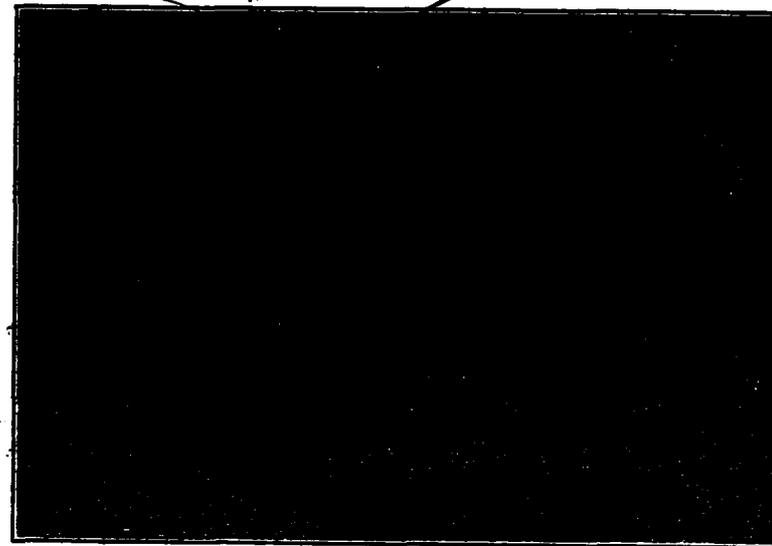
A. *For Cavalry*: Fat and fierce looks; small heads; big eyes; sharp ears; long and strong necks; fine hair; short and strong barrels; long and broad buttocks; strong tails; broad and round chests; strong ribs; neat limbs; tightly joining sinews; light steps; 47 to 51 inches high.

B. *For Artillery*: Fierce looks; long and strong backs; broad and strong barrels; long, broad and strong buttocks; broad chests; wide steps; 47 to 53 inches high.

C. *For Transports*: Broad bodies; thick hair; short, strong and straight backs; steady steps; 45 to 47 inches high.

3. If horses like the above mentioned are difficult to obtain, the commissioned purchaser may use his own discretion as to what are fit for use, but any changes should be reported to the Board.

4. Horses that should not be bought are as follows: With any kind of disease; big, narrow and concave heads; thick and big ears, like sheep; concave eyes; small nostrils; noses like sheep; angular eyelids and long eye-lashes; short and gross necks; narrow chests; projecting elbow joints of the legs; short and gross carpus; (?) big and steep hoofs; too curved backs; long and slender barrels; short and straight hind legs.



CHINESE TROOPER—FULLY EQUIPPED.

5. The following colors of horses are specified: Dun, black, bay, roan, chestnut, ash, straw, smoke, iron-gray, iron-black, and magpie.

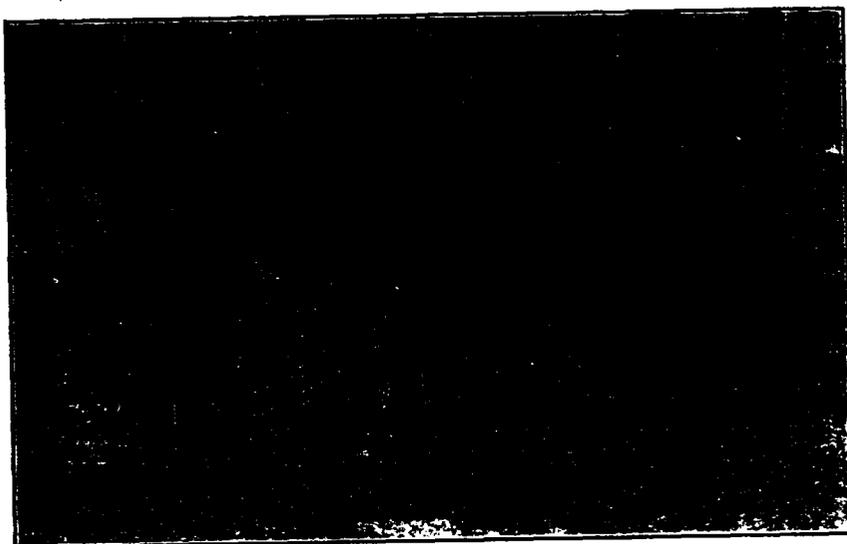
6. The height of the horses to be bought in North China should be 45 to 50 inches, and those in I-li should be 47 to 50 inches.

7. The horses of Yunnan and Kweichow are very short and small, so if it is necessary to purchase them for using on the mountains they could be bought, but the heights given in articles 2 and 6 are not compulsory. The size of the horses should be fully reported to the Board.

8. The age of the horses should be 5 or 6 years and the condition should be seven-tenths full fat.

9. When the horses are bought, each division should fill in all the details asked for below, and send it to the Board:

Where bred,	Date of purchase,
Kind,	Time begin to use,
Age,	Place of purchase,
Color,	Where used,
Height,	What use,
Weight,	Purchaser,
Any scar,	Seller,
Price,	Await examination,



CHINESE TROOPER—FULLY EQUIPPED.

It has been found impracticable to obtain any drawings or plates showing the cavalry equipment of the Chinese army. However, two photographs are sent which show two views of a Chinese cavalry trooper, fully equipped.

J. H. R.

FRENCH SADDLE STALLIONS BOUGHT FOR FOREIGN GOVERNMENTS.

THERE has recently been held at Toulouse a horseshow at which were gathered some of the best Anglo-Arab horses of the Southwest region, the region where this horse, frequently called the "Tarbes" horse, abounds, and there army officers had been sent from Italy, Greece, Spain, Roumania, and Egypt, for the purpose of buying stallions to be used in improving the remount of those countries.

One hundred and sixty stallions were exhibited. Thirty-four of these were purchased by the French department of agriculture for use in the French national studs. After these the foreigners were permitted to buy the rest. The Roumanian officers bought thirteen, the Italian twelve, and the others according to the funds they disposed of. The Italian officers, moreover, with the authority of their government and of the French government, made arrangements whereby the Italian war department is to send each year into the region a board of officers which will purchase Anglo-Arabs for the Italian cavalry, after the French boards have taken their pick for their army.

T. B. M.

DEFECTIVE EYESIGHT OF ARMY HORSES.

THE *Berlin Veterinaer Wochenschrift* gives an extract of an article by Dr. Kersten, staff veterinarian in a Bavarian cavalry regiment, on the result of the examination of refraction of the eye of army horses made by means of the skiaskope. Of one hundred horses so examined, 55 per cent were myopic, 10 per cent hypermetropic and 6 per cent anisotropic, so that only 29 per cent of the horses examined had normal sight. Later he examined 748 horses of another regiment. Of 58

horses reported as shying, 20 head had sclerosis of the lense and were myopic. He personally tried the different classes of horses under saddle to ascertain whether they had any characteristic action or behavior on account of their defective eyesight. He found that myopic horses invariably shy at near objects, often unexpectedly, while hypermetropic horses are liable to hesitate in advancing towards objects approaching at a distance. The myopic horses were all more or less unsafe jumpers. None of the horses with normal eyesight actually shied, but a few of timid nature were close observers of the surroundings that were new to them, purposely selected for trial.

American Veterinary Review. November, 1910. Translated by Olof Schwarzkopf. Veterinarian Third Cavalry.

MORE RESPONSIBILITY FOR THE TROOP COMMANDER.

ONE of the most serious phases now confronting the cavalry arm in our service is the constant interference with his troop by a great many post commanders who take upon themselves to prescribe minutely the course and method of instruction for his command.

Par. 261, Army Regulations, 1908, states: "The commanding officer of a company is responsible for its appearance, discipline, and efficiency, the care and preservation of its equipment; for the proper performance of duties connected with its subsistence, pay, clothing accounts, reports and returns." It would thus seem that he, being under this paragraph responsible to such an extent, would have the authority to have a say in the matter of instruction of his command, but it is a well known fact that he is in many commands a mere figurehead, and in fact, a colonel's first sergeant.

With such a condition of affairs is it any wonder that the initiative, enthusiasm and go, so necessary to the cavalry arm, is lacking almost entirely in our army, and most troop com-

manders sit with hands folded, looking to the Colonel for his weekly and daily instructions, with a spirit of resignation, and preserve a sit-fast do-nothing policy.

On my recent trip through China and Europe with the Secretary of War, I made it a point to discover the policy of Russian, German and French armies with respect to the captains, and in every instance I found that he possesses the widest latitude and enjoys almost complete independence of command. In the French cavalry he devises a weekly program of the drill and duties for the following week, and submits them for the approval of his squadron commander. He also prescribes the amount of forage for his command, and can increase or decrease, according to his opinion, the amount of forage to be used by each animal. He prescribes the duties of his subalterns and allows them great latitude with their platoons, and holds them strictly accountable for their work.

On the last day, or during the latter part of the month the squadron commander inspects the troops minutely on the work for the period, and in case the men do not show proficiency he reports the same to the regimental commander. Every three months the regimental commander inspects the squadrons.

I respectfully recommend that troop commanders be allowed to submit weekly programs in advance to their squadron commander for their approval, and that monthly inspections of the work of the troops be made by said officers, and that greater latitude be allowed troop commanders than is done at present. Any defects in methods of instruction will be thus discovered by the majors, and can be remedied easily.

A captain by reason of his rank and experience is supposed to be capable of handling his command, and if he is not there is no better way to find it out than by a use of the above method.

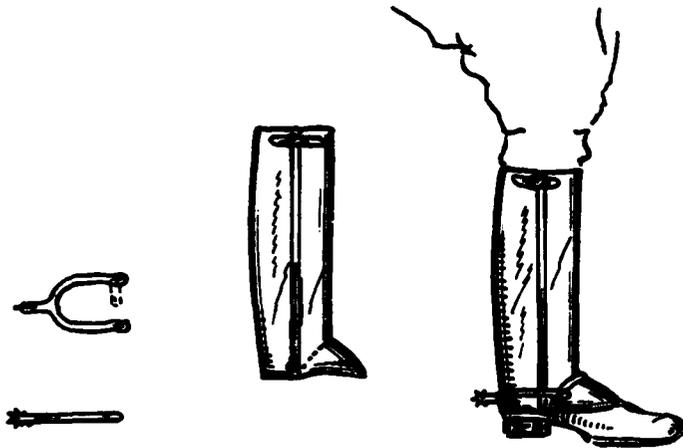
Very respectfully,

HARRY N. COOTES,
Captain Thirteenth Cavalry.

NEW FRENCH LEGGIN FOR CAVALRY.

The new leather leggin is shaped about as shown above and offers nothing particularly novel as regards mechanism; but the cut of the leggin and its effect when on the man is smart and businesslike. The leather is black, of one thickness and fairly heavy, but not rigidly stiff. It is about as supple as the legs of polo and hunting boots which have prevailed for several years.

The leggin closes on the side, as shown, and is held straight along the closed edge by a fairly stiff steel band three-fourths inch wide. At the top is a strap and buckle, at the bottom is a socket. The French soldier always wears his spurs when he



THE NEW FRENCH CAVALRY LEGGIN.

has his leggins on, and the spur strap serves also to hold the bottom of the leggin snugly in place.

The spur has a straight shank and is worn up above the heel, as indicated in the sketch.

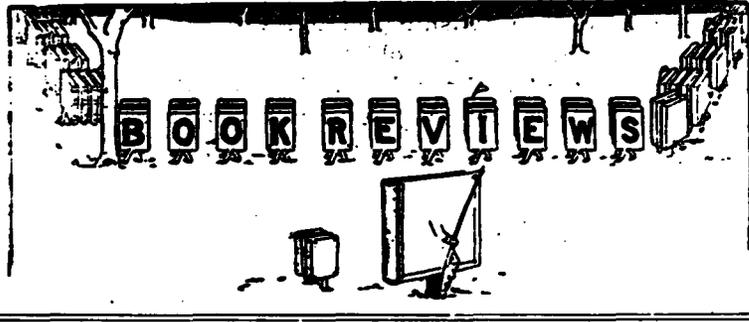
The weight of the leggin is very slightly more than that of our officer's brown leather puttee.

T. B. M.

BRANCH ASSOCIATION AT WASHINGTON.

On the evening of February 10th, twenty-nine cavalry officers stationed in Washington and vicinity met and had an enjoyable dinner. The old time cavalry spirit of good fellowship prevailed throughout. The affair was initiated as a purely social matter, just to "get together." A few cavalry subjects were informally discussed, such as the abolition of the pistol and cavalry reorganization. The desirability of organizing a Branch Cavalry Association in Washington was discussed and the general sentiment appeared to be favorable thereto. The remarks indicated that whatever is undertaken for the cavalry welfare there should be an absence of all grounds for strife from outside sources. The chair was authorized to appoint a committee to examine into the subject with a view to organizing a branch.

H. R. H.



Balck's Tactics.* A translation of Volume 1 of the latest edition of Balck's Tactics has just appeared from the press of the U. S. Cavalry Association. The professional value of Balck's works on tactics is so universally recognized, not only in Germany, where four editions have already been published, but also in other countries, that comment upon the products of his brain and pen may seem superfluous. This translation is, however, so excellent and the subjects therein treated are of such importance to all officers as to merit especial consideration.

This particular volume contains a brief general introduction upon the broad subjects of war, strategy, tactics and methods of instruction, followed by nearly 500 pages especially devoted to the tactics of infantry. But the comprehensive manner in which this subject is treated makes the book as valuable to the cavalryman or artilleryman as it is to the infantryman. There is meat all the way through it.

In this book are fifteen sections devoted to the subject of

*"Tactics." By Colonel Balck, German Army. Vol. I, Introduction and Formal Tactics of Infantry. Fourth completely revised edition with numerous plates. Translated by First Lieutenant Walter Krueger, 23d U. S. Infantry, Instructor Army Service Schools. U. S. Cavalry Association, Fort Leavenworth, Kansas. Price \$3.00, postpaid.

infantry tactics, but practically all of them contains much that every officer, whether of the Regular Army or of the National Guard, should know. The more important sections are as follows: Formations; The Power of Firearms and Expedients for Minimizing Losses (including a thorough discussion of the effects of both artillery and infantry fire); The Employment of Infantry Fire; Deployments for Action; Machine Guns; Infantry versus Cavalry; Infantry versus Artillery; The Attack; The Attack on an Enemy Deployed for Defense; The Defense; The Retreat; Containing Actions; The Expenditure of Ammunition. Each of these sections is exhaustive on its particular subject. For example, under sub-head 9 of Section II (Formations), the following points are discussed: Extended order; thin and dense skirmish lines; the formation of the skirmish line; movements in skirmish line; advance by rushes; time required for making a rush; strength of the force making the rush; rising; long or short rushes; advance by crawling; lessons of the Boer War; lessons of the Russo-Japanese War; provisions of the various regulations relative to the advance by rushes; fire while in motion; examples of the employment of fire while in motion; examples of the employment of rushes; reinforcing the firing line; closing up; assembling; re-forming.

In comparing the present edition with preceding ones the author says: "The treatment of the subject matter has remained the same throughout; it represents, as in the first edition, the principle that tactical lessons must be deduced from human nature, from the effect of weapons, and from experience in war, proper regard being had for national characteristics and historical transmission." The psychological side of war is given the consideration due its importance, and the author's appreciation of the far-reaching influence of moral factors in war seems to point his arguments in favor of greater attention being paid to such factors during peace-training of troops.

Throughout this book Colonel Balck has made the effort to base his conclusions upon actual battle-conditions and especially upon conditions as seem to be inseparably connected with modern warfare. He seems to have been especially successful in avoiding both of the pitfalls into which tactical writers so

often fall, viz., either first formulating a theoretical system of tactics and hunting up isolated historical examples with which to bolster up those tactics, or else taking the experience of one war, possibly fought under unusual conditions, as heralding the introduction of an absolutely new method of warfare. As a natural consequence of Colonel Balck's success in following the main highways of fact instead of the crooked paths of fancy, the numerous historical examples cited by him, mainly from official records of the Russo-Japanese, Boer, Russo-Turkish, and Franco-Prussian Wars, are of unusual interest and value. Especially is this true of the large number of examples taken from the Russo-Japanese War, many of which herein appear in English for the first time.

Unlike most tacticians, Colonel Balck does not indulge in theoretical questions but confines himself to practical deductions from actual conditions. As the translator has also done his part to the full, the combination has resulted in a book that is both instructive and readable. The comparison between the (battle-field) drill regulations of various modern armies is interesting, but the parts that will most appeal to the officers of the line are those that refer to the details of company leading, of how to get the maximum fire effect, of the latest methods of using machine guns, of how best to avoid unnecessary losses from artillery fire, of the best methods of repulsing a cavalry charge, of the importance of local reconnaissance and how to conduct it, of the manner in which combat orders can best be issued and transmitted in battle, of how in time of peace the enlisted man can best be trained to fit him for war, etc., etc.

Typographically the book is all that could be desired. It is printed on good paper, excellently bound and illustrated with a large number of cuts and half-tones. Lieutenant Krueger deserves much credit for the able manner in which he has translated and indexed this important work. It would be a good thing for the service if the remaining volumes of this work could similarly be made available for use.

ROGER S. FITCH,
Captain Second Cavalry.

**The Battle of the
Wilderness.***

To one who considers military literature from the standpoint of evidence only, General Schaff's book will be a disappointment. As it makes no claim to being a tactical and strategical study, those who seek for a searching analysis of the Wilderness campaign, by a military critic, must look elsewhere for light.

The author, in evoking the "Spirit of the Wilderness" to account for Longstreet's untimely wound and the ghost of Stonewall Jackson to explain Hancock's anxiety for his exposed flank, on the day of the battle, can hardly expect to be followed by men who are too hard-headed to ascribe material results to supernatural causes. His excursions into the occult and his prose poetry, which sometimes savors of that "fine writing" against which we are warned by rhetoricians, give a shade of unreality to his narrative and diminish the force of his conclusions.

Whatever the view one may take of General Schaff's book as a military critique, his descriptions of the events which came under his personal observation are interesting and valuable. His status as a staff officer at Meade's headquarters gave him exceptional facilities for observing those high in command and judging their mental attitude from their words and actions. His testimony as to the utter misconception of the situation by both Meade and Grant, on May 5th, is convincing. He further proves this misconception to be due to the lack of correct information, and this in turn to be due to the misuse of the cavalry by men, who, however brilliant their subsequent achievements, were then commanding cavalry for the first time.

Of equal interest is his testimony as to the hour of Burnside's arrival at the junction of the Germanna road with the Turnpike. As he met General Burnside at this point with instructions, he is best qualified to set forth the time at which they were delivered and the apathy with which they were received. Taken in connection with the prophetic utterance of Duane, on the previous evening, it gives a strong probability

*"The Battle of the Wilderness," with Maps and Plans. By Morris Schaff, author of "The Spirit of Old West Point," etc. Houghton-Mifflin Company, Boston and New York. 1910. Price \$2.00, net. Postage extra.

to the author's conjecture that the change in the hour set for the attack on May 6th, and which Grant says was a mistake, was brought about by Meade's distrust of Burnside's energy and capacity. If true, it shows that Burnside exerted a baneful influence upon the fortunes of the Union arms even before the battle had joined.

The author gives a sidelight on the manner in which the most impeccable of military evidence is sometimes fabricated. While Milhau, chief surgeon of Warren's Corps, was giving Locke, the adjutant general, the number of killed and wounded, "It will never do, Locke," interposed General Warren, "to make a showing of such heavy losses." With statistics compiled in such a spirit, General Schaff's appeal to the military student to make use of a little imagination seems superfluous.

But aside from any technical consideration of the work, as a narrative of his personal experience and observations; as a picture of the human side of war, with little of its horrors, but with much of its humor and pathos; as a tribute not only to his comrades, but to those in arms against him, General Schaff's book has an absorbing interest which justifies the sometimes overworked remark that, once opened, it cannot be put down until read. His estimates of the characters of those about him, now great historic personages, are peculiarly sympathetic and appealing, while his just appreciation of the motives and personalities of those opposed to him in the great controversy show the author to be one whose mind is superior to the trammels of personal hostility or sectional prejudice. And this is, perhaps, the finest exposition of character in the whole book.

S. H. E.

**Hagood's
Memoirs.***

In 1871, General Hagood completed his memoirs of the war and filed them away for publication after his death.

The book is of peculiar interest to the members of the First South Carolina Volunteers and of Hagood's Confederate Brigade and their descendants.

Written so soon after the war, some traces of sectional bitterness show throughout the book, but it is, on the whole, written in a spirit of fairness. Written by an intelligent and educated gentleman of wide war experience, the book is of military and historical value, which is increased by the fact that General Hagood used as a check to the accuracy of his statements notes made by himself as events transpired, together with diaries of his companions, loaned for the purpose, and some Confederate records.

The picture of the difficulties of raising volunteers after the first enthusiasm of the call to arms had subsided; the dependence to be placed on "home guards"; and the military government of Charleston, of which General Hagood was provost marshal, are all of interest and value to any military man in our service.

In publishing the book the editor has inserted foot notes, quoting authorities, which show many instances wherein the author was mistaken in his statements.

The fact that so many errors were made in the printing of the volume as to require several pages of errata detracts from the usefulness of the book.

I consider the book worthy a place in any historical library and of special interest to those whose relatives were residents of South Carolina during the war.

E.

*"MEMOIRS OF THE WAR OF SECESSION." From original manuscripts of Johnson Hagood, Brigadier General C. S. A. State Company, Columbia, S. C. Price, \$3.00. Postage, 20c.

Cavalry Reconnaissance.* The author's preface states: "This work has been written with a view to assisting young cavalry officers to study the art of reconnaissance, and to instruct their men." Although written primarily for cavalry officers of the British service, this book should also be of value to cavalry officers of our own army.

The table of contents indicates the scope of this volume and is as follows: Introduction-Historical Examples; Chapter I, Strategical, tactical and protective reconnaissance; Chapter II, Strategical, protective and divisional cavalry; Chapter III, Order of battle, characteristics of commanders, spies, hostile plans, indications; Chapter IV, Topographical reconnaissance, rapid sketching; Chapter V, Action of patrols and other reconnoitering detachments; Chapter VI, Transmission of information, writing messages, dispatch riders and relay posts; Chapter VII, Advance, flank and rear guards and outposts; Appendix, Reconnaissance scheme for a patrol.

It is manifestly impossible for anyone to write comprehensively on a subject like cavalry reconnaissance and present nothing but new ideas. The greater part of any such book must necessarily be merely a repetition of what every cavalry officer ought to know. Colonel Norman, however, has succeeded in presenting old facts in an interesting manner and in introducing new points of view with respect to many of them. Most of the suggestions made by him are practical and some of them are new.

The introduction would be, perhaps, more interesting if it were devoted to examples of good and poor reconnaissance from the history of modern warfare.

Chapter I and II are of just as much value to young cavalry officers of our service as to those of the British, the difference in the terms describing the various cavalry forces in front of an army being only a difference in name and not in function. The remaining chapters are filled with practical suggestions, among which even the most experienced cavalry officer may find some new ideas worthy of his thought.

*"Cavalry Reconnaissance." By Colonel W. W. Norman, 22d Cavalry (Indian Army). Hugh Rees, Ltd., London. 1911. Price 3s. 6d., net

Any such method as is outlined on pages 176-178 for giving orders to an advanced guard in the field is considered neither practical nor desirable. The reconnaissance scheme outlined in the appendix is also thought to be unsuited, unless greatly modified, for our service. Otherwise the book seems eminently practical and well describes the present methods by which cavalry advance guards, patrols, etc., move by successive steps from position to position or from cover to cover, instead of the old way of marching along at a more or less uniform gait.

It is believed that this book is well worth purchasing.

R. S. F.

American Red Cross.* This handy little book is of convenient vest pocket size, contains 177 pages, 55 illustrations, and is divided into ten chapters dealing with the several phases of the general subject matter relating to the relief of injury and the meeting of common medical emergency.

It is a popular edition intended for the use of the general public and is particularly applicable to the needs of those whom duty or pleasure exposes to the accidents of out-of-doors.

The subject matter which it includes is quite sufficient in scope to meet the needs of the class which it is desired to reach, while the presentation is common sense, clear, concise and couched in language readily to be understood by all. For adults, it would be an intensely practical and valuable addition to every household library and it should serve a specially useful purpose in the instruction in first aid of Y. M. C. A. classes, the "Boy Scouts," "Seton Indians" and similar juvenile organizations and movements now so popular in this country.

E. L. MUNSON.

*"The American Red Cross Abridged Text-book of First Aid." By Major Charles Lynch, Medical Department U. S. Army. General Edition. 1910. P. Blakiston's Son & Co., Philadelphia. Price 30 cents.

**Gurley's
Manual.***

This is the forty-fifth edition of this well known manual of Engineering and Surveying instruments. It is in an enlarged form and with colored plates which fully illustrate the many instruments manufactured by this firm which has been in existence for over sixty years. It is a book of over 500 pages and while it is in part a price list and catalog of the instruments and supplies manufactured and sold by them, yet much over one-half of the book is devoted to descriptions and explanations of the adjustments of Engineering and Surveying instruments.

In addition to the usual line of these instruments that they have heretofore handled, they have recently added a special department for the manufacture of scientific and physical apparatus. Also, to meet the demands for their supplies, they have recently established a branch manufactory at Seattle.

**Aspirants
for
Commissions.†**

This is the second edition of a book gotten out by Captain Reeves in 1901, revised and brought up to date. In fact, it is so changed and improved that it is practically a new book, and, as its author states in the preface, "to call it a 'revised edition' would be stretching the imagination beyond its guaranteed elasticity, so a new book is here offered."

In its new form, the book not only deals with commissions in the regular army but also those in the Philippine Scouts, the Philippine Constabulary, the Porto Rico Regiment as well as the "qualified list" for the volunteer army.

It is made up largely from the U. S. Army Regulations, War Department General Orders and Orders from the Headquarters of the Philippine Constabulary, although there is much original matter regarding the subject of which it treats.

It is a small book of over 200 pages which appears to be filled with useful information for those who have need of such a work.

*"A MANUAL OF THE PRINCIPAL INSTRUMENTS USED IN AMERICAN ENGINEERING AND SURVEYING," manufactured by W. & L. E. Gurley, Troy, N. Y. Price fifty cents.

†"A MANUAL FOR ASPIRANTS FOR COMMISSIONS IN THE UNITED STATES MILITARY SERVICE" By Captain Ira L. Reeves, U. S. Army. Franklin Hudson Publishing Company, Kansas City, Mo. 1910. Price

Organization, Equipment, Etc.* This little book has no counterpart in the American service. Its purpose appears to be that of a *vade mecum* to the British Army Regulations and current orders as well as to their special regulations governing the examination of officers for promotion. While no doubt it is of inestimable value to the British army officer, a careful reading of its contents fails to disclose any use to which an officer of the American army could put it.

That it is running in the tenth edition is proof positive that it is popular and valuable to the British army officer. In this respect it might be compared to the Officers' Manual for Subalterns by Moss, though the purposes of the two books do not appear to be exactly similar.

Lieutenant Colonel Banning's book has been compiled with especial reference to presenting the subject matter on which officers must pass examinations for promotion, in a concise, easily digested form.

Among the more important chapter headings may be noted: "List of Official Books With Précis of Subjects They Deal With," "Examination Papers With Answers" and "Recapitulation of Total British Forces." Sx.

**St. Helena to
Santiago de
Cuba.†**

A beautifully printed and illustrated little volume, giving a brief sketch of the history of Dr. Francois Antomarchi who was physician to Napoleon at St. Helena.

The workmanship is beautiful and the subject matter of very little interest except to one who delights in looking for quaint little side lights to greater historical events. Many of the beautiful illustrations have little or no connection with the text.

ELTINGE.

*"Organization, Administration and Equipment Made Easy." By Lieut. Col. S. T. Banning, late Royal Munster Fusiliers. 10th Edition. Gale and Polden, Ltd., London. Price 4s. 6d., net.

†"FROM ST. HELENA TO SANTIAGO DE CUBA," being a Summary of Facts concerning the Latter Days of Dr. Francois Antomarchi, the Last Physician of his Imperial Majesty, Napoleon the First Emperor. By Henry D. Thomson, Captain Medical Corps, U. S. Army. Franklin Hudson Publishing Co., Kansas City, Mo. 1910.

**Lord
Roastem's
Campaign.***

This book is apparently a parody on our present day tactical studies. The author says: "I am in hopes that the careful study required for the purpose of making intelligent criticisms with * * * furnish an useful mental exercise for those who may trouble themselves to undertake it."

On its face the book is written in all seriousness and in a very attractive and readable style. One who wishes to take a short tactical study and dissect it for tactical heresies will find the exercise both useful and entertaining. It is a dangerous book for a beginner to fool with.

E.

*"LORD ROASTEM'S CAMPAIGN IN NORTHERN FRANCE." By Lieut. Colonel A. W. A. Pollock. With sketch map. Hugh Rees, Ltd., London. 1910. Price 2s. 6d., net.



THE ARMAMENT OF THE TROOPER.

As has been noted elsewhere in this number of the CAVALRY JOURNAL, this important subject was brought up for discussion at the annual meeting of the Cavalry Association and has been subsequently discussed at two meetings of the Fort Leavenworth Branch of the U. S. Cavalry Association.

These questions have been receiving particular attention at the present time owing to the fact that, first, there is a movement on foot, or rather that the matter of the elimination of the revolver as a part of the trooper's armament is now being considered by the General Staff or others in authority and, second, that there is a growing belief that there should be a change in the rifle now issued to the cavalry.

There are many cavalry officers of experience who are decidedly of the opinion that the question of the armament of the trooper is so inseparably connected with that of equipment that the Equipment Board now in session can not possibly design the proper methods of carrying the rifle, or carbine, and saber, as well as the pack, without knowing what we are to have for the armament of the cavalry soldier.

At the annual meeting, these subjects were only partially discussed, owing to a lack of time, and they were taken up at the two subsequent meetings of the Branch Association. However, the Association did direct that the Executive Council should prepare questions to be submitted to all cavalry officers for an expression of their opinions on the questions under discussion.

Accordingly the Executive Council have drafted the questions and they will be mailed to all cavalry officers at an early date. It is hoped, however, that in the meantime all our members will take these questions under consideration and be prepared to promptly give intelligent answers to the same. They are as follows:

1. Are you in favor of eliminating the revolver as a part of the armament of the cavalry soldier, except for officers and non-commissioned officers, irrespective of any other change in the armament of the trooper?

2. Are you in favor of eliminating the revolver, provided that, in lieu of the present rifle, a long range, high power carbine, especially designed for the needs of the cavalry service, be adopted?

3. (A) Do you prefer the present rifle as a part of the armament of the trooper which is specially designed for the infantry service? Or (B) Do you favor the adoption of a long range firearm, using the same ammunition as the infantry rifle, but designed to meet the special needs of the cavalry service?

4. Which type of saber do you prefer for use in our service? (A) The present saber, that is the one that has been in use in our service for many years; or (B) The saber shown in Figure 1, page 10, of the Provisional Regulations for Saber Exercise, 1908, that is a straight saber with a straight blade and primarily designed as a thrusting weapon; or (C) A sharp saber with a blade more curved than the one in use at present and which is specially designed as a cutting weapon.

At the two meetings of the Branch Association, which were largely attended by cavalry officers, many of them of long experience, the above questions were put to a vote, after long and able discussions by many of the officers, and with the following results:

Every officer present was decidedly of the opinion that the revolver should be retained as a part of the trooper's equipment irrespective of any change that might be made in the other arms.

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With a single exception, all were in favor of a long range firearm for the cavalry trooper which should be especially designed for the needs of the cavalry service; and, similarly, with a single exception, every officer present favored the rejection of the present rifle which was specially designed for the infantry service.

A majority of the officers favored a curved, sharp saber, especially designed as a cutting weapon.

The Branch Association was further of the opinion that a Board of Cavalry Officers should be detailed to ascertain what long range firearm is best adapted to the special needs of the cavalry service.

The question of the rifle vs. the carbine and the reasons for the adoption of the latter is well set forth in this number in one of the comments on Captain Booth's article on the subject of Cavalry Training and Target Practice, and which was written by one of the officers participating in the discussion at the meeting of the Branch Association.

Those in favor of the revolver, and all were, argue that it is a valuable weapon for the trooper when on patrol duty, advance and rear guard, in the pursuit and frequently in the mêlée. They called attention to the fact that Captain Gray, in his "Cavalry Tactics as Illustrated by the War of the Rebellion" furnishes many instances when the revolver was used very effectually during that war.

The arguments in favor of the curved saber over that of the one shown in our Provisional Saber Exercises are that the latter is designed for thrusting and that it requires an expert swordsman to properly handle it, while the former is primarily a cutting and slashing arm and that our American cavalryman takes more naturally to it and that it does not require nearly as much time to make a soldier proficient in its use.

These are all vital questions for the cavalry and it is hoped that due consideration will be given them, not only by those in authority but by all of our thinking cavalry officers.



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THE ANNUAL MEETING OF THE U. S. CAVALRY ASSOCIATION.

The annual meeting of the U. S. Cavalry Association was held in Grant Hall, at Fort Leavenworth, on Monday, January 16, 1911, with 317 members present or represented by proxy.

The report of the Secretary and Treasurer for the year 1910 was read, accepted and ordered filed. A synopsis of this report is given herewith below.

An election of officers for 1911 was held and resulted in the re-election of those holding the respective offices at the close of 1910.

The votes on the proposed amendments to the Constitution of the Association were submitted, tabulated and the result announced as follows:

To Section 2, Article IV:	Yes—282.	No—14.
To Section 3, Article IV:	Yes—278.	No—18.
To Section 3, Article V:	Yes—281.	No—15.
To Section 4, Article V:	Yes—273.	No—21.
To Section 2, Article VII:	Yes—276.	No—17.
To Section 4, Article VII:	Yes—276.	No—18.
To Section 10, Article VIII:	Yes—281.	No—12.
To Section 11, Article VIII:	Yes—281.	No—12.
To Article IX:	Yes—280.	No—13.
To Article XIV:	Yes—279.	No—16.
To Article XV:	Yes—274.	No—19.

Inasmuch as the above proposed amendments have each received more than the required two-thirds vote of the *regular, active* members present or properly represented by proxy, they were declared adopted.

The Constitution of the Association, as amended, is printed in full in this number of the *CAVALRY JOURNAL*.

The subject of the armament of the trooper, particularly as to the question of the elimination of the revolver as a part of his armament, was discussed at length. It was decided that the further discussion of this subject be postponed until the next

meeting of the Fort Leavenworth Branch of the Cavalry Association, when more time could be devoted to this important matter and by which time, it was hoped that all would have fully considered it and be prepared to vote intelligently.

However, it was ordered that the Executive Council of the Cavalry Association proceed to obtain, by a postal card vote, the opinions of the cavalry officers of our service upon the several questions, to be drafted by the council, regarding the trooper's armament, particularly as regards the elimination of the revolver; that of the straight or nearly straight saber; and that of a rifle or carbine.

REPORT OF THE SECRETARY AND TREASURER.

The Treasurer submitted the following financial report:

Receipts.

Balance on hand January 1, 1910.....	\$2,309.04
Received from members and subscribers.....	3,360.98
Received from advertisers.	1,422.98
Received from sales of books.....	8,160.77
Received from interest on time deposits.....	43.65
Total.	\$15,297.42

Disbursements.

Editor's salary and clerical services.....	\$1,494.68
Printing Journals, engraving, etc.....	3,196.15
Printing and purchase of books.....	8,157.12
Postage.	320.50
Insurance.	17.60
Breeder's Cup.	100.70
Addresseograph fixtures.	154.48
Miscellaneous expenses—stationery, freight, express, typewriter and supplies.	362.94
Balance on hand, December 31, 1910.....	1,493.25
Total.	\$15,297.42

Assets.

Cash on hand, December 31, 1910.....	\$1,493.25
Due from members and subscribers.....	995.75
Due from advertisers.	27.50
Due for books.	1,336.00
Books on hand—bound and unbound—cost.....	<u>1,855.16</u>
Total.	\$5,707.66

Liabilities.

Due for expressage.	\$ 13.99
Due from outstanding accounts for commissions on books.	118.94
Due for books.	6.78
Net assets.	<u>5,567.95</u>
Total.	\$5,707.66

Membership.

Life members.	6
Regular, active members.....	640
Regular—other—members.	58
Associate members.	212
Subscribers.	282
Subscribers—Infantry, club rate.	<u>370</u>
Total.	1,568

Membership by Regiments.

Regiment.	No.	Per cent.	Order.
First Cavalry.	46	86.89	2
Second Cavalry.	36	70.58	7
Third Cavalry.	35	67.30	10
Fourth Cavalry.	36	67.92	8
Fifth Cavalry.	42	79.24	3
Sixth Cavalry.	38	74.50	5
Seventh Cavalry.	25	48.11	15
Eighth Cavalry.	42	79.24	4
Ninth Cavalry.	36	67.92	9
Tenth Cavalry.	50	94.33	1
Eleventh Cavalry.	33	62.26	14
Twelfth Cavalry.	33	64.71	12
Thirteenth Cavalry.	37	71.15	6
Fourteenth Cavalry.	34	66.66	11
Fifteenth Cavalry.	33	63.46	13

CONSTITUTION OF THE U. S. CAVALRY ASSOCIATION.

(As amended at the annual meeting of January 16, 1911.)

ARTICLE I.

TITLE.

This society shall be known as "The United States Cavalry Association."

ARTICLE II.

HEADQUARTERS.

The headquarters shall be at Fort Leavenworth, Kansas.

ARTICLE III.

DESIGN.

The aim and purpose of this Association shall be to unite all persons directly or indirectly interested in the cavalry arm of the military service, for the professional improvement of its members and the advancement of the mounted service generally.

ARTICLE IV.

MEMBERSHIP.

SECTION 1. This Association shall consist of (1) regular members, (2) associate members, (3) honorary members.

SEC. 2. The following shall be eligible to regular membership: (a) Commissioned officers of the cavalry of the regular army and of the organized militia of the several States, Territories and of the District of Columbia. (b) Former commissioned officers of the cavalry of the regular or volunteer services and of the organized militia of the several States and Territories and of the District of Columbia. (c) General officers of the regular army and former general officers.

Those regular members who are on the active list of the regular army shall be known as *regular, active* members.

SEC. 3. The following are eligible to associate membership: (a) Persons who are, or who ever have been commissioned officers of honorable record in the regular army (other than those mentioned in Section 2), or in the navy or marine corps. (b) Persons who are, or who have ever been commissioned officers of honorable record of the National Guard or naval militia of any State or Territory. (c) Former general officers and former commissioned officers of cavalry of honorable record in the Confederate army. (d) Non-commissioned officers of the regular cavalry service and of the organized militia of the several States and Territories and of the District of Columbia and former non-commissioned officers of the cavalry service of honorable record.

SEC. 4. Honorary members may be elected from men distinguished in military and naval service and from eminent men of learning. They shall be elected as such for the period of five years. Honorary members shall be elected by the Executive Council, and it shall require a two-thirds vote of all members of the Council to elect.

SEC. 5. Any person eligible to regular or associate membership may become such upon making application to the Secretary, accompanied with the amount of the initiation fee and upon furnishing satisfactory evidence of his eligibility to such membership.

SEC. 6. Any person or society may become a subscriber for the JOURNAL of the Association; and all persons paying for and receiving the same, but who are not regularly admitted and entered as regular, associate, or honorary members shall be considered merely as subscribers.

SEC. 7. Any member may withdraw from the Association at any time by tendering his resignation in writing, provided he be not in arrears.

SEC. 8. Any person may be expelled from the Association for cause by the Executive Council, but it shall require the consent of two-thirds of the members of the Council, un-

less the cause be the non-payment of subscriptions or other obligations to the Association, in which case a majority vote of the members of the Council present shall suffice. Any member may be expelled whose indebtedness to the Association is \$4.00 or over.

SEC. 9. Membership shall date from the first day of the month in which the member joins, and his annual subscription shall be paid on or before that date in each succeeding year.

ARTICLE V.

RIGHTS AND OBLIGATIONS OF MEMBERS.

SECTION 1. Every member of the Association of whatever class shall be entitled to one vote at all regular or special meetings of the Association. This vote may be cast in person or by proxy, in which latter case the authority therefor must be in writing.

SEC. 2. Regular members only shall be eligible to hold office, and only *regular, active* members can vote upon amendments to this Constitution. With these exceptions all members of whatsoever class shall have equal rights and privileges, and be subject to the same obligations, except that honorary members shall pay no annual dues.

SEC. 3. All members of whatsoever class shall subscribe for the JOURNAL. The subscription price to non-members shall be fixed by the Executive Council of the Association, provided that it shall never be less than the annual subscription for members.

SEC. 4. An initiation fee of one dollar shall be charged all persons joining the Association after January 15, 1911, excepting those elected to honorary membership. Initiation fees and subscriptions shall be paid in advance.

SEC. 5. Additional pecuniary obligations can be imposed upon the members only by an act of the Association at a regular or special meeting, a two-thirds vote of the members present or duly represented by proxy being required to carry such measures; provided, that notice of such intended action shall have been given the members at least three months in advance of such regular or special meeting.

ARTICLE VI.

MEETINGS AND ELECTIONS.

SECTION 1. The regular meetings of the Association shall be held once each year at Fort Leavenworth, Kansas, on the third Monday in January.

SEC. 2. Special meetings shall be called to meet at the same place by the President upon the written request therefor signed by fifty members. When such special meetings are called, at least three months' notice shall be given thereof to each member by the Secretary. The same notice shall be given in case of regular meetings. Due notice of any regular or special meeting or of any proposed action to be taken at such meetings shall be deemed to have been given when such notice shall have been published in the JOURNAL of the Association and a copy of the same mailed to each member at the last address furnished the Secretary, or in case of officers of the regular army, the address given in the last Army List and Directory at least three months in advance of such meeting.

SEC. 3. Ten per cent of the *regular, active* membership of the Association, either present in person or represented by proxy, shall constitute a quorum for the transaction of business.

SEC. 4. The election of officers shall take place annually at the regular meeting of the association. The election shall be by ballot, and a plurality of all votes cast in person or by proxy shall elect.

ARTICLE VII.

OFFICERS.

SECTION 1. The elective officers of the Association shall be: A President, a Vice-President, and five members of the Executive Council. Their terms of office shall be one year, or until their successors are elected, and all except the President shall be residents of Fort Leavenworth, Kansas.

SEC. 2. The appointive officers of the Association shall be: (a) A Vice-President for each Post where five or more officers of the regular army are stationed and for each State,

Territory and the District of Columbia where there is cavalry belonging to the organized militia. (b) An Editor, a Secretary and Treasurer.

They shall be appointed by the Executive Council and shall hold office at the pleasure of the same; provided, that in its discretion, both of the offices of Editor and of Secretary and Treasurer may be filled by the same person.

SEC. 3. The duties of the officers shall be such as usually pertain to their respective offices, and such additional ones as may be prescribed in this Constitution or the By-Laws enacted by the Executive Council under the authority granted by this Constitution.

ARTICLE VIII.

EXECUTIVE COUNCIL.

SECTION 1. The Executive Council shall consist of the President, the Vice-President, the five elected members, the Editor, and the Secretary and Treasurer. But when the President is not a resident of Fort Leavenworth, he shall for all purposes be considered as not belonging to the Executive Council, unless actually present.

SEC. 2. The Executive Council shall meet from time to time at the call of its chairman, who shall be the senior member of the Council present at the headquarters of the Association.

SEC. 3. Five members shall constitute a quorum for the transaction of business. But if through the removal of officers from Fort Leavenworth, or other cause, the Council be reduced below five members, such number as remain shall constitute a quorum for the purpose of filling vacancies, but for this purpose only.

SEC. 4. It shall require a majority vote of all members of the Council to carry any proposition, except an adjournment, which shall require a majority of those present.

SEC. 5. The several members of the Executive Council shall have an equal voice and vote in the determination of all questions acted upon by the Council, except that the Editor

and the Secretary and Treasurer shall have no vote upon questions connected with their own appointment or removal, or their own compensation.

SEC. 6. The Executive Council shall be responsible for the general administration of the affairs of the Association. To this end they are empowered to carry out any measures whatsoever, which, in their judgment, seem expedient in order to further the interests of the Association, or to attain the ends and aims of the organization; *Provided, however,* That such measures do not conflict with any of the provisions of this Constitution. Within such limits the Council shall have power to make permanent regulations which they shall in such cases designate as By-Laws in contradistinction to their ordinary regulations, and such By-Laws shall be binding upon the Association and its members, and shall remain in force until duly revoked.

SEC. 7. The Executive Council shall have power to fill vacancies for unexpired terms which may occur in its membership.

SEC. 8. The Executive Council shall carefully examine and audit the accounts of the Secretary and Treasurer as soon as practicable after the close of the fiscal year, and at such other times as they may deem expedient.

SEC. 9. Funds of the Association can be expended only upon the order of the Executive Council, and money paid out or obligations incurred by the Secretary and Treasurer without such order shall be at his own risk, and if not subsequently approved by the Council he shall make the same good to the Association; but the auditing and approving of the accounts by the Council shall be considered as authorizing all transactions and expenditures previous to such action.

SEC. 10. It shall be the duty of the Executive Council to organize Branch Associations at posts where there are officers of the regular cavalry stationed and in each State, Territory and the District of Columbia having cavalry belonging to the organized militia, as contemplated in Article XV.

SEC. 11. The Executive Council shall also, by correspondence and otherwise, endeavor to keep active the Branch Associations. Any proposition looking to the promotion of the interests of the cavalry, signed by twenty members or by a majority of the Executive Council, shall be submitted to the Branch Associations, and to all regular members not members of Branch Associations, for an expression of opinion by means of a vote.

ARTICLE IX.

THE JOURNAL.

SECTION 1. The Association shall publish a JOURNAL devoted to the interests of the organization, and in furtherance of its ends and aims, as laid down in Article III of this Constitution. This JOURNAL shall be published at least quarterly and, as nearly as practicable, at the close of each quarter of the calendar year; provided, that whenever, in the opinion of the Executive Council, the financial condition of the Association will warrant the same, the JOURNAL may be published bi-monthly or monthly.

SEC. 2. The annual subscription for the JOURNAL shall be two dollars: *Provided* that whenever the JOURNAL of the Association shall be published bi-monthly, the annual subscription shall be two dollars and fifty cents; and provided further, that whenever it shall be published monthly, the annual subscription shall be three dollars.

All subscriptions shall be paid in advance.

ARTICLE X.

THE EDITOR.

The Editor shall edit the JOURNAL and such other documents as may from time to time be published by the Association. In the performance of this duty he shall be subject to the supervision of the Executive Council, to whom he shall be directly responsible.

ARTICLE XI.

THE SECRETARY AND TREASURER.

The duties of the Secretary and Treasurer shall be such as usually devolve upon such officers. He shall keep a journal of the proceedings of the Association, and a separate record of the proceedings of the Executive Council. He shall generally be the organ of the Association in matters of finance, business and correspondence.

In the performance of these duties he shall be subject to the supervision of the Executive Council, to whom he shall be directly responsible. The books, papers and accounts pertaining to this office shall always be subject to examination by the Council. At each regular annual meeting he shall submit a report showing the financial condition of the Association at the time. After the close of each fiscal year of the Association (which shall be considered as identical with the calendar year) and prior to the annual meeting he shall submit to the Council a detailed report of the business transactions of his office during the preceding twelve months. This report shall show: The cash on hand at the beginning of the fiscal year; the receipts and expenditures during the year; the cash on hand at the close of the fiscal year; the assets of the Association; the outstanding obligations of the Association; the membership in the various classes at the beginning of the year and the gains and losses in the same during the year; and such other matters as may be called for by the Council. He shall also make such additional reports at such times and upon such subjects as the Executive Council may desire.

ARTICLE XII.

SECTION 1. This Constitution shall go into effect upon the day of its adoption, and amendments made to the same shall be effective on the date of their adoption.

SEC. 2. Although life memberships are no longer contemplated, such as are in existence at the time of the adoption of this Constitution shall continue to exist under the same conditions as originally granted.

ARTICLE XIII.

ALTERATION OF THE CONSTITUTION.

SECTION 1. The Constitution may be amended by a two-thirds vote of the *regular, active* members present or properly represented by proxy, at an annual meeting of the Association. Proposed alterations shall be furnished the Secretary in writing, signed by five or more members, not less than four months prior to the meeting at which they are to be acted upon. The Secretary, under the direction of the Executive Council, shall publish such proposed alterations to the Association not less than three months prior to said meeting.

ARTICLE XIV.

VICE-PRESIDENTS.

The Vice-Presidents shall represent the Executive Council at their respective stations and in their respective states. They shall endeavor to keep active and alive the Branch Associations under their jurisdiction by means of correspondence and visits with the members thereof; shall assist the Executive Council in organizing Branch Associations and shall submit suggestions regarding the Association. Whenever present at any meeting of the Executive Council they shall be members thereof.

ARTICLE XV.

BRANCH ASSOCIATIONS.

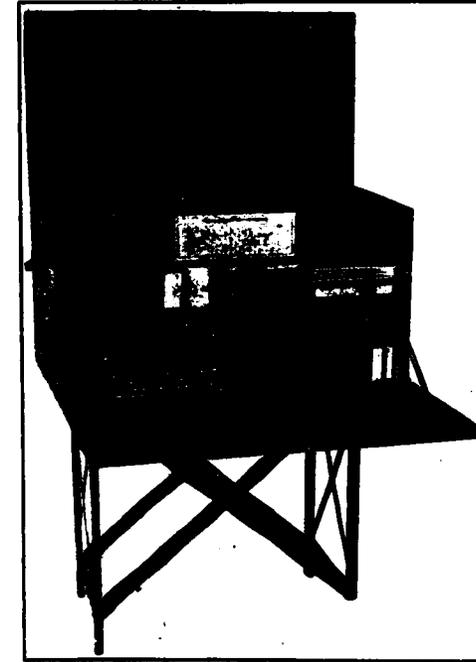
SECTION 1. Branch Associations of the United States Cavalry Association may be organized at each station where there are cavalry officers of the regular service stationed and in each State, Territory and the District of Columbia having cavalry belonging to the organized militia.

SEC. 2. Each Branch Association shall elect a President and Secretary and such other officers as it deems necessary to successfully conduct the affairs of the Branch Association.

SEC. 3. All correspondence from the Executive Council to members belonging to Branch Associations shall be addressed through the Secretary.

SEC. 4. The Branch Association shall meet from time to time to read essays, papers, etc., and to discuss matters pertaining to the United States Cavalry Association. It shall be the duty of the Branch Associations to solicit articles for publication in the JOURNAL; to obtain proxies or the votes or opinions of the members on any matter that may be brought before the Association and forward the same to the Secretary. Any proposition submitted by the Branch Association to the Executive Council looking to increased efficiency may be submitted by the Executive Council to other Branch Associations for opinion and vote.

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Publisher's Notices. | | | | +



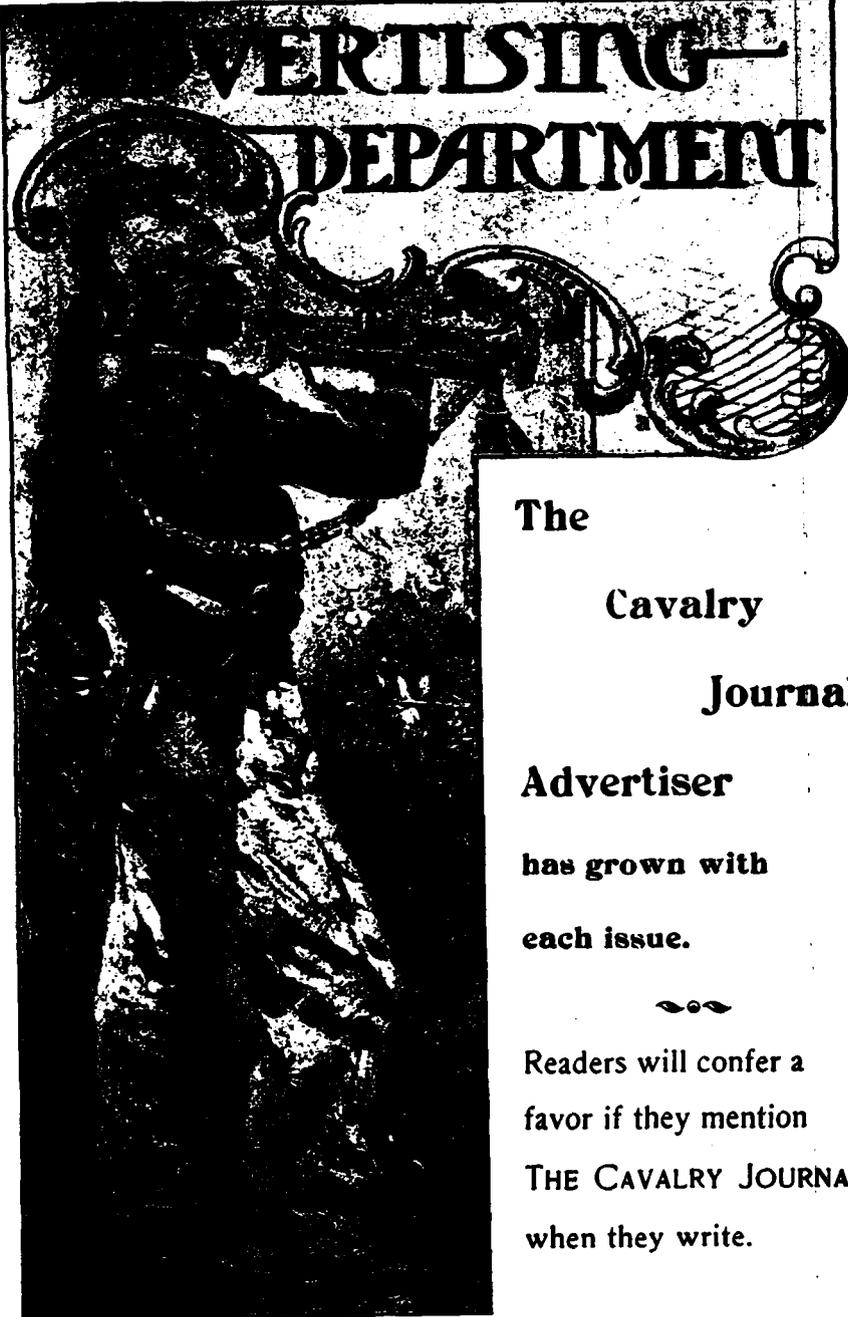
ROYAL TYPEWRITER.

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Attention is invited to the advertisement of the Royal Typewriter Company, which appears for the first time in this issue. The Royal is recommended as a very strong, reliable, efficient machine. It is "standard" in every way, having completely visible writing, universal keyboard and all other necessary features of the up-to-date typewriter. Its price, \$65, is another very attractive feature.

The Royal is finding much favor with the various Government Departments at Washington.



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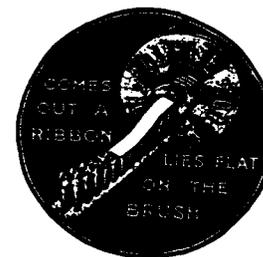
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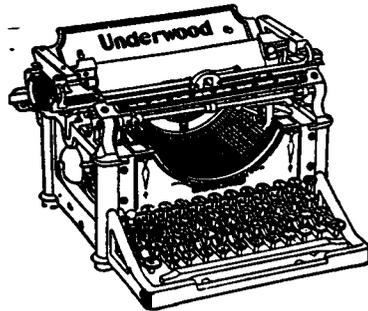
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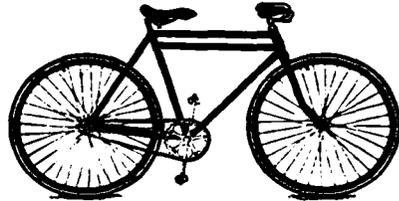
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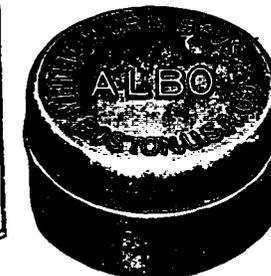
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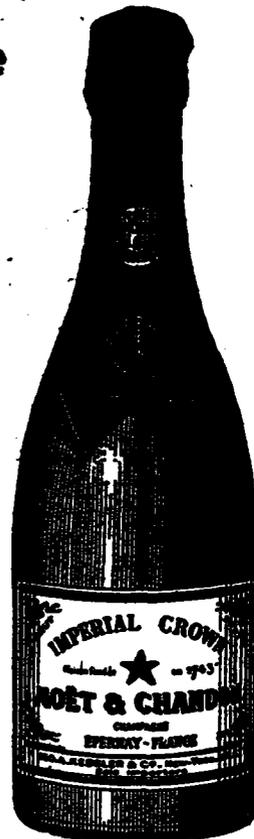
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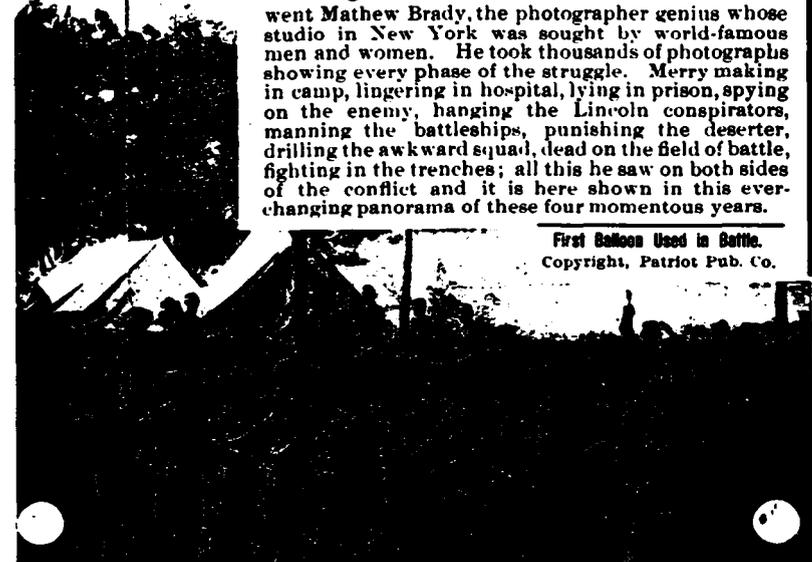
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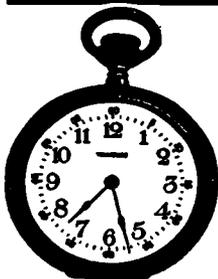
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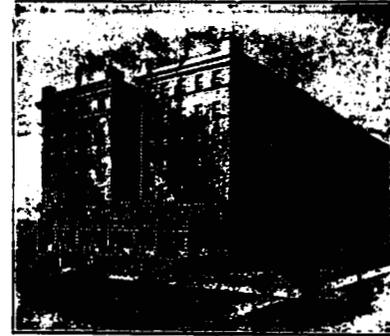
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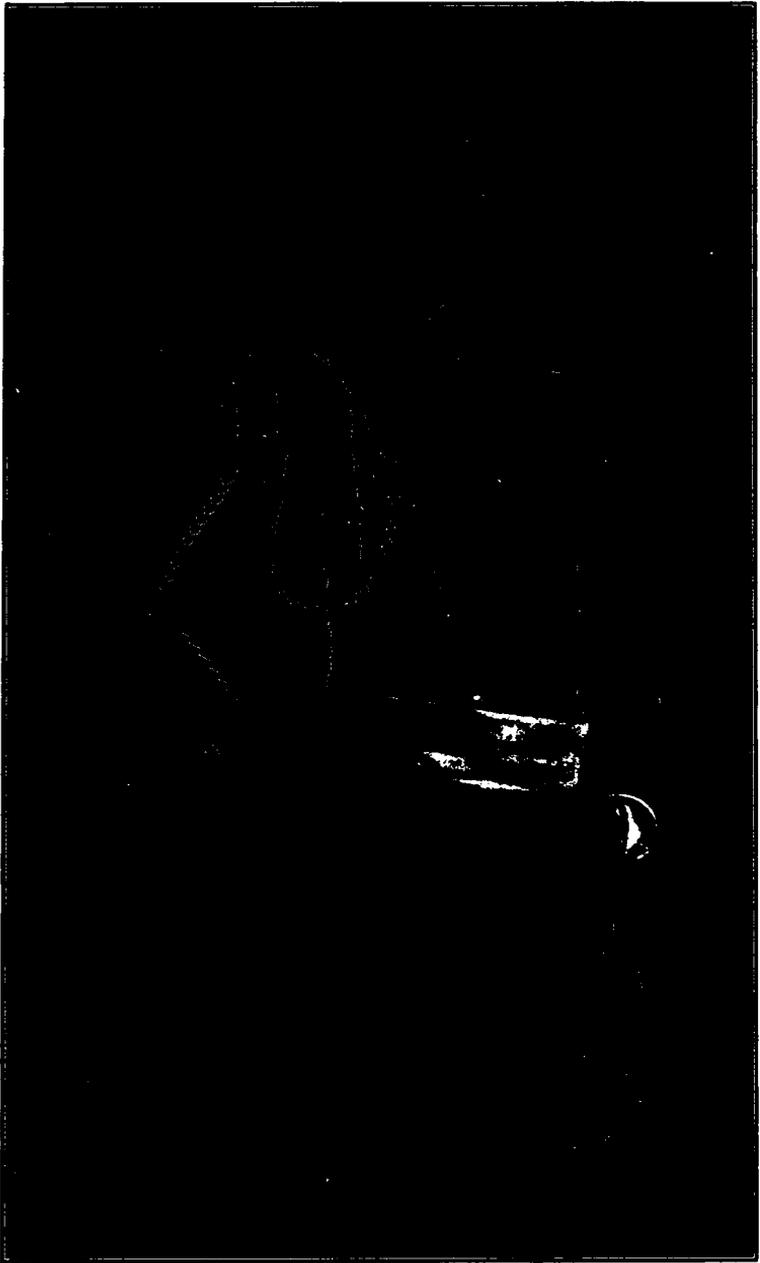
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CONTENTS FOR MAY, 1911.

	PAGE
PSYCHOLOGY OF WAR—Captain LE R. ELTINGE.....	1015
THE WORK OF THE CAVALRY EQUIPMENT BOARD.....	1063
CAVALRY EQUIPMENTS—Major M. F. STEELE.....	1077
A CRITICISM OF OUR CAVALRY DRILL REGULATIONS—Major H. H. SARGENT.....	1083
CAVALRY INSTRUCTION—Captain F. C. MARSHALL.....	1083
FIELD TRAINING VS. TARGET PRACTICE—First Lieutenant W. H. CLOP-TON.....	1100
A PROPOSED METHOD OF LINKING AND DISMOUNTING TO FIGHT ON FOOT—Captain H. R. HOTTON.....	1108
THE FORT RENO REMOUNT DEPOT—Veterinarian G. E. GRIFFIN.....	1115
THE CAVALRY OF THE BRITISH ARMY.....	1128
 REPRINTS AND TRANSLATIONS:	
FIGHTING ON FOOT BY CAVALRY.....	1135
NEAR AND BATTLE RECONNAISSANCE OF DIVISIONAL CAVALRY.....	1141
INTERNATIONAL HORSESHOW.....	1150
THE BROOD MARE A FACTOR IN THE FRENCH REMOUNT SYSTEM.....	1158
BLOODED HORSES FOR THE CAVALRY.....	1162
 MILITARY NOTES:	
A HIGH JUMP.....	1165
THE SEAT AT OBSTACLES.....	1166
EFFORTS TO IMPROVE THE ARTILLERY HORSE IN FRANCE.....	1168
HORSES FOR OUR CAVALRY.....	1169
THE REVOLVER.....	1172
POLO IN THE ARMY.....	1174
INCIDENT IN AN ARGENTINE RIDING SCHOOL.....	1177
 EDITOR'S TABLE.....	 1178
 BOOK REVIEWS.....	 1191
 PUBLISHER'S NOTICES.....	 1197

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PSYCHOLOGY OF WAR.*

BY CAPTAIN LEROY ELTINGE, FIFTEENTH CAVALRY.

Part I.†

"A doctrine of tactics which does not properly appreciate the psychological element stagnates in lifeless pedantry." (Balck.)

IN our studies, we have seen much about the psychology of war, but most of this has been in the nature of general reference to the subject, such as Napoleon's statement, "In war the moral is to the physical, as 3 to 1."

In our tactical problems we have been accustomed to assume that 100 men, equals 100 men. This is essentially *untrue*, and is used only because in theoretical exercises there is no other way of deciding the matter.

"In war there is nothing more important for a leader than the knowledge of the effect of certain things on the *human mind*." (Capt. Orr.)

*Abbreviated from lectures on this subject given to the classes at the Army Service Schools by Captain LeRoy Eltinge, Fifteenth Cavalry.

†Prepared largely from *Psychology of Peoples* and *The Crowd*, both by Gustave LeBon.

"Leadership, to be efficient, must take account of all moral factors. Every leader of men, from a troop to an army, is necessarily a student of psychology, bound up as it is with the study of all moral forces which play so great a part in war. Not the least important, is a knowledge of the manner in which the opinions and beliefs of the men we are to lead in war may be affected by the ideas engendered during peace. The tendency in peace is to forget the importance of these forces. This is partly due to the fact that it is only under the stress of war that the more important moral factors betray themselves." (Capt. Orr.)

"On the actual field of battle, no two bodies of men of equal numbers (given equal tactical training, equipment and physical condition—itsself an impossibility), have been, or ever will be, equal in moral force." (Rezanof.) On successive days even, the same body of men will break the first day with a loss of 5 per cent and the next, fight its way to victory, in spite of a loss of 40 per cent.

On the *evening* of the first day of the battle of Wagram Napoleon's right wing, possessed of a panic-like fright, fled. * * * On the very next day these same troops were the ones who by their heroic fighting won the battle.

At Winchester, the surprised Union troops fled in the morning but returned and won a victory before night.

There are two elements that enter to make these astonishing things possible—1st, Physical condition, 2d, Purely psychological conditions. The first to some extent, tends to produce the second. All psychologists agree that physical condition has a powerful effect on psychological susceptibility. A crowd of men that are tired, hungry, sick, thirsty or who have lost sleep, are much more susceptible to psychic suggestion, than the same men when in normal health and comfort. "As a general rule the soldier is rather hopeful. If he is well fed and has rested his spirits are good." (Soloviev.) With a crowd of men who are worn out, sick, exhausted, the slightest suggestion is liable to produce a quick and most profound effect. What the effect will be depends on the suggestion. This is the basis for Sout's statement "The soldier before dinner, and the soldier after dinner, are two entirely different beings."

Remembering then that poor physical or nervous condition, pre-disposes to psychic phenomena, we will approach the real reason why the same body of troops break easily today and fight like heroes tomorrow, which is, that soldiers in battle have the same mental characteristics as a crowd, and a crowd is easily swayed. On the first day the wrong influence swayed the crowd of soldiers. On that day some man said, "We are outflanked," or "The enemy is in our rear," and the whole crowd ran—no one looked to see if the report were true,—most of the men had not even heard the report, but by a sort of mental telepathy, they realized that the crowd was running away, and they ran also. They did not know why they ran, where they were running to, and most were even unconscious that they were running. On the next day they were just as easily swayed. The right man at the right time put in the suggestion that "We have them going now,"—"Our other battalion is in their rear, and we will push them back and capture the whole outfit."—"Come on, let us rush them." Exactly the same kind of blind rush, which yesterday they made to the rear, is today made, but it is made to the front. Losses are not noticed, the collective brain of the crowd is now centered on doing damage, and it forgets for the time, that it is also suffering loss. When an officer commands on the firing line, he must realize that his men are just a crowd, and that they must be handled like a crowd, not like the calm, respectful, obedient soldier of the drill ground.

SUGGESTION.

By suggestion is meant, as far as we are concerned with the subject, the implanting of an image in men's brains that will impel them to certain acts, but without direct commands.

We know how a street faker will extol the virtues of his wares till we feel impelled to buy, even though, if we thought calmly, we would know we do not want them.

In company one yawns. Many of the rest at once follow suit.

These are examples of suggestion, one by words, the other by an act.

In neither case was there a command, and precisely for that reason the effect was less to be resisted. In either case a direct order would have failed to be effective.

To a person in a normal state of mind the strength of the suggestion is dependent on the following factors:

1. Last impression—that is, of several impressions the last is most likely to be acted upon.
2. Frequency—that is, repetitions, not one after the other but at intervals separated by other impressions.
3. Repetition—this is distinguished from frequency by being repetitions one after the other without having other kinds of impressions put in between.

"Repetition" is one-third as powerful as "frequency," and one-fifth as powerful as "last impression."

4. The strongest suggestion is obtained by a combination of "frequency" and "last impression." (Sidis.)

The above conclusions are the result of a large number of laboratory experiments.

PSYCHOLOGY OF CROWDS.

The minds of an aggregation of soldiers are influenced in the same way that the mind of any other crowd is influenced.

"Anyone, taken as an individual, is tolerably sensible and reasonable. As a member of a crowd he at once becomes a blockhead." (Schiller.)

In its ordinary sense the word "crowd" means a gathering of individuals of whatever nationality, profession, or sex; whatever be the chances that have brought them together. From the psychological point of view, the expression "crowd" assumes quite a different signification. Under certain given circumstances, and only under these circumstances, an agglomeration of men, *presents new characteristics* very different from those of the individuals composing it. "The sentiments and ideas of all the persons in the gathering take one and the same direction, and their conscious personality vanishes. A *collective mind* is formed, doubtless transitory, but presenting very clearly defined characteristics. The gathering has thus become what, in the absence of a better expression, I will call *an organized crowd*, or a *psychological crowd*. It forms a

single being, and is subjected to the law of mental unity of crowds." (Le Bon—"The Crowd.")

"A thousand individuals accidentally gathered in a public place without any specific object in no way constitute a *psychological crowd*. To acquire the special characteristics of such a crowd, the influence of certain predisposing causes is necessary. The disappearance of conscious personality, and the turning of feelings and thoughts in a different direction, are the primary characteristics of a crowd about to become 'organized.' An entire nation, or an entire religious sect, though there may be no visible agglomeration, may become a crowd under the action of certain influences.

"It is well known that, in a crowd, a sudden impulse will affect men and produce curiously concerted action. The knowledge of this 'psychology of crowds' has often been used by leaders of men. After all, an army is a crowd with a common training, and therefore easier to move than any other crowd to unanimous action. *Hence the spirit which impels an advance, or a passive defense or a retirement, may well have been transmitted by the leaders.*" (Capt. Orr.)

Von Moltke implanted the idea of the "spirit of the offensive" in the minds of the whole German army. The leader whose own ideas are not clearly defined and whose intention is vacillating will get only half-hearted action from his troops while, on the other hand, a determined man who has one clear idea will himself be surprised to see how the troops respond.

In a crowd each individual becomes a grain in the heap. He loses all his former characteristics and assumes, individually, the characteristics of a member of the crowd.

"Effects of crowds can be traced everywhere, at all times, and in all phases of human life, whether political, religious or social. Not seldom, as in the French Revolution, or the Crusades, have these effects been felt all over the civilized world."

Now what are the inborn attributes of crowds? No matter what the individuality of the people forming a crowd, how similar or dissimilar their modes of life, their occupation, their character or their intelligence, by the mere fact of merging into a crowd they form a sort of collective soul, by means of which they feel, act and think in a manner different from what each

individual would, if left to himself. "There are ideas which appear in the collective mind of the crowd that do not appear in the minds of the individuals who form that crowd."

"The chief point to remember is that a crowd's mind is not the average of the sum of the minds of its individuals, but a combination followed by the creation of new characteristics." (Capt. Orr.)

Several causes may be attributed to bring about the change from personal character to the character of the crowd, which latter is often in the utmost contrast to the former.

The first of these causes consists of the fact that in each individual of the crowd there arises, based on the mere fact of being in numbers, a feeling of invincible power, which at once nullifies the feeling of personal responsibility and which may further lead to a line of action never thought of were the individual alone or at his usual avocation, or which, if thought of, would have been curbed.

"Much will power is required to oppose the actions of a crowd of which we form a part; only a very few people possess that energy."

We all know that strong action comes from a single strong leader. As Napoleon said, "Councils of war never fight."

The second cause of crowd-sentiment and crowd-treatment lies in imitation. Even with animals, imitation plays a great role and that, not only with mammals, but also with the lower orders. It is well known that the barking of a single dog immediately induces all dogs in the neighborhood to bark. The desire to imitate is not less strong in the human being than in animals. Fashion in dress is a good illustration.

"The undeniable fact of imitation, so closely interwoven with our daily life, is intimately connected with another general human characteristic, namely, the suggestibility or psychological power of contagion, which in many individuals amounts to hypnotism." (The Crowd.)

"As a rule man by merely belonging to an organized crowd descends in the matter of civilization. By himself he is an educated individual, as a member of a crowd he has the finger-marks of the crowd. This is one of the main reasons why, what in strikes start out to be peaceable meetings to dis-

cuss grievances, sooner or later lead to mob violence." This fact has been understood for hundreds of years. A Roman emperor said, "The senators are courageous people—the senate is a beast."

A German writer has said, "One is a man, several are people, many are animals."

To get down to the things that are of use to us, I will quote from LeBon, the ways in which a crowd can be led. (The Crowd, page 141 and following):

1. "When it is wanted to stir up a crowd for a short space of time, to induce it to commit an act of any nature—to pillage a palace, or die in defense of a stronghold or a barricade, for instance—the crowd must be acted upon by rapid suggestions, among which example is the most powerful in its effect. To attain this end, however, it is necessary that the crowd should have been previously prepared by certain circumstances, and above all, that he who wishes to work upon it should possess the quality to be studied further on, to which I have given the name of prestige.

2. "When however it is proposed to imbue the mind of a crowd with ideas and beliefs—with modern social theories, for instance—the leaders have recourse to different expedients. The principal of them are three in number and clearly defined—affirmation, repetition, and contagion. Their action is somewhat slow, but its effects, once produced are very lasting.

"Affirmation pure and simple, kept free of all reasoning and all proof, is one of the surest means of making an idea enter the mind of crowds. The more concise an affirmation is, the more destitute of every appearance of proof and demonstration, the more weight it carries." (The Crowd.) "Statesmen called upon to defend a political cause, and commercial men pushing the sale of their products by means of advertising, are acquainted with the value of affirmation." (The Crowd.)

When the thing affirmed is at intervals heard again and again it comes to sound natural and soon is accepted as being true. No one remembers who was the original author of the statement. When this has happened and the repetitions begin to be repeated and spread by others than the originators, then "Contagion" has intervened.

"Ideas, sentiments, emotions and beliefs possess in crowds a contagious power as intense as that of microbes." (The Crowd.)

The opinions and beliefs of crowds are specially propagated by contagion, but never by reasoning.

PRESTIGE.

"Great power is given to ideas propagated by affirmation, repetition, and contagion by the circumstance that they acquire in time that mysterious force known as prestige.

"Whatever has been the ruling power in the world, whether it be ideas or men, has, in the main, enforced its authority by means of that irresistible force known as 'prestige.' The term is one whose meaning is grasped by everybody, but the word is employed in ways too different for it to be easy to define it. Prestige may involve such sentiments as admiration or fear. Occasionally even these sentiments are its basis, but it can perfectly well exist without them. The greatest measure of prestige is possessed by the dead, by beings, that is, of whom we do not stand in fear—by Alexander, Cæsar, Mahomet, and Buddha, for example." (The Crowd.)

Prestige, in reality, is a sort of domination exercised on our mind by an individual, a work, or an idea. This domination entirely paralyzes our critical faculty, and fills our soul with astonishment and respect. The sentiment provoked is inexplicable, like all sentiments.

PSYCHOLOGY OF RACES.

The psychologist distinguishes between peoples by their main mental, just as the naturalist distinguishes between species by a few main physical characteristics. The superior degree of will power, indomitable energy, great initiative, absolute self-control and strong sentiment of independence of the pure Anglo-Saxon distinguishes him from other human beings just as fins and gills distinguished the fish from other vertebrates. A fish may be large or small; chunky or slim; red, white, blue, black, or drab; live in salt or fresh water; have eyes or be sightless; and prey on others or not, but if he has fins and gills

he is a fish. All the non-essentials may be changed by environment, but the essential characteristics remain, being subject to change only by the slow transformations of evolution that require countless ages for their completion. So the main mental characteristics of a race are their inheritance from countless generations of dead ancestors and change very slowly or remain unchanged under the influence of education and environment.

"The influence of environment only become effective when heredity has caused their action to be continued in the same direction for a long period." (LeBon, Psychology of Peoples, p. 9.)

So great is the mental difference between different peoples that they can never fully understand one another. You think with not only a different brain but *a different kind of brain* than does your Filipino servant. The impression that a series of words or a series of events makes on your brain differs from that made on his brain by the same words or events. This is so marked that it is impossible to accurately translate any idea from one language to another. For example, the dictionaries give pan (Spanish) and bread (English) as equivalent. To you the word "bread" brings to mind a mental picture of a large loaf, made without much if any lard and with a small proportion of crust and much soft interior, but to the Spaniard the word "pan" brings up a mental picture of a small hard loaf, all crust and made with much lard.

In a similar manner *events* make different impressions on different KINDS of brains.

Education and environment may quickly change the more noticeable expressions of a brain but they do not change its kind.

In ten years a fairly intelligent Japanese can acquire all the education and exterior social graces of an Englishman. To transform the Japanese so that a series of events would give him the same mental picture that they give to an Englishman a thousand years would not be sufficient.

We think with much the same kind of a brain as does the Englishman. Given a particular set of circumstances we can predict within one or two alternative lines of action just what

an Englishman will do, but what a Japanese, a Chinaman or a Filipino will do under these circumstances, *or why*, is entirely beyond our comprehension. By association with one of these peoples we may come to know more nearly what they will do *but never why*.

As a practical measure, we, in the United States, have today to deal with the mixture of many different kinds of peoples.

The Anglo-Saxon and allied stock we had before the Civil War. We know them and know what they will do in war. Now for military purposes let us consider the rest.

First we have taken in the negro. There are something like 11,000,000 of him. By association we know something of what he will do but, as we think with a different kind of brain, we do not perceive the why of his acts. In other words we will not be able to get the best out of him as a soldier because we do not understand how to touch the mainspring of his character.

Another large proportion of our population is made up from the Jews. It is said that there are today more Jews in Chicago than in Palestine. For generations the Jew has been a trader. He has not been a soldier for over 2,000 years. For the same length of time he has preferred trading to doing work with his hands, and has had no country. He does not know what patriotism means. The soldier's lot is hard physical work. This the Jew despises. None of the qualities of the good soldier are exemplified by him. Nevertheless he is highly religious and very susceptible to the moral sentiments that are characteristic of his race. He has tenacity of purpose and under pressure can patiently endure much. In a cause which appealed to his peculiar kind of mind and led by officers who knew how to get the best out of him he might do surprisingly well as a soldier, but unless we can touch the latent mainsprings of character that 2,500 years ago made him a soldier to be respected we will find him of little account.

Another large proportion of our citizens come from southern Europe. Their number is increasing each year. These men have the mental characteristics that Napoleon's soldiers had. One of the principal of these is the instinctive demand

for a leader more than for a cause. The cause gets the vocal allegiance but they follow a leader, not an idea. We laugh at the harangues that Napoleon made use of in order to raise his subjects to enthusiasm in his service, but we will now have in our armies a considerable proportion of men with just the mental characteristics of those same subjects. We do not understand their brains. From the same events or words we do not get the same mental picture that they do.

The Anglo-Saxon fights stubbornly in defeat. The Latin makes a more enthusiastic and dangerous attack but sinks into the deepest dejection and hopelessness under a reverse.

A big war will now make it necessary to combine all these unfusable elements into one whole.

The organization, the methods, the leaders that suit one part will be unsuitable to the others. Today it is impossible to think of an idea which would make a strong mental and psychological impression on the *whole mass* of the population. It is therefore improbable that the Civil War can furnish any reliable information as to what we may expect our people to accomplish today.

Part II.

PANIC IN WAR.*

BY panic we understand the sudden, precipitate, unreasoning fright taking possession of a crowd, which unlike fear or fright originating in the depth of the individual human mind, *cannot be combated or curbed by reasoning*.

Such a fright, which may have its origin possibly in an utterly unimportant happening in a crowd, suddenly calls into existence the crudest features of self-preservation, features which existed from time immemorial in the human race, but

*Prepared mostly from an article in "Revue d'Infanterie" of November, 1907, translated in Military Information Document No. 12149, of School Library file, and an article by Colonel Emil Pfluef on the same subject, translated from the German.

which were overcome by advancing civilization; such a fright entirely fills the human mind by driving into the background every other feeling; governs the movements of and drives the crowd, causing each individual of the crowd to lose his power of judgment, reasoning and self-command, and leads it, incapable of resistance, into purely brute actions.

In the psychological crowd, the individual is no longer himself; he feels and acts but in the sense of the "collective soul" and shares its peculiarities and desires.

That under such conditions all bounds set by education, culture and reason are driven into the background; that the "human beast" comes to the surface is self-evident.

The study of cases of panic, which have occurred at various times and in various armies, shows that if, in combat, the determining cause of the evil has always been the same, namely, a powerful suggestion in the form of a cry or gesture, yet the real cause, concealed behind the apparent one, is an unexpected modification in the physical or moral conditions affecting the troops, a modification which resulted in diminishing or destroying their resistance to suggestion.

In campaign, this resisting force is subject to incessant fluctuations, according to circumstances, the condition of the troops, and their sentiments. We shall see that these sentiments, even the best of them, are far from being able to balance this devastating and blind force of panic.

From no source do we find any attempt to explain the characteristics of the phenomena of panic. At times, experience has shown to commanders palliatives of a moral kind, but generally the one remedy understood and made use of was sanguinary repression. In all ages military commanders have dreaded panic as a scourge.

In the ancient battles, as DuPicq has shown, "panic was the inevitable issue, and he was victor who was able to resist it the longer." The ancient commanders attempted to conquer by instilling in the soldier the dominating fear of their own commanders. It was necessary, according to a Greek commander, "that the soldier fear his captain more than the enemy."

Indeed it is a fact that in war success often depends less upon the skill of the combinations than upon the stubbornness of the combatants. Still, it is necessary that this stubbornness be general, for panic of a few men can, in an instant, destroy the tenacity of the greatest number.

Panic derives its birth and is developed in manners always identical, which can be described in a few words. Troops in the peculiar crowd state, brought into being by the combat, in anticipation of the combat or later as a result of the combat, are broken up in consequence of a cry of distress that is repeated by a few men who accompany it with gestures of terror and run away in one or several directions, habitually away from the enemy, blind with fear and deaf to every voice.

Such was the panic that seized the Prussians on the evening of Jena. At the cry "Save himself who can," a sudden panic took possession of every soul. They took to running confusedly on the roads, seeing enemy everywhere and taking fugitives, themselves full of fright, for victorious Frenchmen. The cavalry turned out of the roads and took to the fields by whole squadrons. The infantry broke ranks, looting and overturning the baggage.

After the First Bull Run the beaten troops fled in utter route by the way they had come. They ran back by Sudley Springs, though they could have saved many miles by cutting straight across. This wild scramble kept up all night till they reached Washington. Yet no one pursued. The drawn faces and utter exhaustion of the stragglers as they arrived in Washington have often been described. The physical exertion they had undergone would account for their personal appearance, but the descriptions of all other panics contain the same notice of the drawn faces and the utter exhaustion of those who have been in a panic. In order to arrive at a conception of panic, one must consider certain phenomena still little understood. These are *illusion*, *hallucination*, *suggestion* and *contagion*.

Panic is indeed a sort of collective hallucination. Illusion and hallucination are both at first individual and are manifested in the subjects who are the most nervous, the most impressionable, or the most depressed physically. By their gestures and

cries they offer suggestions to their immediate neighbors. Then contagion does its work with frightful rapidity.

Let us examine a few details of these different phenomena.

"Illusion is an error which simulates actual knowledge, evident in itself or intuitive in the form of a perception of the senses." (Sully). It has, therefore, for a point of departure a real impression. For example, a sentinel sees a bush and hears it rustle in the breeze. He really sees *something*, but believes that he sees an enemy sneaking up to kill him.

Of this nature was the phenomena which caused the Russian fleet to mistake peaceful fishing vessels off the coast of England for Japanese torpedo craft.

In hallucination, on the contrary, there is no real impression. A person who pictures to himself the face of a friend or of an enemy so vividly that he believes he sees him for a few moments is a victim of hallucination.

Under the influence of the nervous over-excitement of the battlefield such phenomena are frequent. Every one who was gone to war has verified it.

The commanders, themselves, being more imaginative and having their attention constantly under strain, are frequently the victims of illusion and hallucination. That is what a French General wished to say in 1870, when he said to his chiefs of information: "You have Prussians in your eyes."

A curious example of hallucination in the chief is that of the brigade commander Felix. During the campaign of 1793, while posted in an advance position, he abandoned his detachment before the first shot was fired and fled whip and spur to headquarters (13 miles) where he asserted that his troops had been annihilated by the enemy.

This officer had previously distinguished himself for bravery.

On examination it was found that, though there had been a fight, it had not been a serious affair and the commander was the only one who had fled.

In an army a few individuals become thus victims of illusion or hallucination, and so are created the first germs of panic.

Obsessed by the image he believes he sees and lost to all

notion of the outside world, the victim immediately exerts all his energy and all his power to obey the feeling of attraction or repulsion which the image imperiously impose upon him. When seized by fear, his features become convulsed, he conceals his frenzied eyes with his arms to escape the horrible vision, and his mouth utters cries of fright. It is then that is introduced the phenomena of *suggestion*. This phenomena of suggestion is well understood by military commanders, who know that conformably to suggestion, soldiers will dash to the assault of a position with an irresistible impetuosity.

Unfortunately, suggestion does not always come from chiefs and is not always directed in the channel of duty and the safety of the army. Nor is it of less effect on this account; for, under its influence—and this is a point to be noticed—the soldier will abandon himself to shameful flight as well as to heroic assault.

"The spectre of panic stalks by the side of enthusiasm." (Balck.)

In the crisis of the fight, the action of suggestion would not be so formidable if it could be localized and if it could be made to influence the minds of only the nearest neighbors.

But this is not the case by any means; for *contagion* soon intervenes to disseminate the influence with incredible rapidity. "It is a phenomenon often verified, but unexplained, that every act, every sentiment in a crowd is contagious, and contagious to a point where the individual very easily sacrifices his personal interests for those of the collective body." (Le Bon.) In an instant, contagion carries fright to the bravest hearts, destroys the faculty of reasoning, and brings all of the intellects to the same level.

Thus the reading of the accounts of dramatic panics depicts only the image of a furious, fleeing, unconscious beast, seeking an instinctive shelter from the storm in ravines, woods, villages and mountains, which nature and the industry of man have prepared for the refuge of beings threatened with an imminent danger. With men in a panic, they are seen, after being well started, to herd together in sombre silence, their faces reflecting their sinister fright. After the first start, they

press on in silence, their eyes cast obstinately on the ground. Crushed by fatigue, they throw away knapsacks, hats, rifles, canteens—anything that impedes their progress. The descriptions of all panics dwell more or less on the utter exhaustion of those who have participated therein. It appears to be a result, not of the physical exertion they have undergone, but of the nervous excitement and nervous strain.

In panic before the final stage there are cries, inarticulate, but still human sounds. When a panic has continued for a longer time, the mass settles into sombre silence, utter weariness, and hurrying along in profound dejection is even less possible to control than when the first rush started.

We have seen that troops seized with panic had received through suggestion an extremely vivid impression and that hallucination presents to the eyes of each soldier a frightful danger.

Immediately, by a psychological law, the organs involuntarily react to avoid the danger and with all the more violence because the exciting influence has been most vivid. Then ensue disordered actions causing the man, in order to rid himself of every obstacle to his flight, to precipitate himself upon his neighbors with a frenzy that extends sometimes even to murder, and to hurl himself upon obstacles which he can neither clear nor overturn.

It has been proved, moreover, that strong emotions lead to serious perturbations of the respiratory system in consequence of a disturbance of the nervous centers, the mechanism of which is not known.

Respiratory disorders likewise cause an extremely rapid fatigue even at the time when the troops have just begun movement, and the details of this fatigue fill the accounts of panic. We see soldiers strew unconsciously over fields everything hindering them, everything added to their fatigue or bowing them down. This thing is certain and is seen in every panic.

It can be said, indeed, that from the instant when cries of fright become general, when all feelings and all thoughts are directed toward the one end, flight, troops have acquired a physiognomy entirely new, and there are manifested in them characteristics peculiar to this state.

This annihilation of the intellectual faculties shows of what little importance, from the special viewpoint of panic, is the coefficient of intelligence sometimes spoken of as one of the great advantages of our American army. Remembering that the army that can longest resist panic is the victor and that crowds and especially crowds under strong excitement are the same no matter what the grade of intelligence of the individuals composing the crowd, it seems that, except in the way of leaders, intelligence is of little value in war.

Troops seized by panic are so incapable of the least reason that even the sense of direction often leaves them; and it is not rare to see soldiers dash into the ranks of the enemy with such gestures of terror that fear overcomes the adversary also. Troops overcome by fright are totally deprived of the critical sense, and so one of the consequences of the loss of reason is the creation of an extraordinary credulity. It is thus that a rumor, known at once to be false if one but stopped to think, will frequently turn a retreat into a demoralized rout.

It is not the courage of the individual which is changed into the most imbecile cowardice, but this change takes place in the mind of the crowd. The individual minds have ceased to exist—the crowd has a single mind of its own, separate and distinct from the minds of the individuals composing it. Troops composed of men of proved individual courage will not be inaccessible to collective fear. The gladiators of Spartacus, in revolt, were put into full rout by an army of soldiers of little individual courage, but of better organization and leadership.

We thus see that physical depression, loss of the faculty of reasoning, the unleashing of primitive instincts and sentiments, are the essential characteristics of men seized by the crisis of fear. They become easy preys to their adversaries, who need only to have enough physical power to strike in order to slaughter them.

Pursuit under these conditions becomes a sort of cruel play; a chase where the pursuer has no longer anything to dread for himself excepting fatigue. As DuPicq has shown us, in the ancient battles the winner lost a few hundred; the loser fifty or a hundred thousand. Here the losses must have been about equal till the break. Then one side, overcome by

panic, fled, and the victors without further fighting, had but to follow along and kill the helpless panic-stricken mob.

FACTORS IN PANICS.

In order that troops may be influenced in an irresistible manner by the suggestion of fear, we have said that it was necessary that they be placed previously in a condition favorable to the contagion of the suggestion. This state of predisposition is brought about by two series of factors:

1. Immediate factors, events, almost always unforeseen, which often pave the way for panic in a few minutes, without in themselves causing it.

2. Indirect factors, those which, operating for a time more or less extended, have created a soil favorable to its development.

Among the first may be mentioned treachery, the absence or scarcity of arms, the absence of the commander, surprise, and expectant waiting. Among the second, race, physical depression and moral depression.

The definition of treachery we all know. When it occurs with troops while waging hostile battle, even if they have already accomplished prodigies of valor, even if they are in full victory, and even if treason be the act of only a few isolated individuals, yet demoralization becomes almost inevitable.

It is a fact that the reasonings of collectives operate only by the association of images and by generalizations, often absurd.

The image of treachery is first erected before the frightened soldier who sees himself surrounded to his ruin by mad-dened traitors. Let the cry of treason be raised and the deed is done; panic is let loose.

The lack of arms gives the soldier the impression of being delivered over to the enemy with feet and hands bound. We have a curious example of this in the combat of Saint-Hermagor, where Major Roulier was abandoned by all his men because the muskets were, on account of rain, no longer able to be fired. The enemy was, of course, in exactly the same fix. An individual would have known this at once, but the crowd with the usual lack of reasoning qualities inherent in

crowds, and the extreme egoism of crowds, thought only of itself and its own plight.

The absence of chiefs disarranges the bearings of troops, accustomed to act only upon orders and having for direction only the will and judgment of the chief. The latter appears in the eyes of all as the one person who understands the military task and is capable of directing affairs.

Action by surprise is recommended by all tacticians; for its power to demoralize the enemy is a considerable force in the hands of the assailant. It suppresses, indeed, in the one who encounters it, not only the possibility of maneuvering, but also that of measuring the extent of the danger threatening him. At the same time it removes the two factors necessary to all reasoning, time and calmness. Peril then appears all the more frightful, because it is sudden and apparently inevitable. Before having suffered even the first ill, troops are morally turned foot-loose and are ripe for panic, which is propagated by contagion in a very few minutes.

The phenomena of anxious expectancy explains the numerous shots that sentinels in the field fire during the night at bushes and trees, which they take for the enemy's patrols. It explains also why reserve battalions during battle, having before their mind's eye the spectacle less the animation of the struggle, retreat without even waiting for their entrance into the fighting line.

The above are immediate factors of panic. They often influence troops independently, but often they are grafted on the indirect factors, which favor their action, and therefore take a preponderating part in the origin of panic.

From this point of view, that unchangeable soil from which spring all our sentiments, race, has a capital importance. It is upon it that depend in great part the impulsiveness of troops, their variableness and their susceptibility to suggestion.

Physical wretchedness is one of the most rapid agents of demoralization. By physical wretchedness must be understood, not only the absence of rations, but also the fatigues resulting from marches and combats and the anemia that so rapidly overcomes troops in campaign. Among the causes that create a soil suitable for hallucination and illusion may be cited excessive

fatigue, hunger or thirst, strong mental tension, profound mental or bodily exhaustion and morbidly emotional conditions such as fear. Panic, the daughter of hallucination, becomes extremely frequent with troops physically depressed.

When to physical suffering is added demoralization, when wretchedness breaks down the body and defeat undermines the courage, panic becomes the uncontested mistress, before whom the commanders themselves bow, repulsing the idea of battle, in order to avoid irreparable disaster.

It has been justly said that moral forces are the preponderating ones in war. Moral force, which gives to troops the will to surmount all obstacles, to dread no danger, and to desire to conquer at any price, springs from sentiments, varying according to circumstances, which animate soldiers and place them in a condition to be influenced by the suggestion of victory in combat.

In a general way these sentiments are religious fanaticism, patriotism, enthusiasm for a commander, discipline and *most of all confidence resulting from experience.*

CONCLUSIONS.

After having reviewed the different causes of panic, there still remains for us to determine whether or not there are practical means for rendering them less frequent: of lessening their effects, and of checking them after the evil has been produced.

Among the indirect and immediate causes of panics, it is evident that several, such as race, are beyond control, or such as treason and surprise, cannot be foreseen. If known in advance, they could not exist.

Against these factors of panic only general preventive measures, designed to render them less frequent, can be taken. We must therefore resign ourselves to submit to them as an inevitable evil.

Other factors, on the contrary, depend upon the commander, who is able, within certain limits, to suppress them.

It is a question of understanding troops, of administrative diligence, of discipline; and it is especially in this respect that past experience imparts instruction.

Thus the panic of the Tuileries, in the battle of LeMans, demonstrates conclusively that it would be preferable to leave at home men who were neither armed nor instructed, rather than to lead them into combat, where they become a center of extremely dangerous demoralization.

These chances would be still further reduced if troops be drilled to fight according to methods appropriate to their racial temperaments. It is necessary, indeed, that instruction, while taking into account arms, terrain, situations and numerical strength, be based upon the moral forces of the combatants. The penalty for doing otherwise is to find them useless on the day of battle.

Man is but little changeable, but little transformable. It is therefore from perfect knowledge of *him* that tactics must especially be derived, and that mathematical theories must be met.

Panic is an aberration of assemblages of men, an actual scourge, of which tactics must take account.

With this in view, the following principles can be deduced from what has preceded:

1. Joint responsibility and confidence are two essential factors for steadfastness of troops in combat and for their resistance to panic.

2. Troops must fight in the organization they are used to in time of peace, each man in his habitual place and with his proper unit.

In order that a man or troops may fight energetically, without apprehension, it is necessary that there be protection on both sides and in rear.

Consequently, reserves should not be too far distant from the fighting line in order that they may give the latter confidence by their promptness in supporting.

3. The different arms must give each other constant support. The artillery, especially, the effect of whose fire is universally recognized, should support the infantry from near points, and should march, so to speak, in the midst of them. The soldier in combat must never feel himself isolated or separated from his brothers in arms.

4. The best troops, those whose steadfastness is assured, should be placed on the second line. Those who are struggling directly with the enemy have in action a powerful deterrent from emotion, namely, the centering of their attention on the incidents of the fight, without it being possible for them to think about their own personality.

If the best troops be placed in the first line the least recoil on their part causes the disintegration of the reserves.

5. Adequate ammunition supply is absolutely essential. Troops out of ammunition can not and will not fight, except at the very closest range. Such troops will not only break themselves, but their panic will, by contagion, be spread to their neighbors.

To avoid surprise at any cost, troops should not only cover themselves in all directions from which the enemy may approach, but they should also, if possible, be warned in advance of the probable incidents of the combat.

Morgan, at Cowpens, realizing that his militia was going to flee anyway, told them to fire a volley or two and then run. They did this, and thus everything being expected, they were so encouraged that they had the nerve to come back and materially assisted in winning the victory.

Complete supply and organization, providing largely against material wants, appropriate tactics, and instructed nuclei of the units are the elements in troops, other than valor, suitable for warding off panics. These elements, which, added to discipline, endurance and exalted morale, constitute an appreciable force, are still insufficient in themselves. Only *joint responsibility*, born of experience in war, can ever offer an impenetrable resistance to the contagion of fear. Therefore, panics among troops will occur, whatever the cares the commander may have taken to prevent them.

"Collectives are the plaything of all exterior excitants, and the latter's incessant fluctuations are reflected in them. They are the slaves of impulses they receive." It follows that troops influenced by suggestion to panic can, if a sufficiently strong will be imposed upon them, receive an absolutely contrary suggestion, which they will obey with the same docility that they did the first one.

History is full of deeds where the attitude of a chief, a happy word or a gesture have changed in an instant the sentiments of troops.

Washington, at Princeton, rode out between the lines and sat on his horse fully exposed to the volleys of both sides; this steadied his men. It is not the words, which few if any hear, nor the gesture, which more, but not a large percentage of the whole, see, that brings back the whole mass. It is the words or gestures that influence a few—then contagion spreads the effect through the mass, which knows no more why it came back than why it first started to fly.

Prestige is the first element of the habit of obedience. It causes the acceptance of an idea without discussion or controversy. It is necessary then that prestige be the dominating quality in a leader of men. It is because of it that his suggestions take on an irresistible power, that he is able to throw his soldiers against the enemy in an enthusiastic assault, and that he can stop with a gesture the first fugitives, transforming them into heroes.

So, for that moral aberration of collectives, panic, two remedies of a moral nature present themselves. *Prestige of the commander and joint responsibility of the troops.*

Some have prestige inherently in their composition; others seem to have acquired it almost by accident, while a certain amount of it is acquired through exterior surroundings.

More difficult is it to inculcate in troops the sentiment of joint responsibility based upon mutual confidence. It can exist in a high degree only in soldiers who have gone to war together; for souls are revealed only in crises, and characters are verified only in suffering and dangers. If no one knows himself until he has suffered, still less does he know others until he has suffered with them. Napoleon said of the soldiers of Waterloo: "They had not eaten soup together long enough." The important thing is not to eat in the same room and at the same hours, but rather at the close of the same fatigues and in the midst of the same dangers. This is because the only means we have of developing joint responsibility among soldiers is to subject them to the same harsh proofs, which grow more and more painful and which are wisely graduated and energetically endured.

Part III.

PSYCHOLOGY OF INFANTRY COMBAT.*

IN dismounted fighting, especially, man is the first instrument of combat. Weapons change from time to time with the advances of science, but man with his weaknesses and his heroism is always the same, always subject to fear, to physical weakness and to waves of psychological enthusiasm or panic.

Many writers have noticed that skulkers are more to be expected in infantry than in the other arms.

The artillery is the supporting arm. Its men, in action, are in groups around the immobile pieces. To fight, the men must stay with the pieces. Being in groups around stationary objects the men are always under direct command and supervision. Skulkers are few in the artillery.

The smallest cavalry unit is a dual individual, the man and his horse. Of this pair the horse is a nervous and headstrong animal which by instinct seeks to go in herds—to stay with his comrades. It is much easier for a man to hide and stay behind than it is for a man and his horse to do so. The man who lacks the moral force to join in a charge also lacks the moral strength to hold his horse out of it. The rush and clatter of a charge also tends to raise the enthusiasm of the man. As one writer has said, "The cavalry charge is a bitter dose. First one makes a face and then swallows it at a gulp. But the infantry fight is a whole bottle of medicine to be taken drop by drop, and each drop is more bitter than the one before."

Even when fighting dismounted, the influence of the horse keeps men from skulking. The dismounted cavalryman never knows when his troop will mount and ride off somewhere else. He does not know where the lead horses are, but his officers do. If he does not want to be left in the hands of the enemy

*Taken, to great extent from "Psychologie du Combat de l'Infanterie," by Lt. Louque, itself mostly made up of quotations.

in case of a reverse or be left behind alone in case of success he must have some way of regaining his horse. It results that the cavalryman, almost instinctively, makes every effort to stay with his organization. On the other hand, the combination of men and horses, both being susceptible to panic, makes panic more to be dreaded in the mounted arms.

Numerically, the infantry comprises the bulk of a large force. For the above reasons, the discussion of the psychology of combat will be limited to that of the infantry combat. "In this arm there is no heavy and collected material to serve as in the artillery. Its strength is not due to position; armament is individual, cohesion can not be forced; it is an affair of the will of the individuals. In combat, the mounts do not instinctively group themselves as in cavalry, there is no headlong rush; but men weighed down under the weight of human feelings advance slowly and painfully by an intense effort of their wills." "The human element dominates all the rest. Its essential is solid character, unity of action and mutual confidence. The man and the man alone makes the measure of these elements. All the power of the arm resides in the man himself. His solid personal character is his birthright; unity of action and mutual confidence come from the military education his nation has given him." (Loque.) If it has given him no such education, he will lack these qualities.

Our children don't get the love of country inculcated in them in the schools as we did ourselves. In the average family this is the case as well. We amuse the children by taking them to see the moving pictures, not by telling them stories of the deeds of our ancestors. We do not lay the foundation for strong patriotic character as did our fathers. Our population is becoming more and more mixed in character. No longer can we raise regiments where every man will be of the characteristic American stock, of the same general level of education and ability, of the same good average, honest, faithful personal character. No longer can we count on our average man making the best of what he can get in the way of rations; instead, we will try to furnish infinitely more and meet much more grumbling for our pains. We could not hold an army together a month on the food of the Civil War.

FEAR.

"Cowardice is fear yielded to; courage is fear vanquished." (Legouve.)

"Courage is neither so common nor so invariable as the public suppose. A person is very variable as to courage. He has his good and his bad days, depending on exterior circumstances such as physical or mental fatigue, cold, heat, hunger thirst, or the news received.

"As to the average, the ordinary man, it is necessary to flatter a little to appease public opinion. Without doubt he is capable of many fine moves, but subject also to strange reactions. It is said everyone is brave, but when one comes to the fact one finds few of uniform courage." (La Guerre et l'Homme.)

"Of all animals, man is the most cowardly. If one studies the faces before a battle he will realize this. For a man to sacrifice his life for the success of the end that the army pursues is a rare thing. Are there so few absolutely brave among so many brave men? Alas, yes! Gideon found 300 among 30,000 and he was surprisingly lucky." "The absolute bravery that does not refuse to fight even against odds, trusting in God or destiny, this bravery is not natural to man; it is the result of moral cultivation, and it is infinitely rare. For always in danger the animal sentiment of self-preservation bobs up. Man calculates his chances and makes how many errors?

"Man has a horror of death. Among corps d'elite a grand sense of duty, which they alone are able to understand and reach, sometimes makes them march forward; but the mass always recoils at the sight of destruction. Discipline has as its end to do violence to this horror by a greater horror—that of punishment or of shame. But there always arrives an instant when this natural horror takes the upper hand of discipline and the combatant flies. When the combatant is long under fire there is produced the selection of which Skobelev speaks. The brave and the men of good intentions keep up; the others, the cowards, waiting under cover, weaken themselves and the others, delaying the execution of orders, breaking up the movement and impeding the effectives. Fire, even from a great distance, has then produced disunion material and moral." (DuPicq.)

"Fear is then an enemy that we have not taken into account, yet it is really more terrible than the real enemy, for it weakens the effective strength more than the latter."

These human sentiments are common to officers and men. The officer is sustained by two things which do not come to the aid of the soldier. He has better education and a feeling of the responsibility that rests on his example—*noblesse oblige*. He also has studied and thought about war. In his studies he has thought often of many of the situations of war. When these actually come to pass on the battlefield he will have a sense of having been in such a situation before.

This will help to make his acts and decisions seem natural to him. To relieve some of the nervous tension.

Fear—that is the thing to vanquish in order to assure the victory.

Battle is a terrible drama, a bloody tragedy, which unfolds itself to the hearts of all the soldiers, from the humblest to the most exalted. It is a struggle of two moral powers. The conquered are not those who fall dead or wounded, but those who followed and who rushed away because they were afraid. Fear is a very natural human sentiment. Those who are reputed to have been the most brave have acknowledged it.

Ney said: "The one who says he never knew fear is a compound liar."

Grant said that he realized that the enemy was as afraid of him as he was of the enemy and that this thought helped sustain him through his battles.

Turenne said to himself before a fight: "You tremble, body. Well, you would tremble more if you knew where I am going to take you."

The manifestations of fear are not such as novel writers suppose, but they are ever present in combat.

The physical expressions of fear are betrayed first by an almost unconquerable desire to fire. Feeling in danger, man wants to strike back. Physiologically, fear dilates the pupils of the eye so that it can not be properly focused. Some can barely see the end of their rifle. Many fire from the hip. It is useless to try to take aim through the sights, the eye does not see them

and this is involuntary; it can not be overcome by an effort of the will.

Fear makes the muscles tremble so that, though the brave man grits his teeth and tries his hardest, yet his aim trembles and realizing this his morale is weakened. Also fear gives rise to respiratory disorders which greatly enhance fatigue and cause an involuntary contraction of the blood vessels which causes paleness.

"As a general rule our soldier in battle has an astoundingly simple and everyday demeanor. He who expects to see something out of the ordinary, something heroic on his face at these decisive moments, something picturesque and dramatic, is greatly mistaken. The soldier remains the same ordinary man as before, only his face is somewhat paler and its expression more concentrated and serious. His nervous and rapid firing betrays the inner struggle. It is at that moment that it is necessary to master the soldier's impression and bring him to a normal condition, as far as this may be done in battle." (Soloviev.)

Is it any wonder that battle practice is far inferior to target practice? Is it any wonder that foreign nations consider our refinements of target instruction as time wasted?

"For what is perfection one should recall the Spartan. It ever man had been perfected with a view to war, it was he, and nevertheless he was beaten and he ran. Then, unhappily for education, moral and physical force has its limitations, since the Spartans ran away—they who should have remained to the end on the field of battle." The prominence of the story of Thermopole shows how exceptional was the case when even a comparatively small force would fight on till the end.

Much was made in the papers of the self-sacrifice of the Japanese soldiers, yet we know that whole battalions of them were reduced to the grade of transport troops for cowardice—made equivalent to our Q. M. employes for handling freight.

The fight is not over in an hour or two. It lasts for a week or ten days. The men suffer great physical hardship from exposure, lack of food and, most of all, from continuous nervous strain. They become so exhausted that they go to sleep on the firing line. There is a paralysis of wits—a total loss of initiative. In this state they are peculiarly accessible to the in-

fluence of suggestion—to panic. In this state a handful of cavalry suddenly appearing in their rear will break the resistance of a division. (There was an example of this very case in the Japanese War.)

Still, as in ancient times, "fear is the one true enemy and he is victor who is able longest to resist it." (DuPicq.)

SKULKING.

Skulking is great and general in all armies. It is to replace skulkers and to replenish ammunition that we need such great depth in our formations. If it were not for skulkers we would have no place on the fighting line for the reserves, we know from experience, will be required.

Lt. Louque quotes the following examples of skulking:

"Hohenlohe tells of crossing the battlefield in war of 1870 and finding it covered with skulkers—whole battalions of them—some were lying down with their guns pointing forward like skirmishers—evidently they had remained there when their comrades advanced. Others were hiding in holes and ravines. All had an indifferent air. It seemed to be sufficient for them that the party of officers riding by did not belong to their corps. Some cried, 'Look, here are some more who are going forward to get killed.'"

Captain Culmann describes finding at Woerth five men in Indian file behind a small sapling who had remained there several hours.

Quotation from a French description of the defense of Saint Hubert, 18th of August, 1870: Four hours! Rain of bullets, all high. Ah, look! A line of battle coming to support us, well aligned. The marshal in the center, the colonel on the right, Sourdrille on the left. It is the Third Battalion. From my place I see holes made in the line, which soon reaches us and wishes to share our shelter, hardly sufficient for us. They get in two and three ranks; the occupants refuse to yield the place which they have had all day. They need not have sent all the soldiers in the world. We needed only cartridges.

What is that? We are turned. No; our friends 200 meters in our rear are firing on us, taking us for the enemy. We sound "cease firing," we make the signal, but the fire con-

tinues. My under lieutenant asks permission to go over there; he rushes forward through a storm of bullets, reaches their officers and finds among them some who ask if he really is a Frenchman. However, the fire ceased. That battalion rose up and rushed to join us. Where could we put them? Every one got behind something and began to shoot. We were in ten ranks. The front rank cried that the fire of those in the rear menaced them. I struck those nearest me with my cane and finally ended by turning my back to the fire of a Prussian battery which was less dangerous than my comrades.

A Prussian captain wrote in 1870:

I see many people occupied in trying to devise means to make the enemy's fire less effective, but I acknowledge with regret no one seems disquieted by the serious losses caused by men of the same troop firing on each other.

BATTLE FIRE.

"Modern rifle fire produces a strong impression; the air seems to be literally filled with bullets; their plaintive whistling pervades the atmosphere like a continuous moan, above, below and everywhere.

"As soon as the first shot is heard the soldiers grow serious, take off their caps and cross themselves; all jokes and conversation ceases. At the given order all march gravely as during maneuvers.

"The courage and calmness with which the soldiers go into battle produce a strong impression.

"The infantry soon grows accustomed to rifle fire, but the artillery fire, especially the shells, produce a decided impression. It seems to me that this is not due so much to the losses inflicted by artillery as to the earsplitting noise produced by the explosion of the projectiles. The effect is produced only on the ear, but it is strong. The shimose shells have a specially powerful effect upon the inexperienced, and the shrapnel upon those unaccustomed to battle. The young soldiers throw themselves face downward at each bursting of a shell. Thus the infantry, which suffers most from rifle fire, pays least attention to it; the artillerymen, on the contrary, are much impressed by rifle fire. This may be explained by the fact that the men are accustomed to their own arm." (Soloviev.)

"At Liao Yang, Kuroki had before him 300 pieces of artillery that fired without ceasing for eleven days. The consumption of ammunition was enormous and has been placed at 500,000 projectiles, including the fragments, fired by one battery in a day. Result, 750 men were reached. That is to say, that each battery touched in some manner one man in a day. That is reassuring against danger, but not against fear." All those pieces did not kill as many as one would have believed; nevertheless, they attained their end—the demoralization of the enemy, for the enemy did not know in advance what the results would be." (De Mand'huy.)

"A Japanese general said to M. Kahn, war correspondent: See that battery firing in front of us? It aims at the Russian redoubts at 3,500 meters and it is composed of mountain guns. I am sure at this distance of not killing many Russians, but I have no doubt of the pleasure with which our infantry two kilometers in front of us take in hearing the shells go over their heads."

"The moral support of machine guns, especially if permanently attached to the regiment, will be greater still, for the rattle of their fire once heard is never forgotten."

"The employment of machine guns was for the first time quite great in the Russ-Jap War. Both sides have attributed to these machines a principal role both in attack and defense. In moments of crisis they invariably constitute a strong point of support. These guns are free from the effect of trembling nerves and muscles and for that reason are especially valuable in supreme moments."

Right here we get a good idea as to the proper use of machine guns. In supreme moments their effect is great, their moral support being as great as the physical. If they are pushed too far forward in the attack or held to the last minute in defense, and thus are captured, still the material loss is small. Used too liberally during the action such guns consume enormous quantities of ammunition—far too much—but used *right* their support, both moral and physical, will be invaluable.

So much for the effect the enemy's fire has. Now let us consider our own fire.

DuPicq: "The soldiers have emotions, fear even. The sentiment of duty, discipline, self-esteem, example of officers and above all coolness maintains them and keeps back the fear of becoming frightened. Their emotion does not permit them to see clearly, to more than partly adjust their sight, when they do not really fire in the air.

The rifle, like the cannon, keeps power, the faculty of adjusting sights, but the agitation of the heart and nervous system is opposed to the immobility of the arm in the hands; the arm being supported takes part always in the trembling of the man. The latter is in haste to launch the shot that will stop the ball destined for him before it can leave the enemy's gun. And for fear the enemy will fire first this vague sort of reasoning, though not actually formulated in the soldier's mind, still leads him to fire without even bringing the gun to his shoulder."

General Trochu says: "From my experience I am convinced that troops in the firing line, under the emotions of battle, never adjust sights, no matter how good the troops. They fire to the front, hurriedly, many of them hardly bringing the gun to the shoulder."

General De Negrier says: "Of 100 men who are under fire for the first time ninety-five do not even see the end of their gun and fire very high." He had considerable war experience.

Of the 100 men the five or six who remain cool see what they believe to be the point occupied by the enemy. Their bullets strike within a zone of 150 or 200 yards, provided the range is correct. The others fire at all kinds of angles. Their bullets go everywhere, but principally in a zone from 2,700 yards up.

"The proportion of five men out of 100 who remain cool may seem extraordinary to those who have never engaged in a large battle, being themselves on the firing line. *It is, nevertheless, not exaggerated and is sensibly the same in all armies.*" (De Negrier.)

After the above, one may doubt whether battle fire can be directed.

"A man under fire has the impression as quick as thought that he is specially and personally seen, that they are after him. It is the logical reaction of the sensation of danger on an organ-

ism deprived of the faculty of thought. The observation is, moreover, well enough known and proved by experience. Under the influence of this feeling man tries to kill, so he will not be killed, and it is one of the most powerful motives of the combatant. From this it results that he will necessarily fire, and, whatever happens, he will fire on the ones whom he believes are firing at him; that is, on those most clearly seen in front of him; this conviction that it is those seen and no others, which menace him, being the direct consequence of a series of unreasoning impulses, will present themselves to his mind as evidence. The man himself will not often choose his objective; the objective will be imposed upon him. One sees how unreasonable it will be to count on always being able to direct his fire on any point one chooses." (Grandmaison.)

"Let us not expect under a hot fire to be able to use fire with counted cartridges or volley fires. Only when the firer is himself not in danger will telescopic sights and all the other paraphernalia of the target range be of any value."

"Only against an inferior enemy (like savage tribes), where the soldier feels himself safe, will it be possible to use a knowledge of probably percentage of hits, split ranges or range finders."

"*The efficiency of fire in time of war reposes above all else in the morale of the combatants.*" (Daudignac.)

"Absorbed as the commander will be in leading his men, he will have little chance to sanely appreciate all the conditions that are necessarily taken account of in range firing. He will have all his faculties engaged in solving the tactical problem and the problem of leading his men, without going into the direction or intensity of wind, the direction of light, the temperature, the barometer or even the use of the range finder. Instead, he will be seeing that his men keep some kind of formation, choosing the time for advancing, pushing the men forward, trying to keep control of the opening and cessation of fire, and above all in watching the enemy."

WHY ASSAULTS SUCCEED.

In the attack "Each forward move requires great mental strain—takes perhaps hours to accomplish. Even the halts give no rest—no let up to the nervous tension. The men crouch in uncomfortable positions behind insufficient cover, with deadly projectiles constantly singing in their ears and a knowledge that each movement constitutes an additional danger of death. The human organism is not constituted to endure danger of this intensity and *above all of this continuous duration*. The fire of the defense does not destroy the assailant, but demoralizes him to such an extent as to suppress all effort." (Grandmaison.)

It is then only the arrival of fresh troops that can furnish the impulse for a forward movement. It is almost impossible to, in daylight, re-inforce a firing line close to the enemy which has not already gained superiority of fire; that is, has gained the ascendant morale and made the fear-stricken enemy fire wildly while they themselves are less shaken.

This is the moral advantage of the attack. It feels itself superior and shows it by attacking. The waiting defender has lost morale by the very fact of taking the defensive. Now, as the advance proceeds, the defender fires, but the advance continues. Many writers have noticed that the attacker's loss grows less as he gets close to the defender.

"It has always been necessary to go in person, in flesh and blood, and to go after his hide and occupy the place of the other fellow before his opinion will change and he will acknowledge himself beaten. It is still the same today. Nothing is decided by fire alone."

"The bayonet alone marks a determination to go to the end. It proclaims the necessary understanding of the situation. It states the distance at which the enemy must be met in order to accomplish the task."

Let us now examine the state of mind, the morale of the defenders of a position.

"In place for hours, for several days, perhaps, their passive attitude has only convinced them of their inferiority. They have suffered all the emotions of the preparatory combat; volleys of infantry; machine guns fire shrapnel; nothing has been

spared them. Their losses are not much, perhaps, but their morale is considerably lowered.

"The short bursts of regulated fire, even if inefficient, against a masked object, are absolutely depressing.

"DeWet, in his Memoirs, tells us that on two different occasions his burghers ran away under the fire of artillery without having lost a single man. A combat is entirely an affair of morale.

"The wounded must most often remain a long time where they fall, it being impossible to remove them under fire, and their presence only increases the skulkers."

Further, the man realizes perfectly that the nervous trembling which he is unable to overcome is disarranging his aim and that his bullets can not hit the adversary, who, step by step, is approaching him, bayonet already fixed, in order to make him feel what is coming to him if he waits. And that is precisely the reason why attacks succeed.

(See "Tactics," Balck, page 87.)

At Nicholson's Neck in 1900 the Boers crawled forward, firing. The defenders fired also, but, while a storm of bullets swept over them, they could see the Boers getting nearer and ever nearer. The psychological effect of this uncanny crawling advance was so great that by the time the Boers were within 300 yards the British soldiers were individually showing white handkerchiefs. The Boers feared a trap and continued the attack. Soon the white handkerchiefs were almost universal. When the Boers came up to them many of the British soldiers were weeping and their officers laid the trouble to the constant advance of the crawling line against which the British fire *seemed* to have no effect.

At Chattanooga the Confederate soldiers left what their officers thought to be an impregnable position because of the moral effect of seeing Thomas' masses advancing toward them. (See Alexander.)

"Then, should a charge alone, unprepared by fire, succeed? Alas! No. In spite of all the chances of success which we have just enumerated, man is slow to comprehend that he can conquer by running straight into bullets. Thus it is that at the moment of the decisive attack the struggle between the instinct

of the men and will of the chief becomes more intense."

The decisive attack must be preceded by efficient fire preparation

CONCLUSIONS.

As men begin to suffer losses they will open fire even in spite of orders, hence it is better to open fire by command and "open the safety valve of the emotions" before the men get out of hand. Get them as far forward as possible without serious losses, *but under serious losses open fire*, unless the distance is short enough to be covered in a single rush.

"Before an action it is of use to say to the men a few words, that, if they do not inflame the imagination of the men, will at least show them that their leader is there and that he is confident."

At Pickett's advance, last day at Gettysburg, General Gibbon rode down the lines, cool and calm, and in an unimpassioned voice he said to his men: "Do not hurry, men, and fire too fast; let them come up close before you fire, and then aim low and steadily." "The coolness of their general was reflected in the faces of his men."

The nature of these remarks, even the utility of making them at all, depends on the character, or better the race, of the soldier. For a Frenchman such attempts to inflame the imagination and excite enthusiasm might be continued at every halt during the deployment and even after the first shells began to arrive and be crowned by a supreme effort just as the serious action began. This was the idea of Napoleon, who used to ride along his lines at the beginning of an action to increase the enthusiasm of his men. With us a cool, cheerful, confident bearing of the officer, even a joke cracked at another officer, would better answer the purpose than a fiery speech. The main point is to keep the command from sinking into the silent, self-centered dejection that comes from letting each man have time to brood over his personal danger. "In making any effort in this direction it may be well to remember that it is always easier to secure the attention of a crowd than of isolated individuals."

If you know a certain danger threatens, it is better to warn your men to expect it, for an expected danger is better withstood than one that comes as a surprise. The French regulations of 1809, made up by Napoleon, laid it down as a principle that the men should always be forewarned of the danger to which they were about to be exposed; that if an extraordinary effort was to be demanded of them they should be so told, but that in any case, though warned of the danger, it should not be exaggerated to them.

During the long days of battle the men will be subjected to all kinds of discomforts, including difficulty as to subsistence. Often the wounded can not be removed from the firing line till night. Their cries still further add to the depression.

When high explosive shells burst the effect is small, almost nothing against living targets; the pieces are too small, being almost dust. On the other hand, "It does but little damage, but the noise is fearful and its explosion throws up a great column of black smoke, mud, pebbles and fire which produces a great impression upon inexperienced soldiers. The moral effect is absolute." (Soloviev.)

The results of fire will vary from nothing to a maximum. When the enemy is cool and has a good target losses will be great and very sudden. "At Magersfontein a British regiment returned the Boer fire for three minutes and then broke. It lost 10% of its effective strength. It may be said that 10% is not an excessive loss, but 10% loss in three minutes is sufficient to make any regiment break, for such quick and severe loss will at once give the enemy the ascendant morale." This is the argument for the use of machine guns. If they can be used effectively the losses they will inflict will be so sudden and so great as to break the morale of any troops exposed to their fire.

Efficient battle reconnaissance must thus be made to prevent these sudden losses and the men must be in the fire zone for considerable periods only when they are protected by natural or artificial cover or by the effect of their own fire making the enemy shoot wildly.

"Each eye-witness of battle may confirm how narrowly the men watch their officer. The soldiers judge by their offi-

cer the condition of affairs, the greater or less danger, the success or failure. * * * Woe to the unit which in time of peace did not become impregnated with the spirit of iron discipline. It will pay dearly for it in war."

To quiet the men "It is useful to make remarks concerning the service alone. For example: 'Why are the sights not set in that squad? Squad commander, what are you thinking about? Examine and correct immediately.' If the commander is angry, reproves neglect; this means that there is nothing unusual—that everything is going as it ought and that there is no cause for fear. The men grow calmer and forget that bullets are whistling about them." * * * (Soloviev.)

A threat or a joke may bring the men to their senses. "But a threat must be serious and the men feel that it will be executed if need be. Angry words and shouts can do nothing." (Soloviev.)

"It must not be overlooked that the soldier, separated by a considerable interval from his comrades in (a thin skirmish) line during the advance and withdrawn from the influence of his officers succumbs more easily to temporary spells of weakness and is more apt to remain behind than the skirmishers in a dense firing line." (Balck.)

The example of his officers and his own sterling character are the main factors which, aided by discipline, will enable the soldier of today to develop that morale which is the main element in winning victories.

THE WORK OF THE CAVALRY EQUIPMENT BOARD.

PROGRESS.

THE Board, after a period of ten months, is now said to have completed its tentative revision of the cavalry equipment. Before its duty can be finally completed, these present results must be submitted to a test that shall definitely determine their individual merit or demerit. Application has been made for the equipment of a squadron with the new models and for permission to make such a test. The following notes will give some idea regarding the scope of the revision and the results attained.

THE NOSE BAG AND GRAIN ROLL.

The present nose bag seems to have occasioned about as much criticism and complaint as any detail of the equipment. The one now recommended obviates most, if not all this trouble. It is merely a canvas bag, about two feet long by one foot in width, with a supporting strap and attachment, therefor, at each end. One end is prepared for the entrance of the horse's nose. The bag is placed under the jaw and neck, one supporting strap passing over the horse's neck, well down, the other over his poll. The horse puts his nose into the hole and feeds in perfect comfort. His nostrils are not entirely covered at any time. He seems to have no desire to throw the bag—never attempts it, and couldn't succeed if he tried. At its first appearance everyone laughs at this bag and seem to regard it as a freak—everyone but the horse—he knows just what to do with it. It is believed that were this bag placed on a horse that had never before seen a nose bag of any kind it would go at once to eating from it as though it had been used to doing so all its life. The weight of this bag is about the same as that of the old one. It is a proprietary article, and collects a royalty of 5 cents, or such a matter, on its man-

ufacture. A grain bag of sheeting, 30x7½ inches, accompanies this nose bag for the purpose of carrying grain. This bag readily carries up to eight or nine pounds of oats, and when placed within the nose bag forms a grain roll that attaches very conveniently to the saddle pommel. The importance of this feature can scarcely be overestimated. Cavalry horses of the United States Army have usually been starved and have broken down from this cause in much greater proportion than from hard work. In a state of nature the horse feeds about twenty out of each twenty-four hours. Digestion goes on simultaneously with consumption and his stomach is even then soon empty. In a state of domestication he is fed a much more highly concentrated food—grain—and the feeding is not required so frequently. After about four hours, however, even with feeding oats, his stomach is again empty. If his work is hard, it should be replenished at once. If the work is mild, an interval of an hour or two could elapse with safety before his reserves are drawn upon. This is the effect that should be guarded against—using up the horse's reserves. Feeding once in six hours thus becomes a necessity. This has long been appreciated by civilians. It is appreciated in foreign armies. Carter in his work recognizes it, but says it is impracticable in the United States army. The Board has now made it practicable. Three or four pounds of oats can readily be carried in the grain roll on the pommel. When the column halts daily, about 11:30, to eat lunch, unstrap the grain roll and hang it on the horse. The horse thus eats his lunch at the same time, his stomach is replenished, digestion recommences, his reserves are not drawn upon, he comes into camp at the end of his march in good strength and spirits, can then readily accommodate any reasonable delay on the part of the Quartermaster's Department in procuring forage, and is ready to do his thirty or forty miles the next day, if necessary, without noticeable injury. In addition, this nose bag serves as a convenient water bucket whenever it becomes necessary to water in this manner—a material advantage. This bag when in use is always supported on the horse's neck, can not get on the ground, nor be attacked with his hoofs, as is frequently the case with the present model. Its life should be longer on this account.

THE CORONA.

The saddle blanket has also come in for its share of criticism. It is difficult to keep the wrinkles out of it. It is hot and causes profuse sweating. The salt from this sweat forms in the fiber, resists efforts to remove it, and diminishes the elasticity of the blanket. It is expensive, and with those troop commanders who do not give great attention to its being thoroughly cleaned, turned and refolded frequently it does not last long. It is not shaped to the horse, and consequently portions of it work up into the slot in the saddle and cause discomfort to the rider. The board has substituted a shaped corona therefor. This is composed of three layers of blanket and one, next to the back, of cotton sheeting. The layers of blanket are well quilted together. There can be neither wrinkling under the saddle nor working up into the slot. The cotton surface next to the horse can be readily scrubbed and dried after each day's march, if necessary. It can thus always be kept free from salt, hair, blood and foreign substances, and the elasticity of the fibre preserved. The outer surfaces can readily be replaced at the Arsenal, and the body of the corona made to last indefinitely. The insignia is placed on the corona itself. This obviates the use of the saddle cloth. It is lighter in weight, less expensive, lasts longer, looks better, is more readily put on and kept clean. It does not, however, serve as a blanket for either horse or man. The idea was taken from the packers, who always use a corona under the blanket for many of the purposes above mentioned.

THE HALTER-BRIDLE.

The Board has substituted a combined halter-bridle for the two articles at present used. By this means the weight and also the number of straps on the horse's head when both bridle and halter are worn are materially reduced. The model adopted combines as much neatness as is consistent with the necessary strength and is thus a gain in appearance. As one article serves the purpose of two, there is a gain in economy. The model adopted permits either one of the bits, or both together, to be readily applied and used; there is thus a gain

in convenience. As the halter tie will be always present there will be no occasion for hitching the horse by the bridle reins. These have consequently been made shorter and much neater and lighter. This has been found to be a great gain by all who have tried them. As the use of the pommel pockets prevents the convenient tying of the halter strap to the pommel, as at present, it is now tied about the horse's neck, well down towards the withers, after the manner of the British. This requires the length of about 100 inches. It is impracticable to cut that length from leather without splicing. The Board has accordingly adopted, as a tie, a ½-inch Manila rope, dyed to an olive drab tint and treated in paraffin to render pliable and waterproof. This is attached to the halter by a swivel bolt snap, brozed finish. The plan is that this halter-bridle shall be issued to the man individually, and in garrison will be kept, when not in use, with his other equipments in the saddle room. He can thus be held responsible for its presentable condition at all times—a material improvement over the present method, where the halters are used in common, and no individual can be properly expected to keep them in condition. To provide for the security of the horses in garrison a simple web halter is adopted. These will be issued to the stable sergeant for the entire mount, will be used for tying the horses in and about the stables, and for no other purpose. In the field and on the march the halter-bridle will be used.

The Ordnance model of 1909, bit and bridoon, with a few minor modifications, has been adopted by the Board.

THE SADDLE.

It is probable that this single item occupied as much of the time and attention of the Board as all other details combined. To devise a satisfactory saddle is an undertaking of considerable proportions. Whoever has succeeded in producing a superior saddle of new design may be safely credited either with genius in this particular direction or else in having devoted a great degree of attention to the matter. The Board lays no claim to the possession of genius, the alternative is unavoidable. After a careful consideration of the entire subject, it was decided that, owing to the many serious and inherent de-

PLATE I.—ORDINARY FULL BACK.
Contrasting the present equipment and pack (off side), with the proposed equipment and pack as tentatively decided upon.



fects of the McClellan saddle, all attempts to modify or improve it with a view to making it satisfactory would prove futile. It was thereupon determined to devise a new type of saddle, retaining, as far as practicable, the acknowledged ad-

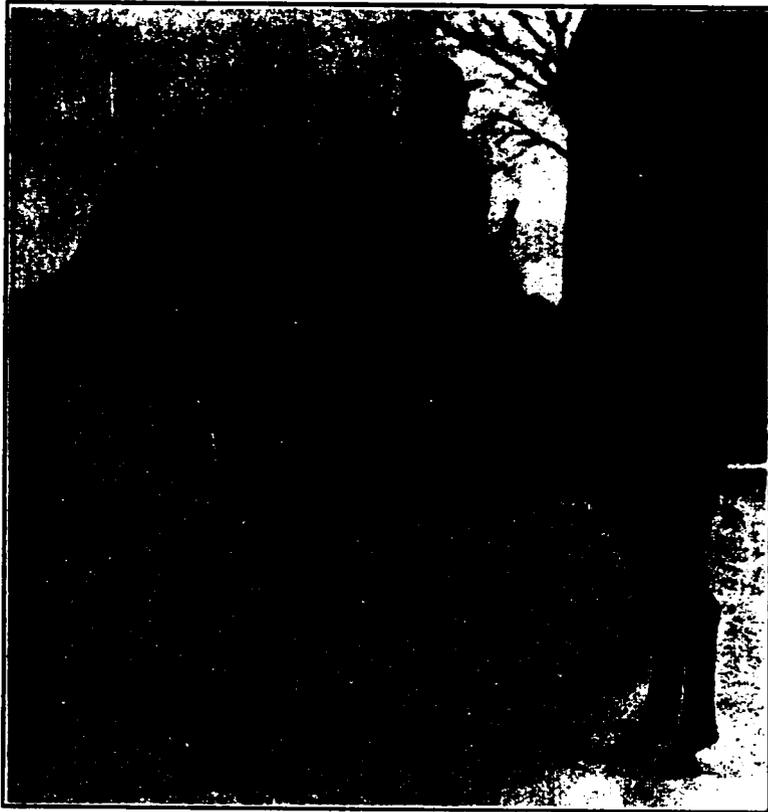


PLATE II.—FULL WAR PACK.

Proposed equipment and pack. The pack as here shown conforms to the Field Service Regulations as to rations, (Par. 207, Section 3), ammunition, (Par. 224, line 12), and grain, (Par. 204, line 27).

vantages of the McClellan type, to-wit: Its simplicity and its permitting the rider to get "close to his work." From the many reports received from various sources it was apparent to the Board that, in the development of the saddle, the preser-

vation of the horse's back was of the first importance. The comfort of the rider was secondary. To accomplish the first consideration a side bar must be devised that would actually fit the horse's back. That is to say, would constantly present a smooth bearing surface, in shape the counterpart of that portion of the horse's back supporting it, and in dimension, limited only by that of such corresponding portion selected to support the weight, at the same time being entirely

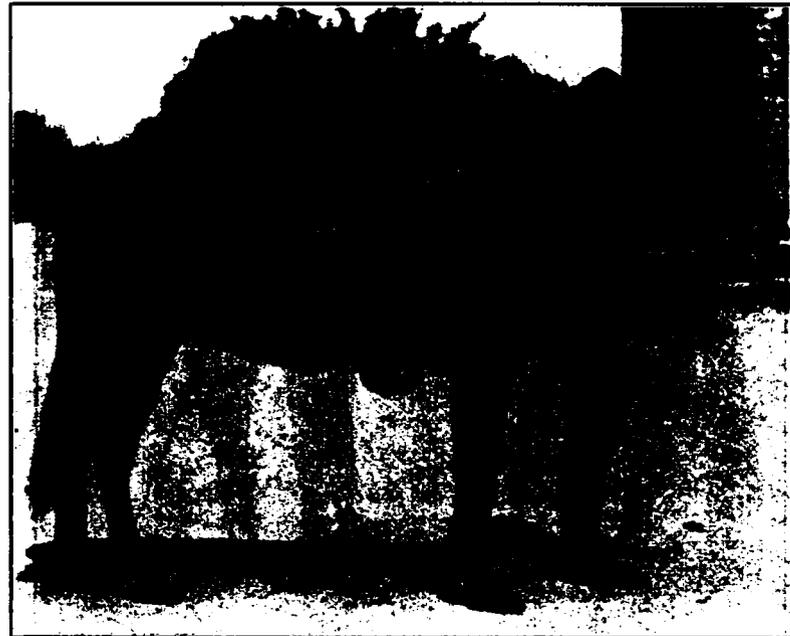


PLATE III.—STRIPPED SADDLE.

The proposed adjustable saddle is here shown with skirts attached. These skirts are removable. Pommel pockets attached to show size, etc.

free from all bearing upon edges or undue convexities of whatever kind. It must be competent to do this, not only for a given horse, but for all horses with approximately normal backs, and not only for these horses in a given condition, but for all possible conditions of flesh. Such a side bar having been obtained, the assembled saddle must readily take the position desired upon the horse's back and tend to remain in that

position, without requiring to be held there by a system of attachments that materially interfere with the horse's action or comfort as do quarter straps, breast straps, cruppers and the like. It must do all this automatically, or at least readily, and without requiring scientific adjustment. To obtain the first requisite, the shape of the side bar, attempts were made to build up artificial backs that would each represent a mean of many horses. Measurements were taken at different posts for

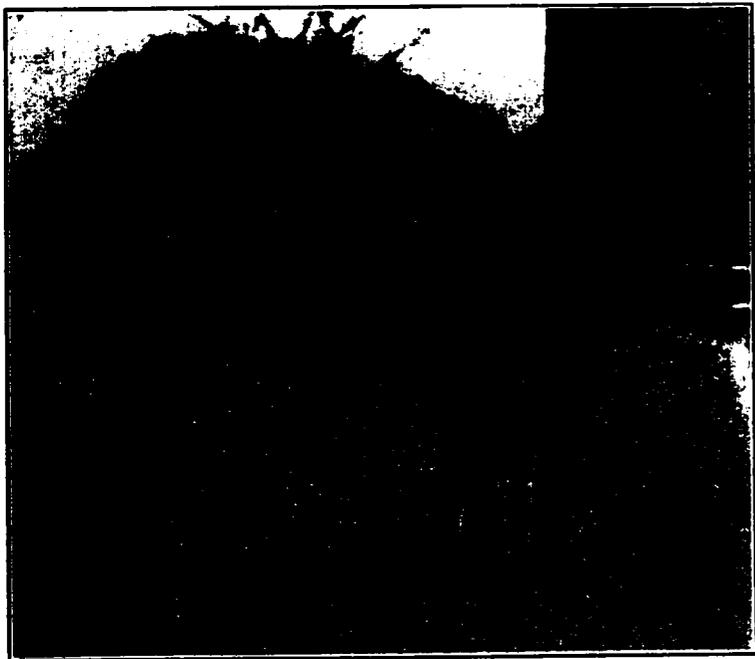


PLATE IV.—STRIPPED SADDLE.

The propose adjustable saddle is here shown with sweat leather attached.

this purpose, with a complicated, specially designed instrument. The result of this effort was not encouraging. It becomes practically impossible to accurately represent a horse's back by contours and sections taken by mechanical devices. So much time is exhausted in transferring the contouring instrument to and fro from the horse to the paper that he invariably changes his position more or less during this period, and with such changes of position come corresponding changes of form, so

that it is next to impossible to obtain results of any value by this method. After a reasonable attempt this plan was abandoned. The next attempt was to take by impression a mold or form of a fairly representative saddle horse's back by means of plaster of paris. A frame of boards, about a foot in height and about two feet square, shaped to the horse on its lower side, was placed on the horse's back after the latter had been well coated with cosmoline to prevent the action of the plaster on the hair. The joints between the lower edges all around and the horse's back were snugly calked with oakum and clay. Six or eight buckets of prepared plaster of paris were then quickly poured into the frame, the horse being coaxed to remain in a normal position meanwhile. This material sets almost as soon as in place. The horse made no fuss, and in two or three minutes there was removed from the back as fine a mold as could be desired. From this mold on the following day a perfect cast representing the horse's back was made, and from then on the Board had something upon which to work. From this cast there was made another mold, in order not to use up the original one. This was trimmed down to the approximate size and shape of a saddle, a slot cut out for the backbone, strengthened with arches, and there was thus obtained the representation of a bearing surface that actually fitted the back in question; in other words, the forms of the side bar. The first of the above requirements had thus been fulfilled. There was next made a representation in timber of this plaster bearing surface. This was applied to as many different backs as circumstances would permit, being corrected when necessary by the removal of such small portions as might press unduly in the general case. By this means a side bar was obtained that would fit the average horse in his normal condition. It still remained to fit the under and over averages, and the reduced and overfed conditions. Plainly this could be done only by hinges. The saddle was then assembled by means of four hinges, one under each extremity of both pommel and cantle, resting upon the median elements of the two side bars. Upon these hinges the side bars move freely when the saddle is not on the horse. The act of securing the saddle to the horse, that is, of drawing the cincha, automatically adjusts it

to the horse and prevents further motion in any considerable degree, yet leaves sufficient to readily accommodate the slight movements of the horse's backbone and avoids in this manner the straight jacket effect of the rigid saddle. The second requisite was thus accomplished. The third requisite was obtained by attaching the cincha to the central portion of the outside edge of the side bars, and the use of a 36-inch cincha of thirty strands of small braided linen fish cord. To furnish friction on the corona and give further elasticity, removable felt pads, one inch in thickness, were placed on the lower faces of the side bar, and, as far as the horse was concerned, all the requirements had then been complied with. To adapt the saddle to the rider was not so difficult. The seat was made horizontal so the rider would sit in the middle of it, and the desired slope of both pommel and cantle was readily obtained. An adaptable sole leather seat covers that portion of the seat of the saddle that comes in contact with the rider's seat. Fenders (sweat leathers) or skirts (choice not yet determined on, but will be decided by the coming test) protect the rider's leg from the horse's side. Three-inch stirrups with re-inforced treads, without hoods, attached to safety loops, support his feet. A broad smooth pommel permits a rest to his hand when desired and avoids sharp edges striking his hand at other times. This pommel is of pressed steel and while giving more space to the withers is of less height than that of the present issue. The side bars have been slightly lengthened in rear of the cantle to support the roll, but are turned up to avoid pressure on that portion of the back not adapted to it. All the advantages of the McClellan saddle have thus been retained. All its defects avoided. This saddle has already been subjected to considerable use and has given satisfaction wherever tried. The Board believes it will be generally acceptable.

THE RIFLE CARRIER.

Many correspondents have urged that the Board provide a better method for carrying the rifle mounted, but no one suggested the method. About the time it was intended to seriously consider this item Colonel Patterson, of the British

Yeomanry, a well-known hunter and explorer and author of international repute, as well as a most agreeable gentleman, obtained permission to come from London and appear before the Board for the purpose of introducing a rifle carrier of his own invention. His device consisted essentially of a steel clutch attached to the near side of the saddle, and resting about eight inches below the cantle. This clutch grasped the rifle at the small of the stock. The barrel extended upward in a nearly vertical direction, passed through a 3-inch ring that stood out from the rear portion of the cartridge belt, and was loosely supported in that position by this ring. A strap terminating in a convenient snap hook depended from the shank of this ring and engaged in the trigger guard. To use this device: After saddling the trooper would pass the muzzle of his rifle up through the ring on his belt and attach the snap hook depending therefrom to the trigger guard. His rifle then swung from his belt with the butt plate about two or three inches above the ground. Both his hands were free to use for other purposes. He mounted at the command precisely as though he had no rifle. When fairly in the saddle, with his left hand he grasped the rifle near the rear sight, and, aided by his left foot, readily forced the small of the stock into the clutch. He then dismissed the matter from his mind, and, while riding, forgot that he had a rifle. On the command to dismount he dismounted and stood to horse without any reference to his rifle. In case the horse fell or the rider was thrown the rifle readily detached itself automatically from its clutch and came away with the trooper. It was always with him—he couldn't separate from it. This device has much to recommend it, and the Board gave it most exhaustive consideration. The enlisted men were generally pleased with it. One experienced and skillful enlisted man of the Sixth Cavalry said after using it that for the first time he felt as though he was riding a horse; on all previous occasions he had felt as though he was riding a set of equipments. In the end, however, the Board was reluctantly compelled to abandon its use, mainly on account of the difficulty experienced in obtaining steel clutches that would render satisfactory service. After a few weeks' use a considerable portion of them either lost their elasticity and

shape, or cracked and gave way. In its later attempts to devise a carrier, the Board retained as many of the excellent features of the Patterson as possible, and contented itself with merely attempting to remedy the defects of the latter. As finally adopted, the rifle carrier resembles a leg of mutton affair of harness leather, about 18 inches in length, the smaller end terminating in an eye, that is attached by means of a strap and buckle to a 1¼-inch steel loop on the lower edge of the near side bar of the saddle, just below the cantle. The lower portion of the carrier terminates in a boot or bucket, shaped to fit the butt of the rifle, and of a depth of about 3 inches. At the proper height above the bucket, a steel spring clutch is riveted to the carrier. This grasps the small of the stock, it supports no weight, but merely prevents the butt from jumping out of the bucket at fast gaits. A very simple spring serves this purpose, and the strain upon it is slight. On the back side (toward the horse) of the carrier, and at the point of attachment of the steel clutch, a strong dependent billet is attached. This engages into a special cincha of linen webbing passing under the horse, and attached to the side bar on the off side, just opposite the corresponding attachment on the near side. This keeps the carrier and rifle snugly against the side of the horse and prevents all lateral swinging and flapping. The bucket contains a floor spring, which dissipates the rifle's downward concussion, thus avoiding its transmission, with resulting blisters to that portion of the horse's back supporting this weight. As far as experiments have gone, this carrier appears to have preserved the advantages of the Patterson and avoided its defects. Further and more severe tests will determine its real usefulness. All who have used it thus far like it. No one would willingly go back to the present method. The most careful observation on many marches has failed to detect a single instance of injury to the horse's back from the use of either the Patterson or the Board's carrier. There is no tendency to injure the sights of the rifle as in the present boot. The rifle carries well behind the leg and is out of the way. It does not interfere with the use of the aids. Both the weight and the cost of the carrier are less than that of the present boot.

THE POMMEL POCKETS AND RATION BAGS.

Carrying the rifle at the rear of saddle compels a redistribution of the equipment to avoid encumbering the cantle. This has been accomplished by substituting pommel pockets and ration bags for the present saddle bags. The pommel pockets are made of the same material as the present saddle bags, are of a sufficient size to hold the required contents and nothing more. They attach readily to the pommel by means of foot staples, are carried low, to the front, and well out of the way of the rider's knees, are small, neat and shapely in appearance. Some have suggested they even be worn at dress formations. The near one holds the canteen and cup. These articles were originated by the Infantry Board, and adopted virtually without modifications by the Cavalry Board, in order to avoid increasing unnecessarily the number of patterns in the Ordnance Department. The canteen is bottle-shaped, of aluminum, and holds one quart. The cup rests on the base of the canteen, is also of aluminum, and is slightly smaller than the present issue. It has an ingeniously devised folding handle, which serves to support it when placed on the ground. A blanket-lined canvas cover, readily removable, encases both canteen and cup, and carries at the back a snap hook for attachment to the belt for dismounted service. These fit snugly in the near pommel pocket, and are strapped securely in place. No more knocking about and rattling by these articles. The off pocket contains a canvas bag, which holds the meat can, knife, fork and spoon, and protects them from dust and dirt by a flap which closes over the top and extends well down the side. This bag may be readily detached and removed for cleaning. The horse brush, curry-comb and grooming-cloth fit in between this bag and the outside of the pocket. The horse brush has been reduced in size about one-half; otherwise is like the present issue. This reduction appears to be an allround advantage. The small brush works more readily into the difficult places about the horse, between his legs, under fetlocks, etc., weighs less, costs less, takes up less space in the pocket, and probably will last longer. The curry-comb has been reduced one-fourth in size, has attached a hoof-hook, similar in design to that furnished by Sergeant Westbrook, Troop "G." 15th Cavalry, but is otherwise similar to

the present model. Below the grooming outfit there is a space for the trooper's personal needs, his pipe and tobacco, bottle of oil, etc. This is entered through an opening on the face of the pocket just below the grooming outfit. The Field Service Regulations require three rations carried by the troopers under certain exigencies. These rations form so heavy and bulky a mass that it was considered impracticable to fabricate gommel pockets large enough to hold them in addition to the articles mentioned above. Special ration bags have been devised for carrying these rations when necessary. These ration bags are of canvas, when carried are attached to the cante, well down, the lower extremities being secured to the rear cincha buckles to avoid lateral motion. They admit of readily being formed into a kind of knapsack, with a pocket for carrying the mess outfit. When the trooper has to separate from his horse, he can thus shoulder his ration bags and be independent of his mount in this respect. These carry very conveniently upon the back and the dismounted trooper is but little encumbered by his rations. When empty, they occupy but little space and go readily inside the shelter tent roll.

THE SABER.

While Europeans generally favor the thrust in a saber attack, and doubtless their position is the correct one—at least in theory, however it may work out in practice—Americans, on the other hand, seem to like to cut and hack. This appears to be a national trait. It may be it comes from the fact that it is but a comparatively short time since everyone in this country was skillful with the axe through force of circumstances, possibly it comes from baseball. At all events the spirit exists and must be recognized. This the Board has done by producing a saber well adapted to both cutting and thrusting. Its balance is a happy compromise between these two extremes. Its point is on the median element of the blade and accurately hits the object aimed at. The blade for some distance back from the point is double edged, and its shape favors penetration. Although issued dull, its edge is capable of being rapidly brought to a slicing keenness. The guard is of bronzed steel. It completely protects the hand from points, and in a considerable measure from cuts. It

is serviceable in every respect, and attractive in appearance. The scabbard is of wood, covered with rawhide, and finished without by olive drab canvas with bronze metal mouth and tip. The mouth is bell-shaped, or, to be more accurate, funnel-shaped, to favor the ready return of the saber. The tip terminates in a dowel to fit the grommet of the shelter tent, and the saber will replace the present shelter pole. All who have seen this saber have expressed their appreciation of it. The knot is simpler, more convenient, more attractive in appearance, and more serviceable than the present issue, though similar in principle. This saber is purely a service weapon. Not one detail has been sacrificed to considerations of mere dress or garrison use. It is the intention of the Board to leave the present officers' saber for garrison and similar service, and use this new model by officers solely in campaign—it being furnished on such occasions from troop storerooms, as revolvers and ammunition are at present furnished to officers. For enlisted men, this saber is carried on the off side of the horse, just opposite the rifle, in a loop attached to the leather support acting as the off billet for the rear cincha. This loop is swivel-attached and has motion forward and backward in a vertical plane. The cincha prevents all lateral swinging and flapping. In this position, it is readily drawn and returned, is well out of the way, permits the use of the aids, and contributes its weight as a counterpoise to that of the rifle. For officers an attachment somewhat similar but especially adapted to their use is provided.

THE INTRENCHING TOOL.

The American Cavalryman has always been a Dragoon. In many instances his dismounted service has been of great value. Lack of space prevents supporting this statement with numerous historical citations, but Buford's seizing and holding in advance the position at Gettysburg is a fair illustration. European authorities were slow in learning the value of cavalry's dismounted action, but they seem to have at last appreciated it, and measures are now on foot to furnish both the bayonet and intrenching tool in some European cavalry services. There can be no doubt but that in the future, far more than in the past, cavalry will make use of dismounted action, and must be armed and

equipped to do so to advantage. The U. S. cavalryman now has a rifle equal in power to any in the world; were he also supplied with a bayonet and an intrenching tool, he need have no fear of infantry under any circumstances. The Board has not seen its way clear to provide the bayonet but it has furnished the intrenching tool. It is as good a one as the infantry has. The handle is formed of the picket pin. The blade alone adds weight to the equipment, and this is but about one pound. With this tool the dismounted cavalryman can protect himself at least from the bullets of the infantry without having to retire before them. He now has only their bayonet to fear. This shovel is carried in a leather case, underneath the saber (between it and the horse). This case is readily removable when not desired. When advancing dismounted the shovel is held in a small loop on the belt.

THE LARIAT AND PICKET PIN.

Some correspondents, not many it is true, have recommended that the general use of the lariat and pin be discontinued, only a few being retained as a temporary picket line. The discussion set forth in support of this position reduces to two principal and one or two minor arguments. The principal ones being, first, that it is no longer necessary to picket horses; second, that it is impossible to use the lariat for picketing without rope burning and disabling horses in appreciable numbers. The minor arguments are, first, the added weight of the lariat and pin, and, second, the danger of injury from the pin, in case of a stampede, or even when attached to the saddle on the march. To consider these arguments in turn: First, it is believed that the convenience and abundance of supplies of all kinds at maneuver camps, on regular practice marches and all similar occasions, together with the scarcity of actual field service, has caused officers to overlook the imperative necessities of real service, where horses must eat even though there be no ready contractor with his supplies. The importance of feeding frequently was referred to *supra* under the subject of the grain roll. It will not be again considered here except to say that it is necessary. If the horse's reserves are to be held for emergencies, he must undergo no long fasts, but must eat at every possible opportunity. The lariat not

only readily accommodates this exigency but is virtually the only means of accommodating it, so that whatever may be urged against it, its use in actual service become imperative. The rope burns are little but a myth—a hobgoblin manufactured by veterinarians. A horse can readily be taught to graze quietly on his rope wholly without injury from rope burns. No military horse's education is properly complete until he will do this. This argument against the lariat is not worth one moment's consideration. The minor arguments have been met, as far as practicable, in the Board's revision of the equipment.

To show that these are no idle words, attention is invited to the fact that several European cavalry services, as well as the Japanese, provide lariats, so that every possible opportunity may be utilized to keep their horses' bellies full. In '88 the 7th and 8th Cavalry changed station by marching. The march was a long one, approximating 2,000 miles for some stations. The 7th Cavalry used lariats and grazed constantly, except when on the road. Although grass was usually abundant, the 8th Cavalry used no lariats, but relied on the Q. M. Department for its supplies. The regiments met at Fort Riley, and furnished an object lesson regarding the use of the lariat that was of lasting effect in the minds of some present. General Chaffee, one of the most able and experienced Field soldiers of the U. S. Army alive at the present day, believes in its retention.

The lariat is similar to the present issue except that its length has been reduced from 25 feet to 15 feet. One end terminates in a snap hook without connecting link, the other in an inch and a half ring. On the march the lariat is rolled and secured by thongs to the upper surface of the shelter tent roll. The picket pin is hollow, oval in cross section, and of a pattern adapted to form a convenient handle to the intrenching tool. Its upper end terminates in a small hammer head, so that in emergencies the picket pin may be readily used for shoeing a horse. It has already served that purpose. It is carried on the march in a small leather scabbard secured by two straps to the outside of the saber scabbard. It is well out of the way there and contributes its weight towards counterpoising that of the rifle. It weighs a little less than the present pin. To use the lariat and pin, snap the hook into the halter ring and drive the pin through

the ring at the other end. The ring will turn on the pin and serve as a swivel. In case the horse pulls it up, the end of the lariat will draw off and leave the pin lying near where it was driven. This may occasionally lose a pin, but it will obviate all danger of injury by flying pins in case of a stampede.

THE HORSE SHOE AND NAILS.

The object of the shoe is primarily to preserve the hoof from undue wear, and, incidentally, to assist the horse in exerting his strength on icy going. In the use of a shoe, two undesirable features are of necessity introduced. First, by adding weight where it is most objectionable, both mechanically and physically, and, second, by raising the hoof above the ground so as to diminish frog pressure and thus tend to destroy the elasticity of the foot. While both of these features are unavoidable, they are evils that must be kept within narrow limits. To this end, first, the shoe should be made as light as possible and still serve the purpose; second, calkins should be made use of on the saddle horse only when necessary to avoid his slipping. To bring about the first requisite, the shoe should be made of steel, should be narrow in the web, of a thickness sufficient to wear no more than six weeks, should bevel from the inside outward towards the ground surface to imitate the natural hoof, save weight, and prevent mud, pebbles and other foreign substances from lodging in the shoe, and should be countersunk rather than creased for nail holes, as this gives strength and permits a corresponding saving in weight. To accomplish the second requisite, both a summer and a winter shoe should be adopted. The summer shoe should have all the essentials above set forth, and, in addition thereto, the hoof bearing surface should be level to prevent an undue portion of the weight being borne by the hoof walls. The winter shoe, having to support calkins, cannot possess all these essentials in so marked a degree as the former, but should approximate thereto as nearly as circumstances will permit, should be drilled and tapped for removable calkins, should be fitted with both short, blunt plugs to maintain the holes perfect when the going is not icy, and with higher sharp calkins for use in icy times. Each trooper should be competent to readily interchange them when necessary, and should be provided

with the proper tools for so doing. The Board has made investigation looking toward obtaining such shoes. Both the Phoenix and the Bryden companies supply a shoe that conforms to the essential requisites of the summer shoe. These are in sizes 1, 2, 3 and 4, their respective weights being 10, 12, 15 and 18 ounces before fitting; upon fitting the weight decreases a little. The Neverslip company can supply the winter shoe. It has the essentials set forth above; it comes in five sizes, covering the range of the cavalry horse's hoofs, and its weight is between the limits of 9½ and 19 ounces for these sizes. Horse shoe nails should be as small as will well serve the purpose and should be bright. The usual commercial nail is a good one, but on being carried on the march will get rusty and be hard to drive on this account. The Board has taken steps to prevent this by having the nails carried by the trooper coated with an anti-rusting substance, tin, zinc, aluminum, or a mixture of these substances. This coating does not interfere with the use of the nails and preserves the bright finish. The Board will recommend that but one shoe and ten nails per horse be carried. These will be carried in a shovel carrier. A partition therein separates the shovel from the shoe, and a small pocket within carries the nails. The weight of these articles tends to counterpoise that of the rifle.

WIRE CUTTERS, WRENCHES AND HATCHETS.

Each trooper is provided with a small but powerful pair of wire cutters, so that, in the event of his being ordered in actual service, on any distant mission, he will possess the means of obeying such order, without being subject to annoying delays en route. Both the weight and the cost of these cutters is slight. They slip readily into the pommel pockets. Each man is also provided with a light wrench for changing the calkins on his winter shoes. This wrench also goes into the pommel pocket by the side of the nippers. Eight light hatchet heads adopted for use with the picket pin, as handle, have been provided. They are excellent tools. They will be supplied to men not issued shovels, and the hatchet head will occupy the space in the shovel carrier that was prepared for the shovel.

THE PACK IN GENERAL.

Assuming the weight of the trooper, naked, at 150 pounds, his horse carries under the present system, when fully armed and equipped, under favorable conditions, 286 pounds, 2 ounces. In spite of all its efforts, the Board has succeeded in reducing this by only 8 pounds and 4 ounces, and the horse must still carry 277 pounds and 14 ounces. It requires no discussion to conclude that this weight is a burden that should be lightened whenever circumstances permit, if the horse's power and endurance are to be conserved for expenditure in a vital emergency. To this end, the Board will recommend that, when ever practicable, the trooper's roll, comprising shelter half and pins, bed blanket, underclothing and toilet articles, be carried for him in the wagon. At other times the horse must carry it. When fully packed, the distribution of the articles above described will be as indicated in such descriptions. The bed blanket goes under the saddle and over the corona. The shelter half will be formed into a roll, containing the underclothing and toilet articles in a simple cloth case and the tent pins. This roll will be attached to the cantle, the ends falling just in rear of the rifle on one side and of the saber on the other, being snugly secured in this position by thongs or straps (choice not yet determined). The rain garment will be similar in form to the present slicker, and will be of a material similar to that known as Raino, Federal Cloth, or Protex, will be rolled and carried on the pommel, just in front of the grain roll, secured in that position by double buckled coat straps, that is, two buckles to one billet. Neither the slicker nor the grain roll will materially raise the rider's hand above the pommel. No surcingle will be provided, that on the horse cover has been made detachable and can be readily made use of when desired. The aim of the Board has been to provide a light pack, a tight pack,—a low pack and a balanced pack. An analysis of the distribution of the equipment will show that these ends have been fairly well attained, excepting of course, a pack cannot be made light and still carry all the articles required, nor can anything attached to the pommel be regarded as carried low in the strict sense of the term, but the best practicable has been done in these directions. Nothing is loose

or insecure. Nothing can rattle. Nothing glitters. All weight has been placed as low as practicable. It is true the rifle barrel rises above the horse, but as the rifle is supported at a point well below the saddle, the mechanical effect is thus about the same as though the weight of the rifle were concentrated at that point. Between the right and left of the pack the difference in weight is practically negligible, and the weights on each side are symmetrically placed with respect to each other. From front to rear the burdens do not balance. Such a balance, even were it practicable, is not regarded by the Board as desirable. The saddle seat readily favors the rider's sitting precisely over the center of motion. He assumes that position naturally. The side bar was constructed with that end in view for both saddle and rider. This puts the principal weight at the desired location. The other weights are distributed so as to decrease somewhat the weight borne by the forehead, and increase that borne by the haunches. This is believed to be an advantage. While the foreleg's principal function is to support weight and that of the hind legs, to furnish propulsion, and though this natural distribution may be taken advantage of in races and similar uses of the horse; yet there are other considerations entering into the problem of the trooper's distribution of the weight, which cannot be wisely ignored. Though placing weight on the haunches may interfere somewhat with the horse's propelling power, and cut down, in a measure, his maximum speed, on the other hand, placing weight on the forehead greatly increases concussion on the almost vertical forelegs, especially on hard roads, and tends to develop stiff joints, navicular disease, sprung knees and similar injuries. Observation shows that cavalry horses in the past have generally given out in the forelegs much sooner than in the hind legs. In the future as stone roads become more common, this tendency will increase. As the cavalry horse has rarely to put forth his maximum speed and his work is usually done at a comparatively low rate of progression, a reasonable compromise should be effected between the loss of power due to weighting the haunches, and the increased concussion due to weighting the forehead. This has been done in the Board's distribution of the pack. The result has shown no appreciable loss of action in the hind legs. Be-

yond question, there must have resulted, due to this distribution, a decreased concussion in the forehead.

PACK SADDLE OUTFIT.

In order to be in a measure independent of the wagons the Board has provided a pack saddle outfit to be carried on a led horse and to remain constantly with the troop on the march. It comprises a pack saddle of improved pattern. The cargo on one side is a securely made wooden pannier containing the horseshoer's tools, the saddler's tools and a limited amount of farrier's supplies. That on the other side consists of five tubular iron pins and a sledge hammer, all securely carried in a kind of boot or case. These two cargoes are lashed on the pack saddle. Over all and extending well down on each side is secured a seven-eighth inch field picket line. The load on this horse will be somewhat less than that on the trooper's horses and he should have no difficulty in constantly keeping up with the troop. By this means the troop should be able to keep its horses and equipment serviceable on the march, even though separated from its wagons for periods of several days.

ARTICLES OF CLOTHING AND EQUIPMENT ON THE TROOPER.

The trooper on the march will wear a stiff brimmed hat with a Montana peak, without hat cord but having a string for securing it to his head. He will wear an olive drab neckerchief. His insignia will be shown in embroidery on each breast pocket of his shirt. His leggins will be of durable russet leather of the most approved Cross pattern. His spurs will be light but strong, of drop forged steel, with short, straight shanks without button on the shank, and with small aluminum rowels. The finish of these spurs will be of a blue or brown tint like the parts of the rifle. Each strap will be of two pieces attaching by buttons, the lower one to be fitted by the troop saddler, the upper one adjusting with a buckle, but to be attached or detached by pulling on the inside end of the strap. These spurs serve their purpose well when mounted, are easily put on or off, and interfere but little with dismounted work. The officer's spurs are of similar pattern but polished. All will wear russet straps in the field, the officers' black ones for dress

purposes. The cartridge belt has nine pockets, each holding ten rifle cartridges and four pockets each holding five pistol cartridges. The latter will not fall out of these small pockets. The Field Service Regulations require sixty extra rifle and twenty extra rounds pistol ammunition to be carried in the saddle bags under certain exigencies. It was impracticable to make saddle bags to carry this extra ammunition without unduly decreasing their size and strength. An extra belt was provided for this purpose. It passes over the left shoulder, under the right arm, and is shaped to fit smoothly. Although intended only for emergencies, it has proven such a success that it will probably be worn full constantly in campaign, the ammunition in the waist belt being correspondingly reduced, thus transferring the weight to a more suitable location. No suspenders will be provided, the rifle sling will be adapted to this purpose when a support to the waist belt is found necessary. The pistol holster has been thoroughly revised and it is believed will now meet the approval of all. The pistol is carried butt to the rear and, while the belt is still worn at the proper height, is hung sufficiently low as to permit its ready and convenient withdrawal. The lower extremity of the holster is shaped to the barrel, and the sides stitched down flat and slightly extended, to carry a convenient device for readily securing the holster to the thigh with a thong. The holster is attached to the belt by a kind of frog, to which it is pivotted, and thus adapts itself readily to any movement of the wearer's leg. It has a flap to secure the pistol in place when not in use. When in use, or there is even a possibility of its use, this flap can be buttoned back wholly out of the way. The holster is thus changed at once into the open variety. It is believed that all the serious objections urged against holsters have been corrected in this model and that it will meet with a hearty reception. The use of the lanyard is discontinued.

REMAINING ARTICLES CONSIDERED.

The foregoing comprise those features of the Board's work that are of immediate and special interest to officers and enlisted men of the Cavalry Arm. They by no means cover the scope of the work. In addition to those enumerated

above the Board has carefully considered and determined upon, tentatively, or at least as far as lay within its power under the circumstances, the following items of equipment, to-wit: type of army wagon and load therefor, tentage, surplus kit bags, officer's clothing rolls, and baggage allowance, bacon and condiment boxes, field ranges, field forges, field desks, arm repair chests, cleaning and preserving materials, horse covers, cavessons and longes, guidons, their staffs and carriers, trumpets, lanterns, dispatch cases and record cases, field glasses, electric finders, luminous compasses and discs, fencing sabers and masks, and some articles of enlisted men's uniform especially referred for its action by the War Department.

CAVALRY EQUIPMENTS.

President Cavalry Equipment Board.

Sir:—In compliance with your circular letter dated April 19, 1910, I have the honor to submit the following notes on equipment, etc. My duties have been such that I have not found time earlier to prepare these notes.

I think that our horse-equipment as now furnished is in nearly every item almost as bad as it can be. It was simple and reasonably satisfactory when I joined in 1883, but every "improvement" in bits, bridle, and saddle since then has, in my judgment, made them worse, until they have now almost reached the limit of unfitness.

SUGGESTIONS.

LEATHER: All leather to be red hemlock tanned, like that used in the stock saddle, so that new straps and patches will not be so unsightly and conspicuous on old articles.

BRIDLE: *Bit and Bridoon* of "eglantine" or other non-corrodible metal. (The present issue of tinned or nicked bits are abominable. The plating soon comes off and is only an excuse for an unfit appearance at all times.)

Bit, straight branches.

Snaffle, small.

Reins, curb rein narrower and shorter than the snaffle rein, as is usual among horsemen.

Buckles, brass or bronze. (The brown paint now furnished by the ordnance department to daub on buckles, rings, etc., is abominable. It is a small matter to keep brass buckles, etc., clean and bright in garrison, and a single day's exposure in the field dulls them so that they do not glitter.)

SADDLE: The defects of the McClellan saddle are so many and so well-known in the service that it seems hardly

worth while to mention them. One or two, however, I have not heard generally discussed. *The top of the pommel*, where the edges of the leather are sewed together, is so high and sharp that it bruises and cuts the hand. In training and controlling a horse the hands must be held low. They cannot be so held on the McClellan saddle on account of this sharp high edge. I should, therefore, like to see the pommel smooth and round or flat on top, and as low as may be consistent with strength and space for the withers.

Skirt of flap: A short skirt on the saddle would remove the excuse for sweat-leathers. (The legs cannot be properly used as aids if there are sweat-leathers on the saddle.)

Stirrups: A narrow wooden stirrup with wide opening for the foot. If the stirrup can be covered with leather without too much additional expense it will improve the appearance. If the tread of the stirrup is too wide, as in our present stirrup, it often causes the foot to hang in the stirrup in dismounting. Moreover, it adds unnecessary weight to the stirrup.

Hoods are unsightly, heavy and useless.

Stirrup straps not to be twisted as at present. A simple strap with plain single buckle so placed as not to hurt the leg, and without keepers; the straps to be hung, if practicable, like those on the ordinary flat saddle, so that they can be quickly and easily adjusted, and so that they will pull loose from the saddle in case the rider falls and his foot catches. The flesh-side of the leather should be outside in the stirrup-strap—this makes it stronger where it bends round the ring or staple or fixture by which it is hung to the saddle.

Quarter straps, if used, should be like the simple straps with small D-rings in use twenty years ago. They should be long enough for the D-rings to come partly under the barrel of the horse, so as not to hurt the rider's leg or the horse's side. This would require a good deal shorter cinch than is now used. (The arrangement of the quarterstraps which we have been using for the last fifteen or twenty years is, in my judgment a failure. They are supposed to adjust themselves automatically, but they do nothing of the kind, while the twist in the straps turns the edges of the leather against the horse's side and

raises knots on it. This has made the large D-ring and the great clumsy plate of leather under it necessary to save the horse. These hurt the trooper's legs and prevents him from taking a right hold on the horse with them.)

Stuffing: I hope the Board will make a thorough test of a saddle with stuffing under the bars. While I doubt that such a saddle can ever be adopted in our service on account of the lack of skilled troop saddlers capable of restuffing them, especially in time of war, there is much to recommend such a saddle. The under side should, of course, be of leather and not of felt or cloth.

Staples and rings should be of bronze or brass; if of brass they should not be painted brown, but kept clean and polished in garrison.

Coat straps: I prefer whang leather thongs to coat-straps with buckles.

Seat: I prefer the seat entirely covered and, if practicable, stuffed.

PICKET PIN: Only fifteen picket pins are needed in a troop.

LARIAT: Only fifteen lariats are needed in a troop. Those now furnished are very unsatisfactory. They are woven after the fashion of window cords and are very hard and inflexible, especially when wet. A simple piece of manila rope is far preferable. It soon becomes soft and flexible. Some officers say that a flat lariat of webbing woven hollow would be the best. A good lariat is specially needed in longeing horses.

WHIPS: Fifteen whips and whip-stocks should be supplied each troop for use in longeing horses.

CAVESSON: Fifteen cavessons with iron nose-bands like those in use at the Mounted Service School at Fort Riley should be supplied each troop. A young horse cannot be properly trained without the use of the cavesson and longe. I am convinced from the experience I have had personally within the last year that the longe-and-cavesson is the most essential implement in the handling of untrained horses, and that the use of it in our service would have saved hundreds of fine horses

from ruin and condemnation. The cavesson described on page 160, Cavalry Drill Regulations, is absolutely useless.

SADDLE-POCKETS: The saddle-pockets should be narrower and, if necessary to have as much space as at present, deeper. As wide as they are now, it is hard to prevent them from rubbing the skin off the horse's hips.

SABRE: Sharp.

SABRE-SCABBARD: Of black steel like the rifle barrel.

RIFLE: I hope some way may be devised for carrying the rifle on the horse other than that now in use. It is impossible to ride with the proper seat or to use the leg as an aid with the rifle under it.

PISTOL: The 45-calibre Colt now issued in the Philippine Islands is satisfactory, but I should like a shorter barrel if practicable.

PISTOL HOLSTER: The butt of the pistol grip should turn to the rear instead of to the front. The pistol could then be drawn and returned more easily and naturally, and it would hang in place when one is mounted better than it does now.

TARGET PISTOL: We ought to have a 22-calibre target pistol supplied the service, as nearly as possible of the same weight and balance as the service pistol. No one can become an expert pistol shot without firing thousands of rounds, which is not practicable with the service pistol on account of its terrific range and the cost of the ammunition. It should seem that the 38-calibre revolver now in use might be reduced to 22-calibre by bushing the barrel and chambers, and then issued for a target pistol.

BOLOS: There should be ten good bolos in each troop. Those now supplied by the ordnance department are of no use.

SADDLE CLOTHS: The officer's canvas field saddle-cloth serves no useful purpose whatever, and being very sleek only makes it the harder to keep the saddle in place. I should like to see it dropped. If any field saddle-cloth is necessary it should be made of wool throughout.

BOOTS AND LEGGINS: For the enlisted men I prefer the old style leggin, probably with a string or wire under the foot instead of the strap, for service; and I should like to see a neat black leggin of the Mark Cross pattern for dress.

For officers' boots I prefer the soft close-fitting legs, such as are now used at the Mounted Service School at Fort Riley. The calves cannot be properly used as aids when encased in big, stiff, hollow legs like those of our present uniform boot.

OVERCOAT: I hope we shall try the short overcoat.

CAPE: At our Northern posts there is lack of a warm outer garment to wear with our full-dress and social full-dress coats. The overcoat cannot be worn with the shoulder knots and the short cape affords little protection. If the cape could come down to the knees it would answer.

FIELD SHIRT: I should like to see this shirt replaced by a garment somewhat after the pattern of the sailor's "jumper," which has no tail to be tucked into the breeches. It would look neater than the shirt and be more comfortable.

CAMPAIGN HAT: The flat, somewhat stiff-brim hat, creased peaked (Stetson's cowboy hat) is better than the hat now in use.

HAT CORD: If a hat cord is needed at all it should not be more than half as large, either for officers or men, as the ones in use now.

STABLE CLOTHING: I earnestly beg you to give us back the white stable clothing which had become a part of the traditions of our cavalry. The filthy looking brown overalls now issued are a shame to a trooper, and it is impossible for a troop commander to tell whether his men have on clean or dirty suits. And the blue hostler clothes, which the Quartermaster's department is now beginning to issue, are worse still. If the same clothing must be worn for fatigue as for stables, why not let it be white, like the street cleaners' overalls in many of the cities?

SPURS: The spurs of officers seem unnecessarily heavy and clumsy. The spur usually worn by civilian horsemen is

sufficiently strong and much neater in appearance. The brass spur formerly worn by officers was better than the one of white metal now in use. The straps should fasten to buttons on the side of the spurs.

BAYONET: General de Negrier's "Lessons of the Russo-Japanese War" pretty nearly convinced one that we should carry bayonets in campaign. Much as we hate to admit it, every modern war has shown that a good fire-arm is of more importance to cavalry than the sabre, and I am almost convinced that for practical purposes the bayonet will be of more use to us in war than the sabre. The question is one which should be settled, if possible, before war befalls.

Very respectfully,

M. F. STEELE,
Major 2nd Cavalry.

A CRITICISM OF OUR CAVALRY DRILL REGULATIONS.*—Continued

BY MAJOR H. H. SARGENT, SECOND CAVALRY.

Author of "Napoleon Bonaparte's First Campaign," "The Campaign of Marengo," and "The Campaign of Santiago de Cuba."

IN my last article in the CAVALRY JOURNAL, I stated that whatever system be adopted, whatever rules or principles be followed, in writing the commands of a drill regulations, there are certain things that should be kept constantly in view, namely, simplicity, brevity, consistency, and clearness; and, with reference to these points, I discussed and criticised a number of the commands in our Cavalry Drill Regulations. I purpose, in this article, to continue the discussion and criticism along the same lines.

(1). To change the direction of a squad in the line to the right and halt, the commands are, 1. *Squad right*, 2. MARCH, (307); and to change the direction of a squad in line to the right and continue the march, the commands are, 1. *Right turn*, 2. MARCH, (308).

(2). To change the direction of a platoon in line to the right and halt, the commands are, 1. *Platoon right*, 2. MARCH, (448); and to change the direction of a platoon in line to the right and continue the march, the commands are, 1. *Right turn*, 2. MARCH, (448).

(3). To change the direction of a troop in line to the right and halt, the commands are, 1. *Troop right*, 2. MARCH, (476); and to change the direction of a troop in line to the right and continue the march, the commands are, 1. *Right turn*, 2. MARCH, (477).

*Numbers in parentheses have reference to paragraphs in the Cavalry Drill Regulations, 1909. To simplify the discussion, the commands are generally given for movements towards only the right flank.

(4). To change the direction of a troop in line of platoon columns of fours to the right and halt, the commands are not, 1. *Troop right*, 2. MARCH; there are no commands given for the movement; but to change the direction of a troop in line of platoon columns of fours to the right and continue the march, the commands are, 1. *Right turn*, 2. MARCH. (515).

(5). To change the direction of a squadron in line to the right and halt, the commands are not, 1. *Squadron right*, 2. MARCH, but are, 1. *Fours right*, 2. MARCH, 1. *Left front into line*, 2. MARCH, (621); and to change the direction of a squadron in line to the right and continue the march, the commands are not, 1. *Right turn*, 2. MARCH, but are, 1. *Fours right*, 2. MARCH, 1. *Left front into line*, 2. Trot, 3. MARCH, (621).

(6). To change the direction of a squadron in mass to the right and halt, the commands are not, 1. *Squadron right*, 2. MARCH; there are no commands given for the movement. But to change the direction of a squadron in mass to the right and continue the march, the commands are, 1. *Right turn*, 2. MARCH. (638).

(7) To change the direction of a squadron in line of platoon columns to the right and halt, the commands are not, 1. *Squadron right*, 2. MARCH; there are no commands given for the movement; but to change the direction of a squadron in line of platoon columns to the right and continue the march, the commands are, 1. *Right turn*, 2. MARCH. (660).

(8). To change the direction of a regiment in line of masses to the right, the commands are not, 1. *Regiment right*, 2. MARCH, but are, 1. *Change front to the right*, 2. MARCH, (791); and to change the direction of a regiment in line of masses to the right and continue the march, the commands are not, 1. *Right turn*, 2. MARCH; there are no commands given for the movement.

(9). To change the direction of a regiment in line of close columns to the right and halt, the commands are not, 1. *Regiment right*, 2. MARCH; there are no commands given for the movement; and to change the direction of a regiment in line of close columns to the right and continue the march, the

commands are not, 1. *Right turn*, 2. MARCH; there are no commands given for the movement.

As a previous discussion has made it clear that the drill regulations would be much simplified if the commands, 1. *Column right*, 2. MARCH, were used throughout the text to change the direction to the right of a column of any kind from a halt or a march, so a discussion of the above examples will make it clear that the drill regulations would be much simplified if the commands, 1. *Squad*, (or *Platoon*, or *Troop*, or *Squadron*, or, *Regiment*) *right*, 2. MARCH, were used throughout the text to change the direction to the right of a squad, platoon, troop, squadron, or regiment in any kind of a line and to halt; and if the commands, 1. *Right turn*, 2. MARCH, were used throughout the text to change the direction to the right of a squad, platoon, troop, squadron, or regiment in any kind of a line and to continue the march.

It will be noted that in examples (1), (2), and (3), the commands are consistent throughout; if we wish to change direction to the right and halt, the commands are, 1. *Squad* (or *Platoon* or *Troop*) *right*, 2. MARCH, and if we wish to change direction to the right and continue the march, the commands in each case are, 1. *Right turn*, 2. MARCH. But in example (4) there are no commands given for changing the direction and halting. Now it must be evident to any one that there is just exactly as much reason why commands should be given for changing the direction of a troop in line of platoon columns of fours and halting, as there is for changing the direction of a troop in line of platoon columns of fours and continuing the march. If the reply be made that in this case the, 1. *Troop right*, 2. MARCH, is unnecessary, since the same result could be obtained by giving, 1. *Troop*, 2. HALT immediately after, 1. *Right turn*, 2. MARCH, the answer is that this same reason would justify the omission altogether from the drill regulations of, 1. *Squad*, (or *Platoon*, or *Troop*) *right*, 2. MARCH, since the same result could be obtained by giving in each case, 1. *Troop*, 2. HALT immediately after, 1. *Right turn*, 2. MARCH. The truth is, there is no reason which will justify the omission of 1. *Troop right*, 2. MARCH, in this example, nor is there any reason which will justify the omis-

sion of, 1. *Squadron right*, 2. MARCH, in examples, (6) and (7).

And as to examples (6) and (7) it is a pertinent question to ask, why should commands be given to change the direction of a regiment in line of masses and halt (791) and no commands to be given to change the direction of a squadron in mass or in line of platoon columns, and halt? Surely if we wish to halt in one case there may be just as good reason for wishing to halt in the others.

In example (5) there would seem to be no good reason why, 1. *Squadron right*, 2. MARCH, should not be used to change the direction of a squadron in line to the right and halt, nor why, 1. *Right turn*, 2. MARCH, should not be used to change the direction of a squadron in line to the right and continue the march, just as similar commands are used to change the direction of a troop in line. Consistency would certainly seem to require this; and brevity also, for the movement as now explained in the drill regulations requires two sets of commands in each case instead of one. Nor is this all, the commands here being different from those usually employed in changing direction, the squadron commander must remember that this is an exception to the general rule; and it is evident to anyone, that the more his mind is burdened with remembering exceptions, the more difficult it becomes for him to avoid errors.

In example (8) the commands are given to change the direction of a regiment in line of masses to the right and halt, but these commands are of different form entirely from any of the previous commands given for changing the direction of a squad, platoon or troop to the right and halting. Not only this, but there are no commands given for changing the direction of a regiment in line of masses to the right and continuing the march. I am aware, of course, that the drill regulations state that "In successive formations of the regiment, the completion of the movement should find the regiment halted." (757). But why should a rule of this kind be given and, especially so, since the colonel may want the regiment to be marching at the completion of the movement? And why should the rule be made to apply to a regiment when it does not apply to a

squadron? May there not be just as good reason for wanting a regiment in line of masses to change direction to the right and continue the march as there is for wanting a squadron in mass, (638), or a squadron in line of platoon columns, (600), to change direction to the right and continue the march?

Then, again, if commands are given for changing the direction of a regiment in line of masses and halting, why should not commands be given for changing the direction of a regiment in line of close columns and halting? (See example 9.) Surely there is exactly as much reason for wanting to change the direction in one case as in the other; and, therefore, exactly as much reason why, if the commands are given in one case they should be given in the other.

Now all these inconsistencies must be remembered by the regimental or squadron commander, and in this fact lies the great trouble—the source of much confusion and many errors. He must remember that there are no commands given in the text for changing the direction of a squadron in mass or in line of platoon columns and halting, but that there are commands for changing the direction of a regiment in line of masses and halting; he must likewise remember that there are commands for changing the direction of a squadron in mass or in line of platoon columns and continuing the march, but that there are no commands for changing the direction of a regiment in line of masses and continuing the march; and he must also remember that the commands given for changing the direction of a regiment in line of masses and halting are of an entirely different form than those given anywhere else in the text for executing a similar movement.

In closing the discussion of the nine examples above cited it may here be set forth as a general truth, that in similarly executed movements where one kind of commands will answer every purpose, it will invariably lead to more or less confusion and error, if different kinds of commands are employed. In similar movements simplicity is gained by using a few and not a multiplicity of commands.

Again, to face a troop in line to the rear and halt, the commands are, 1. *Fours right about*, 2. MARCH, 1. *Troop*, 2. HALT; or to face a squadron in line to the rear and halt, the

commands are, 1. *Fours right about*, 2. MARCH, 1. *Squadron*, 2. HALT; but to face a regiment in line to the rear and halt, the commands are not, 1. *Fours right about*, 2. MARCH, 1. *Regiment*, 2. HALT, nor are they, 1. *Fours right about*, 2. MARCH, 1. *Squadrons*, 2. HALT, although the commands given in the text for halting a regiment are, 1. *Squadrons*, 2. HALT, (753); but they are, 1. *Face to the rear*, 2. *Fours right about*, 3. MARCH. (751).

Now it will be noted that in the commands for facing a regiment in line to the rear and halting, (751), there are two preparatory commands, both of which mean practically the same thing; for when a regiment has executed *fours right about* it has certainly *faced to the rear*. And since the command, *Face to the rear* tells nothing whatever that it is necessary to know, that is not told in the command, *Fours right about*, it is superfluous and unnecessary. But this is not all, the explanation of the commands in the text shows that the regiment is to halt after executing *Fours right about*, but there is nothing in the preparatory commands or command of execution that tells this fact or even hints at it; although the knowledge of this fact is just as essential to the proper execution of the movement as is the knowledge of the fact that the regiment is to face about in exactly the opposite direction.

But even this is not all; to march the regiment in line to the rear, the commands are, 1. *Fours right about*, 2. MARCH, (752), and to halt is; the commands are, 1. *Squadrons*, 2. HALT. (753). Now it must be perfectly evident to anyone that no other commands are needed to face the regiment to the rear and halt it; and, consequently, that the commands, 1. *Face to the rear*, 2. *Fours right about*, 3. MARCH, are entirely superfluous and unnecessary.

Since the commands, 1. *Face to the rear*, 2. *Fours right about*, 3. MARCH, as explained in the text, have exactly the same meaning as, 1. *Fours right about*, 2. MARCH, 1. *Squadrons*, 2. HALT, if we eliminate, 1. *Fours right about*, 2. MARCH, from each set of commands, since they are common to both, we shall have left in the one set of commands, 1. *Face to the rear* and in the others, 1. *Squadrons*, 2. HALT, which must be interpreted to mean one and the same thing; that is to say, each

Major must interpret the Colonel's command, 1. *Face to the rear*, to mean, 1. *Squadrons*, 2. HALT; and this, too, not only for the reason given above, but for the additional reason that the explanation given in the text compels this interpretation. Would it be any less absurd, so to explain commands in the text as to require him to interpret, *Fours right about* to mean *On right into line*, or *Column right* to mean *Close intervals* than it is to require him to interpret the command, *Face to the rear*, to mean, 1. *Squadrons*, 2. HALT? Must it not be the source of much confusion and error to force upon the regimental and squadron commanders the burden of remembering the inconsistencies and absurdities in these written commands?

Again, to teach recruits to align themselves to the right at a halt, the commands are 1. *Eyes*, 2. RIGHT, (40), and to align soldiers to the right at a halt, the commands are, 1. *Right*, 2. DRESS, (95), but to align to the right while marching in line, or in column of fours when there are no chiefs of platoons or file closers present, the commands are not, 1. *Guide*, 2. RIGHT, but are *Guide right*, (99 and 114); and to align them to the right while marching in column of fours when the chiefs of platoons are present, the commands are not, 1. *Guide*, 2. RIGHT, nor *Guide right*, but are, 1. *Chiefs of platoons on the right flank*, 2. MARCH. (485).

In the first place, it will be noted that *Guide right* in the example cited and, for that matter, throughout the text, is invariably printed in italics as a preparatory command. And since this preparatory command simply "indicates the movement" that is to be executed, (9), and is not followed by a command of execution to "cause the execution," (9), (except in a very few cases in which the *Guide right* precedes the MARCH in the commands for the main movement, as, for instance, in, 1. *Forward*, 2. *Guide right*, 3. MARCH, in paragraph 119), it is apparent that there is no way provided in the drill regulations for executing this simple command. *There is no way*; and for that reason the commands when following the MARCH for the main movement or when used alone should always be written, 1. *Guide*, 2. RIGHT; that is to say, should be written in a form similar to, 1. *Eyes*, 2. RIGHT, and 1. *Right*, 2. DRESS; for unless this is done, unless the RIGHT is written in

capitals, the commands cannot in theory be executed. That they have for many years been executed in practice does not weaken the criticism in the least; it simply shows that these numerous mistakes in the written commands have been overlooked on the drill ground.

Secondly, there are several reasons why in indicating the guide of a troop, squadron, or regiment, in column of fours, the commands, 1. *Guide*, 2. *RIGHT*, are to be preferred to, 1. *Chiefs of platoons on right flank*, 1. *MARCH*. In the first place they are briefer and, with the exception under discussion, they are the words invariably used throughout the text to indicate the guide. Of course it is well understood that it is seldom necessary to indicate the guide in these formations since it is always on the side of the chiefs of platoons, nor is it scarcely ever necessary to change the chiefs of platoons to the opposite flank in order to get them on the side towards which the line is to be formed, for the reason that they can take their position there just as easily during the movement as they could prior to the movement. But even though it is seldom necessary to give these commands, it must be remembered that it is necessary for each soldier in each set of fours to know on which side the guide is, and this to him is the important and principal fact to be determined. The positions of the chiefs of platoons and file closers are to him subordinate facts of no immediate interest. To tell him where the chiefs of platoons are and then to require him to remember that the guide of the troop is on the same side as the chiefs of platoons and that the guide of each set of fours is on the same side as the guide of the troop only burdens him with remembering facts which would be entirely unnecessary if the direct commands, 1. *Guide*, 2. *RIGHT* (or *LEFT*) were used. Of course, it is apparent that the changing of the chiefs of platoons to the opposite flank may, in the mind of the commander himself, be the principal fact to be determined, but even then the commands, 1. *Guide*, 2. *RIGHT* (or *LEFT*) will answer every purpose in accomplishing the desired result; and though in this case the burden of remembering what these indirect commands mean is necessarily placed on the chiefs of platoons, it is well to remember that there are but two or three chiefs of platoons

in each troop and that they can more easily bear this burden than can all the enlisted men of the troop. Then, too, their average intellect being higher than that of the enlisted men, they will be less apt to make mistakes in carrying out commands of this character.

But it is to the commander himself that these inconsistencies in the text will probably give the greatest trouble; for he must remember to use one form of commands in one kind of formation and another form in almost exactly the same kind of formation, although the thing to be done is practically the same in both cases.

One of our cavalry colonels recently said to me that what he particularly objected to in our Cavalry Drill Regulations was that in the regimental drill he had to unlearn a good many of the commands that he had learned in the squadron drill, or rather, that he had to remember that many of the regimental commands are different in form from the squadron commands.

This criticism was certainly a just one; and, at the risk of repetition, it may not be out of place to look at the matter for a moment from the colonel's point of view.

Having learned that the commands for calling the squadron to attention are, 1. *Squadron*, 2. *ATTENTION*, he now learns that to call the regiment to attention, the commands are not, 1. *Regiment*, 2. *ATTENTION*, but are, 1. *Squadrons*, 2. *ATTENTION*. (747).

Having learned that the commands for halting a squadron are 1. *Squadron*, 2. *HALT*, he now learns that the commands for halting a regiment are not, 1. *Regiment*, 2. *HALT*, but are, 1. *Squadrons*, 2. *HALT*. (753).

Having learned that the commands for facing a squadron to the rear and halting are, 1. *Fours right about*, 2. *MARCH*, 1. *Squadron*, 2. *HALT*, he now learns that the commands for facing a regiment to the rear and halting are not, 1. *Fours right about*, 2. *MARCH*, 1. *Regiment*, 2. *HALT*, but are, 1. *Face to the rear*, 2. *Fours right about*, 3. *MARCH*. (751).

Having learned that the commands for forming a double column of fours in the squadron are, 1. *Double column of fours*, 2. *Center forward*, 3. *MARCH*, he now learns that the

commands for forming a double column of fours in the regiment are not, 1. *Double column of fours*, 2. *Center forward*, 3. *MARCH*, but are, 1. *Double column of fours*, 2. *MARCH*. (799).

Having learned that the commands for forming line from echelon in the squadron are, 1. *Form line*, 2. *MARCH*, he now learns that the commands for forming line from echelon in the regiment are not, 1. *Form line*, 2. *MARCH*, but are, 1. *Form line on such squadron*, 2. *MARCH*. (804).

Having learned that the commands for changing front in mass and halting in the squadron are, 1. *Right turn*, 2. *MARCH*, 1. *Squadron*, 2. *HALT*, he now learns that the commands for changing front in line of masses and halting in the regiment are not, 1. *Right turn*, 2. *MARCH*, 1. *Regiment*, 2. *HALT*, but are, 1. *Change front to the right*, 2. *MARCH*. (791).

Having learned that the commands for forming line of fours from mass in the squadron are, 1. *On (such) troop*, 2. *Line of fours*, 3. *MARCH*, (629), he now learns that the commands for forming line of fours from line of masses in the regiment are not, 1. *On (such) troop (such) squadron*, 2. *Line of fours*, 3. *MARCH*, but are, 1. *Line of fours*, 2. *On (such)*

In these articles in the *CAVALRY JOURNAL* I have purposely confined the discussion and criticism of the Cavalry Drill Regulations to the written commands, and have therefore omitted any discussion and criticism of the movements themselves, except so far as they may have had, in a few cases, a bearing upon the commands. An analysis and a discussion of a number of movements and of the reasons for the inclusion of some in and the omission* of others from the text, would no doubt be of interest and, perhaps, lead us to the conclusion that some changes should be made; but in my opinion the movements described and the general tactical system followed in our Cavalry Drill Regulations are, taken as a whole, very satisfactory. The principal faults are to be found, not in the movements but in the commands.

(The end.)

*As, for instance, the omission of, 1. *Right front into line*, 2. *MARCH*, and 1. *On right into line*, 2. *MARCH*, of a squadron or regiment in column of troops.

CAVALRY INSTRUCTION.

A NARRATIVE OF INSTRUCTION GIVEN DURING THE YEAR 1910
AT FORT SHERIDAN, ILLINOIS, TO A TROOP OF CAVALRY.

BY CAPTAIN F. C. MARSHALL, FIFTEENTH CAVALRY.

THIS is a personal experience. It is offered to illustrate the difficulties that oppose themselves to an effort to give adequate instruction to a troop of cavalry at a post typical of many of the cavalry stations in the United States, and is a frank statement of what was actually done during the year 1910.

The top soil on the Fort Sheridan reservation is a shallow black loam, over a heavy clay subsoil. This loam holds the water a long time in the spring and after each heavy rain, and is so boggy and heavy that work of any sort off the roads cannot be done until it has dried out. In the spring April is lost, and usually May as well, for any work off the roads.

There is a drill hall at this post, originally built for infantry, with a board floor. A few years ago this board floor was removed, and tanbark was put in. The cavalry and field artillery are now allowed to use it, in conjunction with the infantry. On account of certain defects in the construction of the knee boards the hall is extremely dangerous for mounted work, which must, in consequence, be limited to very slow movements, and to small commands.

During the indoor period—November to May—the cavalry troops are allowed in the hall on alternate days, Saturday and Sunday excepted, for one hour each. On account of interference with this schedule by guard and prison guard duty it is seldom that this drill can be had more than nine days per month.

The roads in the vicinity of Fort Sheridan are generally metalled. The surfacings used are limestone macadam or clay

gravel. They are badly kept up and are rough and full of holes. In addition many of them are oiled, and all the good ones are thronged with automobiles. In the winter, due to the mild influence of Lake Michigan, there is rarely a day when more or less thawing does not take place. This, combined with the freezing nights, coats the roads with ice. To use them, horses must be sharp shod, if it is at all icy, and must be shod to use them at any time.

Guard duty, due to the great extent of the post, and the large number of prisoners kept here, takes the men away from their horses certainly two, and usually three, days out of every nine. For example: If my troop goes on guard on Tuesday, at ten o'clock, it comes off at the same hour on Wednesday, and is on prison guard from seven o'clock until five on Thursday. The following Thursday it goes on guard again. During these three days the horses must be turned loose, and they can be groomed but twice: the morning of marching on guard, and the afternoon of marching off. If they are loose they must not be sharp shod, or they will cut each other badly. If they are smooth shod, since the corral is usually a mass of ice, they will run the risk of serious falls if they attempt to move about much. In fact one of my barefooted horses fell in the corral and broke his neck this winter.

From all these considerations, and after two winters at this station, I decided to abandon mounted instruction altogether for the winter of 1910-1911, except mounted fencing on the days the hall was available. I pulled all the shoes from the horses' feet, and reduced the grain ration to three pounds a feed. I experimented with horse exercise on the road two days, and had so many horses laid up that I decided to abandon the idea of having it at all. The horses are all fitted, and their shoes are nailed to the heel posts, ready to be put on in March, as soon as the indications are that the heavy freezing weather is over. Then, as soon as the roads are practicable, the full grain ration will be fed, and the troop will march from ten miles a day, at the walk, in the beginning, to twenty miles a day, done in four hours, as the horses get hardened. This will put them rapidly in condition, and I am sure that they will be much benefited by the rest. It would be much

better, of course, if they could get proper daily exercise all winter, but as that is impossible under conditions at Fort Sheridan, I regard my experiment as the best way out of a difficult situation.

In describing the work of the troop in 1910, I will give you the history by months.

In January, 1910, we had seven mounted drills of one hour each, in the hall; all but one were bareback. There were six gymnasium drills, and one in first aid.

Gallery practice was held daily. I have used every effort to encourage this practice. A fair gallery was arranged in the larger squad room; every unqualified man was required to fire two scores daily, and unlimited ammunition was furnished the others. The gallery was in use nearly all day, and every day. Weekly competitions for small prizes were had between the squads.

Non-commissioned officers' school was held three days in the week, and as broad a course was laid down for them as it was thought they could profitably absorb. Examinations were held, as ordered, and the non-commissioned officers were graduated as provided in orders, on showing proper proficiency, in all subjects, except minor tactics. I do not believe that anyone, officer or non-commissioned officer, should ever be graduated in this subject. In addition to the non-commissioned officers, at least ten selected privates attended the weekly exercises in this subject. These exercises consisted of lectures, or problems or conferences, and the men showed unfailing interest in them.

In February the troop drilled in the hall eight times. There were six gymnasium drills, ten dismounted drills, and one in first aid.

In March the weather was exceptionally fine, and the hall was used only four times; there were thirteen mounted drills, each for two hours, three gymnasium drills, and eight dismounted drills. The gallery was in constant use in February and March.

In April the first three days' practice march of the squadron was held; the troop had eleven mounted drills, of two hours each, two drills in the hall, and twelve dismounted drills.

In May the weather was very raw and rainy. Mounted work was confined to the roads. Target practice—range firing—absorbed all available time between the 9th and the 26th. The squadron made its monthly practice march to Chicago, to participate in the Decoration Day ceremonies in that city.

Rifle practice was continued until June 4th, when it was stopped, and only such instruction as was necessary to prepare for a military tournament in Chicago was given. This duty was finished on July 16th, when the troop returned to Fort Sheridan. The remainder of this month was used in preparing the non-commissioned officers for their duties as patrol leaders at the Sparta Maneuvers. From four to six hours daily was spent on the roads in the vicinity, and special attention was given to perfecting the non-commissioned officers in map reading, in estimating distances, in the preparation of messages, and in marching. Instruction was given almost daily in swimming horses in Lake Michigan.

From August 1st to September 15th the troop was at the maneuver reservation near Sparta, and on its march home. Here its duties were the same as those of all other cavalry troops, and need not be enlarged on.

On returning to Fort Sheridan the troop at once took up its rifle and revolver practice. This duty took practically all the time available (together with practice marches and the annual inspection) for instruction until November 26th, when the proficiency test of the troop was fired, the mercury standing at 12 degrees, Fahrenheit.

This was followed, in December, by practically the same programme as described above for January. The troop got ten drills in the hall. Horse exercise was attempted twice, but the roads were so slippery that it was not considered safe, either for the men or the horses, and so it was discontinued.

At the date this is being written—February 14th—the horses are in excellent health and flesh. They are not too fat. The stable doors are kept open in all weathers; the horses are not blanketed at all, except when brought in wet, and then only until dried. They are kept in the stable, during the day time, only when it is raining hard; never on account of cold, or wind, or snow.

It happened that very few men were discharged during 1910 from my troop; only two recruits were received. Of these, one was an excellent cook, and he was put in the kitchen as soon as his preliminary drills were over. The other joined just before the tournament, was given his recruit training very rapidly, and was taken up as a private when we went to maneuvers.

Paragraph 3, General Orders No. 7, Current Series, War Department, will be full of difficulties for cavalry at stations like this one. The instruction ordered in the first portion of the paragraph can be correctly given to include rifle and revolver practice, practice marches, and camping. Patrolling on the roads can be effectively taught, but, since patrolling in war would very often be off the roads, great care must be taken to impress on the patrol leaders that this instruction is given on the roads, only because they are not permitted, by private owners, to go across the fields. My own plan is to have the non-commissioned officers explain, as the problem progresses, just where they would leave the roads, and why, and how they would move across the country to gain vantage points now inaccessible to them. Patrolling at night can be taught with a much closer approach to war conditions.

I find it more profitable to teach advance, rear and flank guard duties from maps, using the one sided war game, and similarly the attack and defense of small convoys, such as non-commissioned officers might possibly be called on to take charge of.

I limit my instruction of sketching to flat sketches of the roads, but go very deep into map reading, so that my sergeants and corporals can read the war game maps correctly and rapidly. Whenever my troop marches on a terrain mapped by the Geological Survey, several of the non-commissioned officers are provided with these maps (which, after all, is our "military map") and one of them always acts as a guide to the troop. It is his duty to be able to tell me where the troop is at any given moment, and to point out on the map the prominent topographical features visible at the moment.

In addition to the general instruction described above, there is a signal party in one squad, and in another two men are instructed in the use of the Weldon range finder.

The effort was made to play polo at Fort Sheridan two years ago. Twenty messenger horses, quite unbroken, were assigned to this squadron, and a portion of the drill ground was set aside as a polo field. The plot selected needed clearing and grading; it was cleared and the grading was commenced, but, for some reason, was not finished when the ground froze in the early winter of 1909. For the same reason the grading was never resumed, and the ground is now in worse condition than ever. The practice has existed at Fort Sheridan, for a number of years, apparently, of skinning the sods off the cavalry drill ground to furnish sods for the bare spots in the post proper. This has resulted in making the cavalry drill ground so uneven that practice with polo balls is impossible there, nor is there a place on the reservation where the stroke can be practiced, or the ponies trained. The Onwentsia Country Club, three miles distant, was thrown open to our officers, for polo playing, through the courtesy of its members. This seemed to give the chance we were looking for, and, for a time, our officers availed themselves of the privilege. The club members, however, being Chicago business men, could not begin to play until five o'clock in the evening, and this proved to be an hour that was inconvenient to the officers, and the effort to play was soon abandoned.

It became apparent that the ponies would be of no use here, so they were shipped to our friends; the Sixth Cavalry, at Fort Des Moines, where there is an admirable polo field on the parade ground.

It is, of course, unwise to quarrel with conditions that one cannot correct, so I shall refrain from commenting on what might be done for cavalry at this station. It does seem as if stations might be found that would give greater opportunity for the development of our army than many that we now occupy. I have been stationed at Forts Meade, Keogh, Yates, Leavenworth, Riley, Ethan Allen and Sheridan. and am familiar with conditions at Forts Snelling, Robinson and Des Moines. It is my judgment that, of all these stations, Fort Riley is the only one suited to our work, the year around. Fort Robinson offers such excellent facilities for a portion of the year, that

it may also be made an exception, but the rest are, in my opinion, unqualifiedly bad.

It is to be regretted that a large reservation cannot be secured, in the non-agricultural regions in Eastern Tennessee or Kentucky, for instance, where several regiments of cavalry and field artillery could be stationed, and where they could find room and suitable conditions for field work the entire year.

In the mounted drills referred to above, describing the work of the year, excepting those drills had in preparation for the Chicago Tournament, I did not use the drill ground six times in the year. Almost all my instruction was given on the roads, and the greater part of it was designed for the non-commissioned officers. The facilities for horse training, and equitation, are so meager at Fort Sheridan, that I freely confess, my men may be said to be but little trained therein. They hardly deserve to be called cavalry soldiers at all, but rather mounted infantry.

FIELD TRAINING VS. TARGET PRACTICE.

BY FIRST LIEUTENANT WM. H. CLOPTON, JR., THIRTEENTH CAVALRY.

IN the March issue of the JOURNAL the article by Captain Booth entitled "Field Training vs. Target Practice," and the comments thereon under the caption "Cavalry Training and Target Practice," should I believe, be received as a welcome note calling for a discussion of ways and means to correct some of the present defects in our branch of the service, as noted therein.

As one who has in the past few years been deeply interested in the work that a cavalryman can do with the "infantry rifle" in competition with the infantry and others, I take the liberty of making a few comments and offering a few suggestions on the subject covered by the articles mentioned above.

The essential features of the two articles may be divided into the following:

1st. That too much time is being devoted in the cavalry to rifle practice to the exclusion of other work.

2nd. That the present rifle should be replaced by some type of arm, lending itself more readily to cavalry uses, in which weight and convenience of carrying should be the governing principles, instead of its long range effectiveness.

In connection with the first Captain Booth states, "so long as the standing is published and the proficiency of troops is compared with each other and the infantry, most troop commanders will devote all the time they can get to target practice, so as to make as good a showing as possible without regard to how much the instruction along other lines, which is not published, is neglected."

In the comments on Captain Booth's article is found that "too much time is spent in emulating and competing with the infantry in the use of the infantry rifle."

In both of these statements the authors have attempted to place the blame for other deficiencies in our training on the desire of troop commanders to compete, either through published reports or in competition with other troops and the infantry in marksmanship, and have either overlooked or purposely avoided the principal reason *why* so much time is now devoted to rifle practice and other work neglected.

To a certain extent the reasons advanced by them are true, but is it not more true that the prime factor in giving the men so large an amount of target practice rests primarily on the increased pay granted for qualification as marksmen, etc.

Contentment in the troop goes a long way towards additional zeal on the part of the men, both in their work and advancement in instruction. Where the men are satisfied that their interests are being promoted discontent seldom exists, but where they feel that their opportunities are being curtailed discontent follows.

This applies particularly to rifle practice, where the question of additional pay is involved, and it seems but natural for troop commanders to give their men every legitimate chance to qualify and earn their pay. The rating as published annually of the relative standing of organizations has little to do with it. Friendly competition in the squadron or the regiment when they are united, may call for extra effort on the part of troop commanders to beat their neighbor, but the direction of these efforts with reference to the army at large is not often taken into consideration. Isolated cases may be found where officers thinking they have an exceptionally good shooting troop, direct their efforts towards obtaining the highest record in the army, but the commander of an average troop is influenced but little, if at all, with this end of the work.

To offset the evils of too much target practice, two remedies present themselves, one, mentioned by Captain Booth, to abbreviate the course; the other, to discontinue the

present system of making increased pay contingent solely upon expertness with the rifle.

In connection with the former I may state, that for the past five months I have had an opportunity to discuss the present firing regulations with the president of the last revision board, Major Geo. W. McIver, Ninth Infantry, and find that he is far from satisfied, in a great many ways with the present system, especially with the length of time it takes to conduct the practice.

In writing this I have his permission to submit his ideas on the changes he favors. They will be found to agree in the main with the scheme advanced by Captain Booth, and in brief be stated as follows:

1st. Provide unlimited instruction for recruits, to give them the fundamentals at the start.

2nd. Establish a record test to be fired at 200, 300, 500 and 600 yards which will be followed by all the men, qualification in the separate grades to be based on percentages made in this course.

3d. All firing to be timed fire of either five or ten shots in a given interval, for which the following is proposed:

200 yards, five shots in twenty seconds.

300 and 500 yards, five shots in thirty seconds.

600 yards, five shots in forty seconds.

This will comprise the entire course, and in order to qualify as marksman, sharpshooter or expert rifleman, the men will be required to make a certain fixed percentage for each grade.

4th. All firing to be with the battle sight except at 600 yards.

5th. The present expert test to be taken by all men in the troop eliminating the moving targets at 200 yards. A certain qualification in this test being required for final qualification in the different grades, as determined by the firing in the timed fire course.

The exact details of percentages and so on have not as yet been worked out, it being the intention to secure a table

of averages and base the percentages of qualification for the three grades thereon. The present expert test to be retained in the nature of preliminary work for the field firing and proficiency test.

The above scheme has been the result of considerable reflection and study, with a desire to shorten the present course as much as possible and yet maintain sufficient target practice to keep the efficiency of this work up to its present standard.

The elimination of skirmishing is made in the foregoing as in the end this kind of fire is nothing more than timed fire in which the soldier is required to advance hurriedly from one range to another and in no way simulates service conditions.

This seems to be a good solution for the time now required for target practice, and in so far as it relates to our service might be modified by prescribing that the preliminary course for recruits be given before they are placed in the troop, devoting mornings to the mounted work and the afternoons to range practice, with both arms.

Once a man has learned to shoot, his subsequent appearance on the range should call for little preliminary work to put him in shape again for average shooting. The rudiments are not forgotten, but a man may be off in his physical condition, therefore a little "push and pull" drill and snapping exercises for a couple of weeks before the season opens up, will give him a new start without firing a shot; a few rounds then for practice at each range, in targetting his gun, testing his hold and judgment of conditions will be sufficient to put him in good shape to fire the record test, and the minimum amount of time required.

In considering the other remedy, that of discontinuing the present system of making increased pay contingent solely upon expertness with the rifle, some difficulty may be found in bringing it about. However the question seems to be one worthy of reflection and may accomplish the desired changes, calling for equal efforts in all the elements of cavalry training.

In order to give stimulus for all around proficiency why not utilize the funds now appropriated for rifle qualification as a reward for efficiency and general ability as a soldier? Establish the grade of first and second class private as now exists in the engineers signal and hospital corps. Increase the pay slightly of the non-commissioned officers and apportion the number of first and second class privates, so that the money required to give them all additional pay will bear a direct relation to the money now used, in paying the grades in marksmanship.

Make the requirements for designation as first class private include excellence in all of the duties demanded of the soldier, *i. e.* horsemanship, ability to use the rifle or carbine, revolver, saber and general soldierly qualities.

Statistics are not at hand whereby the actual apportionment might be worked out, but it is thought that by taking the average of the amounts that have been expended in the past five years for increased pay for qualification as a basis, some schedule could be arrived at so that the two would be about equal.

From information available the following will show the data for the years 1906 and 1907, the last three years not being at hand.

In 1906 the cavalry had the following qualifications:

Expert riflemen.....	282
Sharpshooters.....	1,268
Marksmen.....	1,267

calling for a monthly additional pay of \$7,748.00.

In 1907 the figures are as follows:

Expert riflemen.....	483
Sharpshooters.....	1,590
Marksmen.....	1,062

requiring a monthly additional pay of \$9,309.00.

In the past three years this amount has probably exceeded so for the sake of submitting some scheme let us assume that the total amount per month now amounts to \$10,000.00. This makes an average of \$55.00 per month per troop.

With this figure to work on establish a schedule of pay as follows:

1st. Sergeants.....	\$48 00	instead of	\$35 00
Sergeants.....	32 00	instead of	30 00
Corporals.....	23 00	instead of	21 00
1st. Class Privates.....	17 00		
2nd. Class Privates.....	15 00		

this would allow 14 first class privates per troop.

Such a change will require congressional action, but if it can be shown that the scheme involves nothing more than changing the designation of the pay from "increased pay for rifle qualification" to "good conduct" pay in which the ability to shoot is only a part of the requisite, instead of the sole consideration, it might be brought about without much difficulty.

In considering the second question, whether the present rifle should be replaced by some type of arm lending itself more readily to the needs of the cavalry, I think I may safely state, though to my knowledge the question has never been placed directly before the members of the cavalry teams I have been associated with, that none of them favor the present rifle simply because it puts us on a par with the infantry in competition.

The faults of the present heavy weapon as relates to the cavalry arm are too grave and conspicuous for any one who has the interests of the cavalry in mind, to want to retain it, and if the matter was put to a vote amongst those who have been and still are interested in competitions, I believe there would be a unanimous decision in favor of a lighter arm. The question of competition not being considered.

I am not however in favor of abolishing competitions for the cavalry. Should a carbine be adopted the old system of competitions could be revived, not necessarily to be held at different times and places as formerly but when the department competitions are held segregate the men using different arms into their own class, proceed with the competition as at present, but classify the men as winners either in the department rifle or carbine competition.

The work could progress simultaneously, the only difference being that two bulletins would be required and the title of the medals changed. The proportion of medals would remain as they now exist.

For instance if there are fifty men present armed with the rifle and thirty with the carbine, let the course be the same for both, but have the men armed with the rifle compete amongst themselves and the men armed with the carbine act similarly.

Assuming the above to exist the following distribution of medals would be made:

With 50 competitors, the team will consist of 10 men, this would require 1 gold, 3 silver and 6 bronze medals; with 30 competitors, the team will consist of 6 men, this would require 1 gold, 1 silver and 4 bronze medals, in all 2 gold, 4 silver and 10 bronze medals the same as if all were competing together. This would adjust the matter of department competitions.

The question of army competitions would require adjustment by either allowing the two arms to hold separate competitions, or by resorting to the former scheme of granting an allowance in the form of a handicap for the men armed with the carbine, based upon the relative efficiency of the two arms.

In considering the question of organizing a cavalry team for the national matches, the adoption of a carbine for the cavalry would not interfere in the slightest, as for this work rifles could be procured as was done in 1906 and the cavalry ask no odds of anyone.

The defects that have been pointed out in the old carbine as not being a good long range weapon. I think, will be found to have disappeared with the introduction of the present shaped bullet and the superiority of manufacture of the ammunition generally, over that we used when armed with the carbine before.

When we consider that while using the carbine, the use of the sling as an aid in firing was scarcely known in the cavalry, due to its absence as part of the equipment, its retention

both as a carrying device and as an aid in firing should be advocated.

Personally I am very much in favor of discarding the present rifle and adopting a lighter arm, better designed for the use of our branch of the service.

COMMENTS.

The foregoing is a very interesting paper which should be published in the Cavalry Journal, if for no other reason, at least to keep cavalymen thinking as to how we may improve cavalry.

I still believe that a radical change in the system of instructing cavalry is much needed, especially with reference to the use of the three arms other than the rifle or carbine, and since this question is one not to be decided lightly and, since to obtain a suitable cavalry system, one must examine any proposed scheme to the very smallest detail, thus leading to countless ramifications, a specially selected Board of cavalry officers should be set to work at once to determine:

1. What is the best cavalry organization for the cavalry of the United States?
2. What is the best equipment for such cavalry? (A proper board is, of course, now deciding this question, a little out of order, to my mind, certainly as organization should come first.)
3. What shall be the system of instruction to be imparted to cavalry?

When these questions have been studied thoroughly and a report thereon made, then the Chief of Staff will be in a position to recommend a well balanced scheme for improving the cavalry.

S. X.

A PROPOSED METHOD OF LINKING AND DISMOUNTING TO FIGHT ON FOOT.

By CAPTAIN HOLLAND RUBOTTOM, NINTH CAVALRY.

IN our present system of linking horses, and dismounting to fight on foot the writer has often been impressed with the slowness of the progress which a body of cavalry is obliged to go through when it is necessary to change from mounted



PLATE I.

Showing the proposed link and the manner of fastening when not in use.

to dismounted action. Imagine a troop under fire trying to link the horses after dismounting, drawing the rifles out of their scabbards, crossing the near stirrup in front of the pommel and then forming a column of threes on one side of the column of led horses. Then, before a skirmish line can be formed by the troop as a unit, the platoons must all close up in

column. Then, and not before, the troop can be formed into a skirmish line.

The writer has a different scheme to propose and has proved by a number of experiments that it will work.

PROPOSED CHANGES.

There are four radical changes in this scheme:

1. The horses are linked and rifles drawn from scabbards while mounted.
2. The men in each four dismount and move in the in-

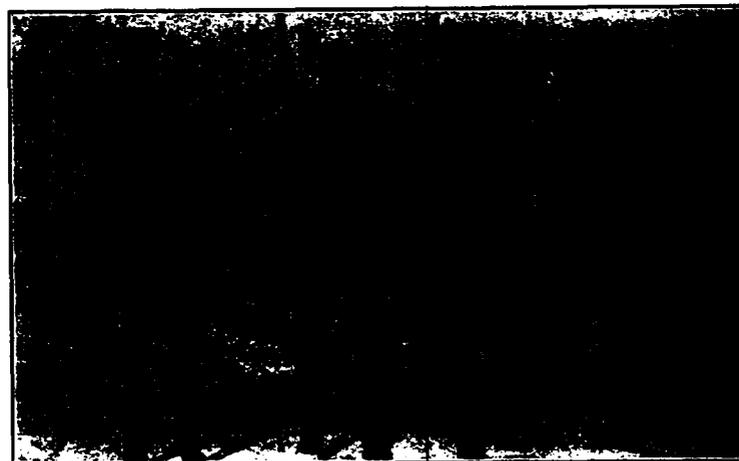


PLATE II.

Showing a set of fours with horses linked and the men at advance rifle, ready to dismount to fight on foot.

dicated direction passing in rear, instead of in front, of their horses.

3. A column of threes is not formed at all, but a skirmish line is formed at once as soon as the men dismount.

4. The troop may be mounted again and put in motion without waiting to unlink or return rifles.

THE LINK.

The link adopted for this purpose consists of two straps, one about 33 inches long with a snap at each end, the other

about 18 inches in length, having a snap at one end and a ring at the other.

The object of having the link made in two pieces is that, if long enough to snap into the pommel ring, a single strap would be too long to lead a horse fastened to the halter ring of another horse. When the horses are not linked, the short piece is snapped into the near pommel ring. The long piece is fastened at one end by its snap to the ring of the short piece.



PLATE III.

At the command "ACTION LEFT," the men. (Nos. 1, 2 and 3), dismount at once and, passing in rear of their own horses, move quickly towards the left, forming in line of skirmishers, each set of three opposite their own horses.

The other end is snapped into the lower ring of the curb bit, the ring of the snaffle bit, or the halter ring, depending upon the horse to be led. Some horses lead better by the halter but most horses lead better by the bridle, either the curb or snaffle, and cannot pull so hard as by the halter.

For experimental purposes the writer has adopted a few commands:

1. TO PREPARE TO FIGHT ON FOOT.

Being mounted to a halt, walk, trot, or gallop in column of fours, the command is given:

"Prepare to fight on foot."*

Nos. 1 and 2 unsnap the long piece of the link from the short piece, each passing the former to the man on his left who then snaps it into his own horse's upper halter ring (D ring).

No. 3 unsnaps his whole link from his pommel ring† and passes it to No. 4 before linking No. 2's horse. Thus No. 3,



PLATE IV.

Showing method of linking. Link snapped to upper ring of halter No. 4 leading No. 3's horse by the entire link. If necessary to have his right hand free to defend himself and horses, with rifle, saber or pistol, he can link No. 3's horse to his own.

as well as 1 and 2, has the use of his reins until ready to dismount.

Nos. 1, 2 and 3 then take the position of advance rifle.

*If this system be adopted, the word "prepare," could be omitted, but it is now used to avoid confusion with the authorized command "To fight on foot."

†In case No. 3 finds it too difficult to unsnap the link from his pommel ring, a ring to snap the link into may be fastened by a short strap to the pommel ring.

All of this requires less than ten seconds from the time the command is given until all are at advance rifle, the troop meanwhile continuing the march at the same gait.

While linked the troop may be made to change direction, increase or decrease the gait or may be brought to a halt as desired.

2. METHOD OF DISMOUNTING.

"Action right" ("left," "front," "rear," "right front," "left front," "right rear," or "left rear," according to the direction desired to have the skirmish line facing).

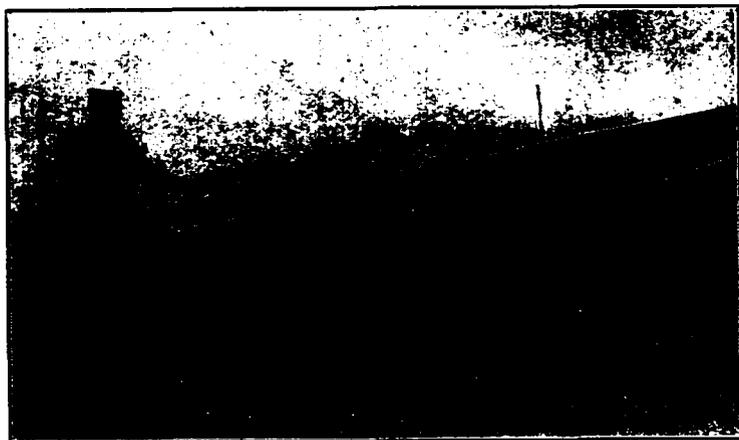


PLATE V.

Mounting without unlinking or returning rifle, which is held in right hand over against the horse's off-side. After mounting, rifles are returned and horses unlinked while moving in any direction and at any gait, or at a halt, as desired.

No. 4, the horse holder, remains mounted and is ready to lead the horse of No. 3 by the entire link.

The troop halts at once. In halting most horses when linked naturally move their haunches outward. If not, the riders may cause them to do so, sufficiently for dismounting. Nos. 1, 2, and 3 dismount at once and passing in rear of their own horses move quickly toward the direction indicated.

3. FORMING THE SKIRMISH LINE.

If "action right" be given, each set of threes, regardless of the order of each man in the set, forms a skirmish line toward the right opposite their own horses. The guide in the troop is center unless otherwise indicated.

As soon as all are in the line, intervals may be increased, if necessary and the line halted at a designated place.

"Action left" is similarly executed. In "Action front" ("right front" or "left front") the troop dismounted forms as in "As skirmishers, Guide right," moving in the direction indicated and regulating on the leading set of threes.

In "Action rear" ("right" or "left rear") the movement is executed similarly, considering each set of threes to have faced about, the skirmishers forming line and moving in the direction indicated, regulating on the rear set of threes.

4. METHOD OF MOUNTING.

The men are mounted again as in the present system, except that, where it is necessary to get away rapidly, as when under fire while mounting, each man mounts without waiting to unlink his horse or return his rifle to the scabbard and each set of threes passes in rear of their own horses. The easiest way to mount while holding the rifle in the hand is to grasp the rifle in the right hand by the upper end of the sling or by the barrel, hold it over the right side of the horse, the right forearm across the saddle, the rifle suspended, muzzle up. The horses can thus be quickly mounted and the troop put in motion, at a gallop, if desired, in less than ten seconds after the command "mount" is given, provided that the led horses are brought up to within ten yards of the skirmish line. The horses are unlinked and the rifles returned while the troop is in motion.

GENERAL REMARKS.

The matter of the kind of link used may seem at first glance to be unimportant. However, if a man is under fire and obliged to go through a slow process before he can get into a skirmish line, or before mounting when trying to get

away, he would probably look at the matter differently. It is a well known axiom that cavalry is most vulnerable while dismounting to fight on foot or while mounting after a dismounted action.

Suppose a body of cavalry is marching along in column of fours and expects to be fired upon any moment by infantry or dismounted cavalry. The commander can give the command "Prepare to fight on foot." The horses thus can be linked at once and the rifles advanced and the men are ready to tumble off their horses and form a skirmish line in any direction as soon as the command is given. Moreover before dismounting they are ready for a certain amount of mounted fire action, if necessary. After being prepared to fight on foot, the command can march any distance that might be required almost as well as before.

An objection has been made that if one of the horses should be shot while linked it might cause considerable inconvenience and confusion. The same objection applies equally to any method of linking, except that in this case the men may still be mounted. In reply I would say that with this system it would be easier to unfasten the injured animal than in the old system; moreover with a saber, sharpened during campaign, it would be very easy for a man to cut one of the links if necessary.

Unfortunately no one has ever yet discovered any means or method by which one of the combatants may injure the other without the former taking some risks.

If cavalry is to preserve its reputation for superior mobility, it certainly ought to be able to change from mounted to dismounted action, and vice versa, with the least possible delay.

It is believed that the necessity for a column formation dismounted is exceptional, as a troop should be able to go most any place mounted where a column formation can go dismounted. Where the necessity exists for such formation it can be obtained by giving the following command:

1. *Form column on left (right) flank.* 2. DISMOUNT.

This after the troop has executed the command, "*Prepare to fight on foot.*"

THE FORT RENO REMOUNT DEPOT.

By GERALD E. GRIFFIN, VETERINARIAN, THIRD FIELD ARTILLERY.

IN Canadian County, Oklahoma, six miles west of the "dry" and thriving town of El Reno, is situated Fort Reno, well and favorably known to the Army as a remount depot. It is surrounded by a large reservation of rolling prairie that slopes gently to the north branch of the Canadian river.

It was my good fortune to be ordered to visit this station early in November of last year, with the object of acquainting myself with the methods employed there in preparing young horses for the military service.

Soon after my arrival, on a Rock Island train, at the post station I was met by a tall, robust, soldierly looking man, he being the sole occupant of a wretched looking express wagon and the driver of a not very spirited pair of mules harnessed thereto.

He remarked with a twinkle in his eye that I was getting a rather cool reception and that my telegram had not been received until after the arrival of the train. At this he introduced himself as Captain Hardeman, 10th Cavalry, and I knew I was in the presence of the Commanding Officer of the depot.

I rode with him to his quarters where he made me at home, and during our trip from the station I noticed that he was very handy in his management of a pair in harness. Before my visit to the depot ended I also noticed, among other things, that this genial man was not only a good driver and the Commanding Officer of the place but that he was also the Quartermaster, the adviser, the friend, the boss, the well informed horse handler, the farmer, the fatherly friend and the motive power of the establishment; and in addition a just disciplinarian and true, conscientious soldierman.

After the usual cavalry tactics of sizing up a new military acquaintance, I was informed that whenever I was ready to look around there was a saddle horse at my disposal with a choice of saddles. I decided to commence operations at once and quickly changed into riding togs. On repairing to the back yard I found Captain Hardeman holding two powerful sorrel geldings ready saddled; one of which he offered me, remarking as the Spaniard does, that the horse was mine.

We hadn't ridden far until we met, and I was introduced, to Lieutenant Ennis, First Field Artillery, Captain Hardeman's able assistant. He is a young man standing about six feet two and built in proportion; a good natured, even tempered, kindly soldier, gentle of manner and speech and an able and true horseman.

We leave Mr. Ennis at his work and proceed to make the rounds of the stables, pastures, farm and training grounds, and return late in the evening, I enthusiastic and well pleased with what I had seen and learned.

The same evening I had the pleasure of meeting Veterinarian Brown of the Quartermaster's Department, who has charge of the veterinary hospital, an immense affair capable of accommodating one hundred and fifty animals, an able and painstaking veterinarian from whom I absorbed many valuable ideas during my too short visit.

The Fort Reno Remount Station is not a show place. Thirty years ago, it was an old frontier post. It had been abandoned for several years before the depot was established, and as a consequence the old buildings fell into a dilapidated condition, a condition that will not admit of repair except in a few instances.

Shelter had to be provided for the animals, wells had to be driven or dug, fences had to be built, hundreds of horses had to be fed and attended to, training had to be started; and all this with a small force and little money, for it may be remembered that the powers were not very liberal in the matter of expenditures.

Everything has been done that it was practicable to do with the funds at the disposal of the Quartermaster's Department and although General Aleshire is the founder of the re-

mount depots he has sacrificed everything here to the preparing of young horses for service in the organizations, and so effective has this sacrifice been that this remount station has become, in a few years, famous throughout the service for its sound, tractable, fearless and well trained young horses of excellent conformation.

It is hoped that within the next few years sufficient money may be available to replace many of the wretched structures now surrounding the parade ground.

And now a recital of the routine work of one day may be the means of conveying a fair idea of what the officials at Fort Reno are doing every day in the year, except Sundays and legal holidays.

At five thirty a. m., turn out and get into working clothes; at six fifteen, breakfast by the light of a lamp when the nights are long. At six thirty saddle up and make the rounds of the stables where the horses in training are in hand. Each man is responsible for seven horses and sees that the watering and feeding have been attended to, that the sick and injured animals are sent to the hospital accompanied by their respective cards, and that the preliminary training of the timid and very green horses on the longe or reins is commenced on the parade. See that the more advanced cavalry animals, numbering about one hundred, are properly saddled and bridled and started on their way to the training ground, where Lieutenant Ennis will take them in hand presently, and supervise their work in hourly batches of thirty until noon and commence again at one thirty and continue until five. Supervise the proper harnessing and hitching of artillery horses in teams of six, to sand laden caissons, and see to it that they are changed daily to different positions in the team and in the pairs composing it; that they are started on their hourly trips properly coupled and mounted and that they are up in the collars and pulling steadily. Be on hand at the critical moments to advise patience and gentleness in handling, to frown on harsh tones, to admonish the hasty of temper and commend the gentle hand and low pitched voice.

It is now about seven o'clock and things are fairly under way but there still remain to be seen the finished horses in

pasture awaiting shipment to troop and battery; the Virginia colts also must be inspected; the condition of the Missouri horses in their pasture must be examined and the two-year-olds must be investigated. Is there sufficient water in the tanks of the different pastures? Are the wind mills in proper working order and are they properly oiled? Has the morning feed for the pastured animals been distributed? Have any of the loose animals been injured in the night? Are all the horses present and accounted for, and are any of them sick? What is the condition of the fences, the gates, the field shelter sheds and the feeding troughs? Are the employees doing their work?

We ride to the trained horse pasture, where forty-five are in waiting, and inspect, handle and count them, and even ride some of them without the aid of a halter or bridle of any kind. They have collected around the breast high feed troughs where the feed wagon is distributing the morning ration of cracked corn and corn fodder. They look healthy and are in fine condition, and we move among them on foot as freely as we would among a troop or battery of old horses turned loose under similar conditions.

One of the feed troughs has a board loose, it must be attended to immediately. We find the tank full of water and the overflow properly drained. The pump is working in a satisfactory manner and the fence is reported to be in good condition by the fence rider.

Off we ride to the Virginia horse pasture and here awaiting the arrival of the feed wagon, we find sixty-five young horses ranging in age from two to four years; thoroughbreds; three-quarters; half and quarter bred. They do not impress us at first blush on account of their ragged and flat looking appearance compared with the trained horses we have just seen. Their breeding does not show as plainly as we expected; we have to hunt for the points, but these animals are young and immature and are mostly underbred. Then too, we know that the thoroughbred does not show to advantage at pasture in the late autumn; he must be well taken care of to show to advantage.

We have always ridden thoroughbreds ourselves and predict that when these youngsters get their full growth they will fill out and appear stronger and more robust. There are many fine shapes among them, indicative of speed, endurance and jumping qualities. There, for instance, is a slashing looking bay that we would like for our own use, but our jumping days being nearly over we pass him by with a sigh for the days that have gone. These animals have not been trained yet, but they are fearless of our presence among them. We find everything all right here except that the overflow from the tanks is not properly drained.

The north doors of the shelter sheds must be closed here as a "Norther" is forecasted for Oklahoma. Yes, that woolly filly looks thin, weak, miserable and hungry; she must be brought in and taken care of.

Here comes the feed wagon. How eagerly they gather around the troughs and gaze high-headed. You can see the thoroughbred cropping out now in the twitch of the nostrils, the restlessness of the ears, the glint of the eyes, the impatient pawing and the elastic play of the muscles of the shoulders and quarters.

Some day, perhaps, one of these chaps will carry off the international military ribbon in New York or London. Will it be the slashing looking bay or that short coupled, deep chested, strongly built, brown filly?

We cross a fenced field where an attempt had been made to plow it by means of steam but the ground was so hard, dry and unyielding that the work had to be abandoned.

We pass into an immense pasture, studded near its eastern extremity with shelter sheds, wind mills and feeding troughs, and presently we see approaching us from the west, squads, platoons, troops and squadrons of horses, now walking slowly, now throwing up their heads, pointing their ears inquiringly and stepping out more briskly until finally as the noise made by the feed wagon is recognized they again lower their crests, protrude their muzzles and all gradually break into a slow trot, while here and there a squeal is heard as some playful colt flattens his ears on his neck and tries to kick or nip his neighbor.

On they come to the number of seven hundred and odd, and mass themselves around us, all heads pointing to the fast approaching feed wagon.

These are the Missouri horses, the back bone of the cavalry and artillery, ranging in age from three to five and in height from fifteen to fifteen and three-quarter hands. Nearly all of them are good cavalry shapes with a sprinkling of first-class artillery fellows; the latter possessing heavy driving muscles, shoulders well formed for the collar and showing good conformation and well shaped feet. All of these were inspected, examined and passed by Captain Kirby Walker and Veterinarian Turner of the permanent horse board stationed at Kansas City. The average price of these horses is in the neighborhood of one hundred and fifty dollars. After training many of them will be worth three hundred.

We dismount and walk among them, as it is the custom here to get the confidence of the young horses by this procedure. We handle numbers of them and pat them on the head, neck and shoulder. They take our movements as a matter of course and show no alarm whatever at our presence in their midst.

The morning ration is soon distributed and they partake of it with little of the disturbance one would naturally expect. Not a cough, cold or inflamed eye, in hearing or sight. Their health and appetite appears to be perfect. Their condition and coats are splendid. We go through them thoroughly and two or three that show evidence of having been kicked recently are sent to the hospital in company with one that exhibits a fresh wound on the off hind pastern. After feeding they are all passed through a shoot and counted; one is found missing but is discovered later, by the fence rider, and so reported. Having looked into the condition of things in this pasture we ride to the pasture of the colts.

The colts have been fed long ago and are well scattered, but at our approach to the feeding troughs they begin to assemble and gaze at us in an inquiring manner. Some of them nose our horses, and even our persons, after we dismount among them. There are over one hundred of these youngsters here ranging from one and one-half to two years old. Some

of them were purchased by Captain Kirby Walker and others by Lieutenant Ennis. They are a fine, promising lot of cavalry youngsters and show lots of breeding, splendid shapes and plenty of dense bone and good, hard muscle; all of them possess good eyes, are wide between the ears, have ideal withers and are well ribbed up. We notice several "Diamond R" colts in this pasture, indicating that they came from the Rangeford ranch in Wyoming, a splendid recommendation.

It was learned that the average price of these colts was seventy dollars; they will be trained at three years and I have no doubt but that many of them will develop into ideal chargers. They were all present or accounted for and looked well.

It was now time to ask a few questions, so we propounded the following, among others, and quote substantially the replies given by Captain Hardeman:

"You know I have authority to purchase one horse for my official use. May I select one of these 'Diamond R' chaps?"

"I am very sorry but they are not to be sold or issued until they have reached the proper age. Such are my orders."

"How about the Missouri, the Virginia and the trained horses?"

"You may select any one of these and he will be sold to you at what he cost the United States. You may even select one of the Montana horses now in training."

"Which lot do you consider the best?"

"Well, that is a matter of taste and judgment, and perhaps sentiment also. I am from Missouri, myself, and have a strong leaning towards the horse product of that state. It isn't all sentiment, either, I can assure you."

"Please give me your opinion of the thoroughbreds?"

"The thoroughbred is the foundation of our best strains of horses. He is all right in his place, at the head of a stud, as a charger, a hunter, a jumper or a runner, but he must have more than pedigree. He must have conformation, height, weight, disposition and intelligence and for the majority of these combined in one horse we must pay a good price."

"Would the thoroughbred make a good cavalry horse?"

"Yes, he would, but he must be of the right kind and in addition to the qualifications I have just mentioned he must be

strong, steady and level headed; the supply of such, so far as I know, is, at present rather limited."

"What do you think of the scheme now being agitated of placing first-class stallions in the hands of the Agricultural Department for the purpose of breeding to approved mares of farmers; the War Department to have an option on the colts produced?"

"We will have to adopt some such scheme in the near future as cavalry and artillery horses are becoming scarce and expensive. A scheme like the one you have mentioned would solve our army horse problem in a few years."

"What percentage of 'I. C.' horses do you have, and do you have many incurables?"

"As to the incurables, we meet cases, of course, that are beyond human aid. Let us ride over to the 'I. C.' pasture and there you may see for yourself what 'I. C.'s' we have accumulated in about a year. We don't give them any grain."

We rode to a well-grassed and watered pasture where a few horses were limping around. On a quick diagnosis we thought two had disease of the navicular articulation; one a large, low ringbone; one an incurable spavin of the near hind; one "heaves." A wretched looking bay had a nervous disease of some kind that affected his locomotion posteriorly; another had chronic laminitis and still another has what must have been at one time, a fracture of the suffraginis of the off fore.

It was plain enough that all of these troubles developed after purchase. The surprise was that there were not more cases; for if my memory serves me right, we used to have, twenty years ago, as many as seven per cent of recruit horses go on the "I. and I." report inside of a year after their arrival at station. Either the class of horses now inspected is improving, or the examination is closer; I am inclined to believe the former is true.

It is now fifteen minutes of noon and we must trot out to get back in time for luncheon. As we come in sight of the training ground we see Mr. Ennis marching in with his last batch of the morning, composed of thirty-one Montana horses. For it was Montana broncos that were being gentled and trained at that time. Awkward, angular, big-headed, sickle

hocked, heavy boned, snorty looking brutes that reminded one of the British Army in the Boer war. All of them were branded, needlessly enough, except for the information of the myopic individuals who reared them on grass and water.

We partake of luncheon with the appetite of troopers and at twelve thirty repair to the office where the daily tussle with the official correspondence takes place and eats into the time to an amazing extent.

Before we realize what is happening the men are out on the parade longing, driving, handling and gentling a squad of raw Montanas.

Over there in the corrals they are starting out for the afternoon's work, and out in front of the largest stable a squad of men are trying to hitch a team of six equine devils to a caisson. All of this work is going on without the familiar military expressions of impatience and without a spur, jerk or whip.

Off they all go to the grind and the procuring of the daily bread by the sweat of the brow and the lather of the skin, and out we go on their trail to see that they do the sweating and lathering to the best advantage, and that the bread already partaken of is decently digested, as it should be, by hard work.

The cavalry trainers form file, twos, fours and platoons; they change direction constantly; they go through half turn in reverse, individual circling, halt, back, forward, trot, gallop, disperse, reassemble, dismount and mount near and off sides; turn and twist in the saddle and finally slide off over the croups of these broncos—money couldn't hire me to do the latter. At one time they did haunches in and two track work, but these have been abandoned recently. They lead these young horses around by their bridles—*always the snaffle*. They handle them all over, lift up their feet and hammer on them, and finally they take individual rides, well scattered, before returning to stables for the next batch at the end of an hour.

We now turn our attention to our artillery friends. Here they come up the heavy, sandy trail, all of them in the collars and down to hard work. The drivers, each armed with a whip encourage them by soft, unmeaning but soothing horse talk. Now they form left front into line and each saddle horse eases

off smoothly as the drivers let the reins pass slowly through their fingers. After a breathing spell they start off in column, each team doing fairly well. There is one devil, the off swing in the second team, who is making a lot of trouble. He looks like a fighter, but there is no one to fight him at this depot and the "pin-headed beggar" begins to understand that there may be something after all in kindness and gentleness; which I take it is the motto of this institution.

The work continues hour after hour and batch after batch, without let up, until the five o'clock bell rings at the office, and by this time all of those in training have had their little lesson of one hour's duration. They have been at it about three weeks now.

Gentle reader, when depot horses reach you, even those Montana broncs (may their family decrease), be kind to them, be polite to them, be gentle with them. Place them in the hands of the old steady soldiers, if there are such in your organization, and save them for a while, at least, from the leather handed, inconsiderate and verbose recruit with the high-pitched, unmeaning vocabulary of Anglo-Saxon bad words, undisciplined temper, jerking of the bits and cruel cinchings of girths. These depot horses have been trained, not broken, and have been brought to a decent understanding of man and his movements while here, a training that has not fallen to the lot of many horses with whom I am well acquainted.

At last we hear the recall bell and at its mellow notes we turn our horses for the post where we unsaddle, water and feed. Again we make the rounds of the training stables and see that each animal has his due.

How quietly and smoothly things run and how fearless, even these branded broncos of the prairies are of the movements of the men who handle them.

We visit the veterinary hospital on our way home and count thirty-two cases there, mostly surgical, and we see by the board that there are twenty-eight minor cases under treatment outside. The hospital is well equipped and supplied and Dr. Brown informs us that all animals are protected against "shipping fever" by serum injection before being placed aboard the cars for shipment to station.

It is now almost six o'clock and we have barely time to dress for dinner, which is graced by the presence of Mrs. and Miss Hardeman; Mrs. Ennis and her manly little son of eight. The talk is mostly about horses and the work in hand, and the changes to be made. It struck us that the station is a very lonesome one for refined women.

All of the employees are civilians and are trained to the work by Captain Hardeman and Lieutenant Ennis. That a man is a "bronco buster" or a "cow puncher" is not a recommendation. There is no "busting" done here; the training must be accomplished with the snaffle and without spurs or quirts.

Captain Hardeman has devised a system of rewards and punishment for these men which works very well. The men are graded according to their work and their grading is posted weekly on the bulletin board at the office; a high grade bringing an increase in pay. There is also a black list and the man on this list must walk except when he is working.

While smoking our cigars, after dinner, some of the men drop around with their little troubles and complaints which are tactfully handled by the Commanding Officer.

During our visit \$85.00 was subscribed by the men for the children's Christmas tree, and the weekly dance of the employees and their families took place in the old hop room where many an army belle reigned in the past.

It is now eight thirty and time to retire. I turn out the light and try to think over the day's work and am comparing the slashing bay thoroughbred, before mentioned, with a strong looking Missouri sorrel colt that had caught my fancy when I am disturbed by the voice of Captain Hardeman who informs me in simple English that it is now 5:30 a. m. and time to turn out for breakfast and the work of another day. He had fed and watered the two sorrels already.

This is Fort Reno as I saw and enjoyed it and this is the simple life of these officials whose untiring work has made the horses from this station famous.

Is this Remount Depot an economical project?

Is it worth while?

Is the service bettered by its establishment?

Will the Quartermaster General improve and enlarge these depots?

These are questions that I have had to answer a hundred times since my visit.

I know the depot scheme is an economical one and for the following reasons:

1. Young horses are bought cheaply and before being exposed to the diseases of sales stables and stock yards.
2. These young horses are started in the right direction by the depot system of training, and the mishandling of the farm horse-breaker, horse-dealer and (must I say it) the troop "bronco buster" is thus eliminated.
3. Half of the forage consumed is grown on the bottom lands of the reservation at about half the market price.
4. By the depot system contagious and infectious diseases among army animals have been practically eliminated by, what to all intent and purpose, is an extended period of quarantine at these places.
5. These young horses are received at these stations free, and are kept free from avoidable colt diseases which frequently weaken the respiratory and the circulatory organs to such an extent that many of the old time remounts went on the "I. and I." report from these troubles alone.

I believe the work is well worth while; any work that betters or improves the service in any way is certainly worth while.

The service has been bettered by the establishment of these depots. They have been instrumental in arousing an interest in horses, riding and training that is a source of wonder and of glad surprise to everybody in our army.

They have been the means of improving the class of horse in our mounted service, and have contributed largely to forcing officers to look closer to the breeding, conformation and style of their private mounts until nowadays no self-respecting officer, entitled to be mounted, will look at anything but a well bred, well set up animal for his own use.

As to the intentions of the Quartermaster General I know nothing. He has made a brilliant success in the establishment

of these remount depots and it would be surprising indeed if he decided not to give them his vigorous support in the future. The establishment of these depots was an innovation in our service, and the only one, too, of which I know, that has escaped being clamped to the anvil of adverse criticism. The reason is not far to seek. We all recognized a good thing at the same time.

After one has visited an interesting public institution for the first time there ever remains with him a strong impression that invariably asserts itself when that institution, or its work, is seriously recalled. The one left with me is the memory of the arduous work of the officials at Fort Reno and the expense they must incur in entertaining the numerous visitors, officials and semi-official, most of them strangers who must be cared for during their stay at that station. The expense of this entertainment must, at present come from the private funds of the officials.

As a purely business proposition it looks to me that there should be an additional officer stationed at Fort Reno to attend to the paper work, at least; and that the Commanding Officer should be given the pay of a Lieutenant Colonel or be furnished with sufficient public funds to entertain the constant flow of official visitors and others for which there is no accommodation nearer than El Reno, six miles distant.

The Fort Reno Remount Depot is still in its infancy. It has just passed through its teething stage with the ungrudging help of Captain Hardeman and Lieutenant Ennis; may they still continue to stand by and train it in the way it should go the help it to retain the envious reputation it has gained.

THE CAVALRY OF THE BRITISH ARMY.

(Gathered from various sources.)

THE British Cavalry consists of thirty-one regiments, divided into three regiments of Household Cavalry, and twenty-eight regiments of the line:

The Household Cavalry comprises:

- Two Regiments of Life Guards;
- One Regiment of Horse Guards.

The Cavalry of the Line consists of:

- Three Regiments of Dragoons,
- Seven Regiments of Dragoon Guards,
- Twelve Regiments of Hussars,
- Six Regiments of Lancers,

of which fourteen regiments are serving at home, nine in India and five in South Africa and Egypt.

War Organization—The war organization of the Cavalry of the Line at home consists of a cavalry division of four brigades, each comprising three regiments, and in addition two regiments are allotted for mounted brigade duties.

With a view to providing the machinery necessary for the training of draughts and remounts for the cavalry regiments in the field, it has been decided to form reserve cavalry regiments on mobilization.

Depots—Cavalry Depots are being established in each Command, except Aldershot, at which four or six regiments will be affiliated. In the Irish, Eastern and Northern Commands these depots have been formed and as soon as accommodation is provided depots will be established at Dunbar, Seaforth and Bristol in the Scottish, Western and Southern Commands respectively.

The depots will be used during peace to train regular recruits for three months before being sent to their regiment, or

linked regiment at home; to train officers and non-commissioned officers of Yeomanry; as a place of storage of arms, equipment, clothing and necessaries of regular reservists. During war, as a mobilization center where cavalry reservists will join; and for the reception and clothing of recruits, the whole of whose training will be carried out with a reserve cavalry regiment.

Reserve Cavalry Regiments—After mobilization is ordered, a reserve regiment will be formed for, and affiliated to each pair of linked cavalry regiments, making in all fourteen reserve regiments; these will take over immature and unfit serving soldiers, recruits and surplus reservists, they will train the whole of the personnel not immediately required by, and supply draughts to the mobilized regiments.

Peace Establishment. (Cavalry Regiment).

	HOUSEHOLD CAVALRY	CAVALRY OF THE LINE.		
	4 Squadrons	3 Service Squadrons at Home	India	Egypt and S. Africa
Officers	24	23	27	23
Warrant Officers	2	2	2	2
Sergeants	55	44	53	47
Trumpeters and Drummers ..	8	6	9	7
Rank and File	343	621	533	513
Total	432	696	624	592
Horses	276	523	561	478

War Establishment—Cavalry Regiments are organized into Headquarters, three Squadrons and a Machine Gun Section with two guns. Regiments in India have a reserve troop.

The squadron is the tactical unit of cavalry on war establishment. These are divided into four troops each under a subaltern; the troop is again divided into four sections consisting of four front rank men and their coverers. The establishment consists of:

Regimental Headquarters.

OFFICERS.		OFFICERS.	
Horses		Horses	
Lt. Colonel.....1.....3	Warrant Officer.....1.....1		
Major.....1.....3	Sergeants.....6.....5		
Adjutant.....1.....3	Artificers.....4.....3		
Quartermaster.....1.....1	Rank and File.....19.....8		
Medical Officer.....1.....2			
Veterinary Officer.....1.....3	Total.....36.....32		

Machine Gun Section.

Horses		Horses	
Subaltern.....1.....3	Privates.....12.....12		
Sergeant.....1.....1	Drivers and Batmen.....10.....16		
Corporal.....1.....1	Total.....25.....33		

Each of 3 squadrons.

OFFICERS.		OFFICERS.	
Horses		Horses	
Major.....1.....3	Trumpeters.....2.....2		
Captain.....1.....3	Corporals.....9.....9		
Subalterns.....4.....12	Privates.....108.....110		
Sergeants.....10.....10	Drivers and Batman.....21.....18		
Artificers.....8.....8	Total squadron.....164.....175		

Recapitulation.

	Headquarters	Machine Gun Section	Three Squadrons
Officers.....	6	1	18
Warrant Officers.....	1		
Sergeants.....	6	1	30
Artificers.....	4		24
Trumpeters.....			6
Rank and File.....	19	23	414
Total.....	36	25	492
Horses.....	32	33	525

At Headquarters the establishment includes one Medical Officer, one Veterinary Officer, one Armorer, fifteen A. S. C. Drivers, second line, and three R. A. M. C. personnel. In addition there are left at the base one orderly room sergeant, one sergeant master tailor, three storemen, and for the first reinforcement one subaltern, two sergeants, forty-four rank and file, with forty-eight horses.

Transport—Consisting of twenty-seven vehicles as follows:

HEADQUARTERS.	
Bicycles.....2	Wagon, G. S. Store.....1
Cart, Medical.....1	Pack animal, Vety. Equipt.....1
Cart, Water.....1	

MACHINE GUN SECTION.

Wagons, for machine guns, etc.....4

SQUADRONS (3)

Wagons, S. A. A. (1 per Squadron).....3	Wagons, Baggage.....6
Wagons, Tools, etc. (1 per Squadron).....3	Bicycles.....6
	Pack Animals for Scouts.....6

Four men in each squadron are trained in first aid, and one N. C. O. and four privates in pioneer duties. In each regiment one N. C. O. and eight men receive instruction in sanitary duties, also the following minimum number of scouts are maintained:

1 Officer, Scout leader	8 Regimental, 1st class scouts
1 Sergeant Scout	16 Squadron, 2nd class scouts

In addition there should be at least four trained dispatch riders in each squadron.

Arms—The Cavalry arm is the short magazine Lee Enfield Rifle. The machine gun section is armed with two .303-inch Maxim Machine Guns with tripod mountings carried in two limbered G. S. wagons. All ranks except drivers carry the sword and scabbard.

Ammunition—The following table gives the approximate amount of ammunition available per arm, and how carried:

HOW CARRIED	NUMBER OF ROUNDS PER GUN		
	Rifle	Pistol	Machine Gun
On soldier, or with gun.....	100	12	3,500
In Regimental Reserve.....	100	12	16,000
With Brigade Ammunition Column.....	100	12	16,000
With Divisional Ammunition Column.....	100		10,000

Tools—A cavalry regiment carries the following tools:

Axes, felling.....	21	Crowbars	3
Axes, hand.....	7	Bill hooks.....	22
Axes, pick	22	Reaping hooks.....	36
Mauls, C. S.	3	Folding saws.....	3
Shovels	36	Hand saws.....	3

Duties—The cavalry with an army in the field is divided according to the nature of the duties required of it into:

1. Independent, or strategical cavalry, for strategical exploration under the instructions of the Commander-in-Chief.
2. Protective cavalry for the provision of the first line of security, under the direct orders of the commander of the force they are protecting.
3. Divisional Cavalry, forming part of a division of all arms; for scouting in connection with the infantry, advanced, rear or flank guards or outposts; or for intercommunication purposes.

Independent Cavalry—The independent cavalry is independent only in the sense that it is at the immediate disposal of the Commander-in-Chief, and is not charged with the direct protection of any slower moving body of troops. It co-operates with other troops in giving effect to the will of the Commander-in-Chief as much as any other formation. To obtain accurate information as to the dispositions and strength of the hostile army is the initial duty of the independent cavalry.

Protective Cavalry—The duty of covering the main columns is normally entrusted to the protective cavalry, which thus furnishes the first line of protection, and is usually accompanied by mounted infantry and horse artillery.

Divisional Cavalry—Divisional cavalry assists the infantry in the immediate protection of the division by supplying mounted men for patrolling in connection with the advanced, flank and rear guards and outposts; maintains connection with the protective cavalry and furnishes escorts, orderlies and dispatch riders for the purpose of inter-communication generally.

Shoeing—The kind of shoe used in all branches of the service, unless otherwise ordered, is the "concave" shoe with

six to eight nail holes, according to the size and weight of the shoe. One-half of the shoes and nails are supplied ready made, a proportion of which are fitted cold; the object in view being to maintain the practice of shoeing exactly as it would have to be performed in the field. The remaining half of the shoes are made up from old ones in order to instruct and keep the shoers in practice.

Care of Horses—The Commanding officer of a unit is responsible for the condition of his horses, their health, shoeing and general fitness for work on service; and for the fitting of their saddlery. He inspects all horses once a week with stripped saddles.

The care of horses in war and the veterinary services generally are under the Director of Veterinary Services responsible to the Quartermaster General, and having under him administrative and other veterinary officers.

Each cavalry man is taught to look upon his horse as part of himself, to take a pride in its appearance, and learn to rely upon it as his most effective weapon. Recruits receive careful instruction in the horse's minor ailments, their prevention and cure, also its feeding and watering to ensure keeping his horse effective under all circumstances on service.

Riding Schools—Riding schools are maintained for the early training of horses and men because the horses are under better control, and the nervousness usually felt by recruits is greatly lessened. It is also a protection against bad weather.

Officers' Chargers—Two chargers are supplied at the public expense to each officer (except Quartermasters and Riding Masters) serving in a regiment of cavalry of the line; when these cease to be serviceable for military purposes they are replaced at the public expense. The chargers are supplied for military purposes, but any horse so supplied may be used for general purposes on payment of £10 (\$48.70) per annum, in which case the horse becomes the property of the hirer after six consecutive annual payments by an officer at home, and after four such payments abroad.

An officer serving with an army in the field will be provided at the public expense with the full number of chargers

authorized for his rank or appointment. The private chargers of officers proceeding on active service, within the number they are required to maintain, may, if required and found suitable, be taken over by the Remount Department at prices fixed with the owners.

Swimming—Swimming is taught at all stations where facilities exist. During the proper season bathing parades are formed at the discretion of the commanding officer for the purpose of instruction, the skilled swimmers being distributed so as to teach the rest. For crossing rivers it is preferred to use small rafts or boats to carry the kit, saddlery and men, and to make the horses swim; or the men swimming with their horses. Scouts' horses are taught to cross a river with saddles and equipment on, the rider carrying his cartridges as much out of the water as possible.

Scouts—Cavalrymen are trained to reconnoiter, and those who show special ability are further trained to become scouts or dispatch riders.

Marching—Marching an average of twenty to twenty-five miles a day is in practice a very considerable performance, and much more cannot be demanded for any length of time without considerable casualties resulting; although forced marches of from forty to fifty miles may be made by careful attention without serious detriment to the efficiency of horses and men.



FIGHTING ON FOOT BY CAVALRY.*

BY LIEUTENANT COLONEL ALFONSO PRADILIO.

(For the *Revista del Arma.*)

Cavalry which cannot fight as well on foot as on horseback is a retrograde cavalry, outside of its mission and fatally exposed to reverses.

ENTERTAINING the firm conviction that fighting on foot opens up an unlimited horizon for Cavalry Tactics, though the study of history proves that the theme to which I allude is but a logical continuation and progressive perfection of what has been done in all ages, since fighting on foot by cavalry goes back nearly twenty centuries, I begin by recapitulating opinions of noted authorities.

French theory. Fighting on foot is not, nor can it be, more than an incident. It should figure only exceptionally. By reasoning otherwise the ideas of cavalry are discredited and its impetus would be paralyzed. Colonel T. Bonie, Major of the 11th Hussars, says: "To those who think that fighting on foot should be but an incident or an exception I will simply reply by the announcement which the new foreign regulations prescribe on the manner of sustaining the struggle under various circumstances.

Prussian theory. Fighting on foot enables cavalry to undertake distant expeditions. The cavalry soldier should not fear the fight on foot which, once begun, should be pursued with vigor.

*Translated from *Revista de Caballeria*, Mexico, of April, 1910, by Colonel Charles Williams, 21st Infantry, for the War College Division of the General Staff, U. S. Army.

He will not be at the height of his mission or of modern exigencies if he does not know how to fight as well on foot as on horseback.

The cavalry soldier should be able, on foot to force a defile in the same manner as he would delay the march of an enemy, obliging him to make a detour which would cause a loss of time. It is necessary that he be able to overthrow or defend a position, whatever it may be, and maintain it until the arrival of his own infantry. In a retreat he can, by fighting on foot, detain the enemy, force him to deploy and thereby cause him to lose time. Cavalry will also be able to support itself in this way when retreating by a defile, when guarding its cantonments, etc., etc.

English theory. Now that the cavalry is armed with breech loading carbines capable of maintaining rapid and effective fire, service on foot assumes great importance and should be practiced frequently. Cavalry soldiers who can march rapidly on foot and put themselves and their horses under cover can be very useful as cavalry under many circumstances; in case, for instance, of a close country in which it is difficult to attack on horseback.

The most favorable conditions for fighting on foot are the following:

1. When in an open, undulating country favorable for rapid movement it is possible for cavalry to secure shelter and from there annoy cavalry or artillery reserve.

2. When an advance or rear guard can avail itself of terrain or obstacles, such as a bridge, a ford, a defile, and from there hold cavalry or artillery in check and prevent the taking of these places except with danger of loss of time.

3. When cavalry, following a road or crossing close country, finds itself menaced by attack or exposed to fire from long range; or indeed, when it may be possible to take advantage of a pit or embankment in order to direct a flank fire on the hostile lines.

4. In isolated houses or buildings, or when a body inferior in numbers may, without fear of being surrounded, hold cavalry in check.

5. When patrols or pillaging parties are met, etc., etc.

The Italian, American and Russian theories are even more explicit than the preceding. In presence of all of these foreign regulations holding the same opinion and inspired by such great initiative, we must not remain indifferent.

From this time cavalry must understand how to fight on foot under various circumstances. This is no exception; it is a fact observable daily in all of the minor operations of war; it is not an incident, it is a constant menace, an obstacle which may suddenly arise and which it is necessary to promptly arrest under penalty of being annihilated.

Foreign powers apply it on a great scale, drilling their soldiers on foot in the minor operations, in attack or defense of woods, towns, etc. They prescribe fighting on foot not with reduced numbers but generally with at least a squadron or more, and even with entire regiments. Therefore, since they will appear with a great force trained to fight on foot it is indisputable that we must go ahead in order to be in training for the struggle, and also give this double instruction.

Far from lessening the confidence of the rider in his horse we must increase it to its utmost limits; it is easy to do so.

Formerly before being armed with a serviceable carbine, the rider was exposed while advancing at a distance, to being stopped by a body on foot. Instinct led him then to whirl the head to the rear to see whether friendly infantry was coming to his support.

Now he can launch out on distant expeditions, because he is sufficient in himself and is prepared to occupy more remote points until the infantry replaces him.

Formerly the capability of the rider was simple because he depended on but one element—the horse; now it is doubled because he has reinforced himself with an important factor—fire.

Formerly the rider was not able to exact from his horse the full limit of his strength and means, because once dismounted he was without defense and exposed to capture by the enemy.

Now the detachment can be run till it falls exhausted, because the riders can get up and with their carbines go ahead and be invincible.

From today, great distances are his; limitless horizons, extreme rapidity, the most dashing career, depending on no one; he can undertake anything by this alternate use of horse and gun. Therefore we must not be negligent about giving our arm thoroughly this double instruction.

Napoleon, the most illustrious of our teachers, insists on this idea and in his memoirs, written with calmness, he often recommends frequent and brief exercises, fixing a good proportion to pursue.

Shall cavalry be the only arm not to accept, like others, evolution?

The influence produced on tactics by long range and rapid fire is not to be denied, giving to infantry and artillery an element of progress. Such denial would imply immobility; it would be as much as accepting your removal from the field, because the potency of the charge, which depends on the living force acquired at the moment of shock, tends to become weakened with the range of the arm. This would be to minimize the role of cavalry and to expose it continually (should new methods of destruction be discovered even more perfect) to hearing its *raison d'être* discussed, or, at least, to see its prestige and importance reduced.

On the other hand, cavalry seeks energetic and intelligent advantage in his accurate arm, his mission grows, his confidence increases, the future seems bright because he loses the anxiety of isolation, because he will know, like infantry, how to take advantage of every improvement and will be able to pursue it step by step along the road of progress.

More than ever is co-operation of the three arms necessary in order to meet extreme emergencies; and without fire action cavalry will be unable to fulfill its future mission either before the combat or on the battle-field.

On beginning of war, whilst armies are being organized, the function of the cavalry consists in aiding the mobilization and protecting the abandoned territory between the frontier and the points of concentration—and this work extends over limitless space. It is essential that it be able to take care of itself; that it can take possession of important positions and hold them until arrival of the infantry. This mission can be

fulfilled by utilizing the cavalry for rapid movements to desired points but it can be perfect only by resort to fighting on foot.

During action on the battle-field cavalry will often be the only protection for artillery, because it is subjected to the destructive effects of the hostile artillery, it will have to be more mobile than in the past, be at great distances and not being able to be kept up with by infantry it must seek support from the cavalry; the maximum of resistance cannot then be reached except by combining mounted and dismounted fighting.

Modern war imposes on cavalry the absolute necessity of bringing all of its resources into play and of being able to command all of its strength by fighting on foot and horseback; it is indispensable that it seize every possible advantage by means of this dual instruction.

For one to be content without asking others for what they may be able to give us is a deliberate refusal to utilize all of our advantages—not to desire to obtain more than medium results. Do not tell us that fighting on foot tends to deprive cavalry of its native qualities, because such cannot be the case. The precious attributes of power and speed, of continuous charm, of daring and of equestrian exploits we wish to develop to the utmost, and exactly because we understand them in their highest sense, we do not desire that the dash of the cavalry be paralyzed by drilling it in fighting on foot: much to the contrary, it is to give the rider confidence and fearlessness to use the horse to its last breath, because there yet remains the firearm which makes him formidable. He will more than ever be able to get from his horse the power and speed which he possesses, the resources which constitute all the vital forces of cavalry.

Cavalry service by tradition, instinct and pleasure will always take the first place. Is it not the use of the horse to which we owe the sensations which hold such attraction for us? Not only is the horse our principal source of success, but he represents the seductive, brilliant, irresistible side of our calling. He is our luxury, our coquetry, our inseparable companion in war. To be on a horse springing into space, running great distances at full speed, to go flying to a point where we were

not expected and to place ourselves beyond the range of vision, is a charm which no other exercise can give us. The start of the animal, his powerful breathing, the sound of his hoofs beating the ground, the speed of the race course, the beating of the wind which lashes him in return, all these sensations stir the senses and produce a kind of lightness which intoxicates. The cavalry service represents what is seductive, knightly, legendary, poetic and irresistible; we will always be drawn to it like steel to the magnet.

On the other hand, foot service represents for the horseman the painful, serious and difficult side. Armed with his carbine he advances slowly under the cover of obstacles. One must be cool-headed in order to aim correctly, and then he fires at long distance without the thrill of battle.

On one side we have prestige, pleasure, attractiveness, all that appeals to the imagination; on the other only stern reality and arduous work. It is not to be feared that the second function may detract from the first; each of them retaining its well-defined attributes.

Without possible question, mounted service constitutes, and will always constitute, the important role of cavalry because without the horse it has no existence. This is essential to it and is to be insisted upon, because the cavalry can make from 80 to 100 kilometers a day.

More than ever we require operations at long distances, because present exigencies impose on us the necessity of being able to travel for many consecutive days 80 kilometers, more or less.

This expenditure of energy is within our means and must be urged by saying that the cavalry force is a gold mine which can, and should be, drawn on liberally in a campaign.

But when the horses are exhausted from fatigue or the terrain will not permit its employment, must cavalry be reduced to a state of impotency? This is unworthy of acceptance and we shall ever resent the pettiness of this argument which would lessen the importance of our mission.

Cavalry as we understand it is the arm which must constantly retain the fervor of movement, restive, unable to remain sedentary.

Not being able to fight mounted, let it seek the means of being useful on foot by using its firearms and thus bring into play all of its resources and be able to be in condition to meet the exigencies of modern warfare; and to this end it is indispensable that you retain to the last moment all of your resources and vigor: what are they? The development of the powers of your horse, united with the formidable support of your firearm—such is the double power which, more than ever, makes for cavalry the conquest of great space, opening up a fertile and limitless field of action in which its noblest qualities can be exhibited.

NEAR AND BATTLE RECONNAISSANCE OF DIVISIONAL CAVALRY.*

BY CAPTAIN NIEMANN, GENERAL STAFF, SEVENTH AUSTRIAN ARMY CORPS.

PEACE maneuvers furnish our cavalry with numerous opportunities to practice the near and battle reconnaissance of divisional cavalry. Considering the love the cavalry has for this service and our excellent material for patrol and message service, we might expect the best of results, which is, however, far from being the case. Complaints are continually heard that the patrols ride entirely contrary to actual war conditions, that their manner and method of gaining an insight into conditions is unmilitary, to say the least, and that the leader of troops is never supplied with sufficient reports and information. On the other hand, the cavalry commander maintains that he has sent out more than sufficient patrols for the purpose and that nothing but the rapid course of the peace maneuver is to blame for insufficiency of results of reconnaissance, and points to his frittered away squadrons and exhausted horses in support of his statement.

Upon careful examination of the complaints viewed from both sides we find the gist of the matter to be as follows:

*Translated from *Kavalleristische Monatshefte*, November, 1910, by Harry Bell, M. S. E., Army Service Schools.

The leaders of troops expect entirely too much from the cavalry performing the near and battle reconnaissance; unused to make their dispositions in the fog of war, they demand very early reports as to the hostile dispositions down to the very last details. To furnish this detailed information whole troops are split up into patrols which have to ride close to the enemy, entirely contrary to what they would do in actual war, and thus lose all connection with their units in rear. Being thus entirely without strong cavalry support and having no short, assured route to transmit messages, their reports reach the leader only after a long delay, if at all.

Our inquiry as to what we may justly expect from the near and battle reconnaissance and what methods will best lead to desired results, should be based on lessons taught by actual war. What has been and can be achieved in war we must require in our peace maneuvers; but nothing beyond that, for that would harm the training of men as well as spoil the leaders. The latter should not be accustomed to arrive at their decisions in peace maneuvers on any results of reconnaissance they would not have in war and we should demand nothing of the cavalry which it can not perform in actual war; but we should demand that what the cavalry *can* perform be performed just as would be the case in war.

There are many and diverse conceptions of the meaning of near reconnaissance and battle reconnaissance. The near reconnaissance has always certain definite limits. It serves the purpose of securing for the leader of troops complete freedom for tactical decision and movements, and gets close to the enemy only when the latter has come so near that actual contact may ensue either during the succeeding night or next day. As soon as the near reconnaissance has gained touch with the enemy, the far reconnaissance ceases. In maneuvers on a smaller scale, where both parties are at the start separated by only twenty to thirty km. there can be no question of far reconnaissance and only near reconnaissance can be performed. But battle reconnaissance is one phase of near reconnaissance; it must be prepared by the latter and becomes effective at the moment when the opposing party proceeds to deploy from the march column.

In closer examination of the tasks set the near and battle reconnaissance of divisional cavalry and in discussing the best means of reconnaissance, we have to make a distinction between divisions operating independently and divisions operating as part of a larger force.

In the advance of a division acting alone, the divisional cavalry will almost always be under the orders of the advance guard commander. Its main task is to ascertain the approach of the enemy, as early as possible, by near reconnaissance and for this purpose a few patrols will suffice; these patrols to augment or relieve the organs of the far reconnaissance in touch with the enemy. It is the principal duty of patrols which encounter the enemy frontally, to correctly ascertain the *frontal* advance of the enemy in regard to *time* and *place*. In carrying out this task, they have to reckon with the hostile cavalry screen and must fall back from observation point to observation point along the route assigned them for reconnaissance. (To cite an example: A patrol receives the task to ascertain whether an enemy, who has today reached A, marches tomorrow via B to C. At daybreak the patrol would take position between A and B at such a point as to be able to overlook the road A—B as far as A, if possible. When it perceives the advance of stronger hostile forces from A on B, it would take up an observation position between B and C at a point giving a good view as far as B, etc.) As the two opposing parties get closer to each other the patrols are received by their own infantry battle reconnoitering units and may then serve these latter for the purpose of quickly transmitting reports to the rear.

Naturally, a part of the near reconnaissance patrols will encounter the flanks of the hostile advance. Such patrols frequently will have the opportunity to ascertain the strength and march order of the enemy; but this must not prevent them from carrying out their original task, the observation of a certain terrain sector or road. It will prove difficult for these patrols to send back reports as to the strength and march order of the enemy, for the messenger carrying that report will have to go a long way around the hostile cavalry security detachments and screen, and in most cases quite a fighting force may be neces-

sary to make sure that such important information, the enemy's strength and order of march, reaches its destination.

In the meantime the main body of the divisional cavalry advances by stages. It has the duty to gain certain sectors or vantage points which allows a distant view into the country ahead, to keep hostile cavalry away from such vantage points as will offer a view towards our own march column. For this duty the divisional cavalry must be of great fighting strength, and it can possess such fighting strength only when the strictest economy has been practiced in the matter of sending out patrols.

Artillery patrols can carry on their reconnaissance under protection of the advance cavalry. One of the main points in that is that the artillery officer *personally* sees everything. Only then will he be able to point out to the artillery commander the different points in the terrain which come into question in the matter of hostile artillery positions and those which facilitate quick ranging.

As soon as the near reconnaissance is taken over by the infantry, it becomes the duty of the advance guard cavalry to continue observation on the flank. The commander of the troops should designate the flank on which reconnaissance appear to him to be most required and of most importance. On that flank the main body of the cavalry would take station, a small detachment under an officer being sufficient for the other flank. As a matter of fact, higher headquarters frequently neglect to orient the cavalry commander concerning his own intentions and the position of the leader. It is recommended that some staff officer be charged with keeping up communication between the cavalry and headquarters. This officer should at the same time take care that arriving messengers assemble at some convenient point and are sent back in squads to their organization from time to time.

When no longer reconnoitering in front, it becomes the duty of the cavalry to make every effort to gain such points on the flank as will assure a good view of the hostile deployment. This will never be an easy matter to accomplish if the opponent is active. Naturally, infantry patrols and detachments will be found on all points of vantage near the hostile flanks.

In going farther off on the flank, we will have to reckon with the hostile cavalry. Single patrols are of little use in such situations. Only when the advance guard cavalry has victoriously driven the hostile cavalry from the field of observation may results of reconnaissance be expected from patrols. The main information required is location of hostile wings and hostile depth formation, everything else is of secondary importance.

The artillery of both sides may be this time have opened fire; still, in formation of the hostile artillery may yet be welcome and of value. If an artillery patrol is in the field, the respective artillery officer will note the hostile artillery position on his map, will make a mental notation of prominent points in the terrain and himself ride back to the artillery commander. Written notation of prominent points seen from the flank is of doubtful value; any prominent point seen from the flank is frequently invisible from the front or looks entirely different; only a comparison of both views leads to a clear understanding.

If no artillery patrol is in the field, the cavalry itself has to report what can be seen of the hostile artillery, without however going into minor details. If it succeeds in early ascertaining the grouping of the hostile artillery it has performed all that can be expected of it. Details, frequently demanded, such as location of limbers and ammunition wagons, whether field guns or howitzers, number of pieces, kind of fire, formation and gait in which change of position are executed, etc., are of minor importance to the commander of troops and to the artillery commander. In any case, such reports will be overtaken by events before they reach their destination. The artillery has to *see itself* and must direct its fire on those parts of the enemy which are susceptible to an effective fire. Any other procedure is wrong.

The main difficulty of reconnaissance does not lie in the composition of reports, but in creating the possibility of ascertaining extension and depth of the hostile deployment and transmitting that information to the leader with certainty and on the shortest road. Failure in this matter is frequently not to be blamed against the patrol commander but against the cavalry commander who sticks to the flank instead of utilizing his mobility and occupying important points of observation. In

place of keeping his fighting power together and using his force in the service of reconnaissance, he looks to his salvation by sending out a large number of patrols, which in many cases lose connection with the rear, have no knowledge of the course of the battle, carry on their observations entirely in an unmilitary manner and within the hostile security zone, and whose reports and messages may reach the commander too late and by a roundabout road.

Cavalry which, by using its full fighting power, has forcibly gained the hostile flank, can carry on a thorough battle reconnaissance to near the rear of the enemy with merely a few closely connected patrols. (In many cases a few galloping troopers will suffice to ascertain the presence or absence of the enemy at tactically important points in the terrain.) It can at all times furnish protected observation stations for artillery patrols and a point of concentration for its own patrols from which all reports will be sent to the commander of the troops on the shortest road. In a situation where the cavalry patrols do not have the support of a strong cavalry body in rear, reconnaissance from the flank, if at all practicable, will be performed with great difficulties.

Similar to the reconre engagement are conditions in an attack against an opponent in a defensive position. Here also the cavalry has to furnish opportunities for early reconnaissance to the artillery partols by forcing back the hostile reconnoitering units. After that has been done, the cavalry must try and gain the hostile flank designated in advance by the commander of the troops and create means there for observation. The ascertainment of the location of hostile wings and hostile reserve is most important. It will probably always be found impossible to ascertain artillery details, and in any case the artillery of the attacker does not need such information; it can wait until the infantry forces the defender to show his artillery.

No battle formation is so dependent on reconnaissance as is the defense, none needs screening so much. Therefore important points in the foreground which facilitate early frontal reconnaissance by the attacker are generally occupied by cyclist or infantry detachments, while the activity of the cavalry must in the very start be far in front of the flanks. The longer the

attacker is prevented from gaining an insight into the conditions prevailing within the defensive line, the better are the chances for the defender to carry the battle on as he desires, that is, forcing the enemy to attack frontally. Thus it will be seen that reconnaissance by very strong cavalry in front of the flanks is of vital importance to the defense. Will the enemy attack frontally? Does he march off toward a flank? Where is he massing his forces for the attack? These are important questions the cavalry will have to answer; everything else is of secondary importance. In carrying out its duty, the cavalry of the defender should always remember that changes on a large scale in an attack once started are almost impossible of execution. If it has perceived that the attacker deploys and if it has ascertained the grouping of the hostile forces, it has fulfilled its main requirements; its subsequent duty consists in screening the flank of the defense in front. The most important point is to prevent the cavalry of the attacker from gaining points on the flanks of the defense, thereby creating an opportunity for the defender to launch a sudden counter attack.

The duties of the battle reconnaissance in attack and in defense cannot be solved by merely sending out a number of patrols, even if the message service is perfect, but only by having a very strong and well led body of cavalry in the field, which opens the roads for some single patrols (sent out charged with definite duties) and offers them the requisite support. If that system is adopted, the commanders will in good time learn what is tactically important and the information will reach them in a proper, regulation manner. If we demand more from our divisional cavalry, it will resort to actions contrary to rules in war; it will lose its sense of what is tactically important and practically attainable, and will fritter away valuable time.

In war the divisions will be as a general rule fight as part of a larger force and the divisional cavalry will be confined to certain limits in its near reconnaissance, and being confined to a narrow strip of terrain, it will have to content itself with more frontal reconnaissance. Observation from a flank will be possible in exceptional cases only, for the hostile columns marching up to battle are so close to each other that a patrol entering the

space between them will have but little chance of sending back any report, because the messenger carrying it may never be able to pierce the probably dense hostile screening lines. It is the duty of the far reconnaissance to ascertain the enemy's depth formation and it can observe the enemy as long as he marches on a broad front. Limited to a confined space, it is the duty of the divisional cavalry to take possession of and hold as long as possible the terrain so important for reconnaissance to the commander of these troops and to the artillery patrols and at the same time prevent the hostile cavalry from gaining an insight into our own advance and deployment.

There will seldom be room for the cavalry in the first line of a division engaged in battle as part of a larger force, and it is impossible for it to remain on the enemy's flank. Only at places where the battle reconnaissance has found gaps in the hostile fighting line will the divisional cavalry have to try and occupy observation points in front and to one side of our own infantry. But such cases will be the exception. In general it will be advisable to place the cavalry in readiness behind the front where crises may arise in the battle or where gaps in our line are to be filled up. Not much can be done by cavalry in the matter of battle reconnaissance in a battle.

Conditions are somewhat more favorable in those cases where the divisional cavalry is on the extreme wing of an army. There it will act as a sort of connecting link between the army and the independent cavalry on that wing. As soon as the latter has succeeded in driving the hostile cavalry from the field, as soon as it starts to attack the hostile wing, the divisional cavalry must hold the terrain on that wing of the hostile battle line and defeat any and all attempts of the enemy to reconnoiter the terrain between the independent cavalry and the army in battle. If it succeeds in this and if it further succeeds in reconnoitering conditions on that hostile battle wing and keeping up connection with the independent cavalry, it has performed all that can reasonably be expected of it.

Thus we see that actual events in war set definite tasks to the near and battle reconnaissance of divisional cavalry as well as limitations which cannot be exceeded by it. In all phases of the war, divisional cavalry has more important tasks than

concerning itself with reconnoitering details. If we demand reports of minor details of the divisional cavalry in peace maneuvers, it will undoubtedly furnish them, but at the cost of its training for war.

Our cavalry is not lacking in technical ability to observe and to compose proper reports, but is lacking in proper war methods of reconnaissance, which correctly judge and consider the hostile counter effect. There is an absence of tactical understanding and practical training so necessary for correctly performing the near and battle reconnaissance in actual war. by *correctly performing* we mean the act of strong bodies of cavalry taking early possession of that part of the terrain in front and on the flank of the enemy which offers good view into hostile dispositions; that these strong bodies of cavalry work with only a few patrols sent out to clearly defined localities, furnish them the necessary support in rear and assure to them a certain, short route to send back their messages and reports. There is also an absence of correctly estimating the importance of screening duty under any and all conditions, which duty consists in keeping away the hostile reconnoitering organs from all favorable observation points in our front and flanks.

The artillery commander is responsible for the artillery reconnaissance; it is carried out by artillery patrols, not by cavalry patrols. It is merely the duty of the divisional cavalry to enable the artillery patrols to timely and efficiently observe things. Care should be taken in peace maneuvers not to require too many details; they cannot be reconnoitered in actual war and in any case good artillery needs no messages concerning details. It has been variously recommended to utilize the terrain maneuvers of artillery for training our cavalry, but we do not approve of that. Even if in those maneuvers the other arms and their positions are indicated by flags, these maneuvers will only conduce to give the cavalry erroneous ideas. There is, above all, an absence of just what causes difficulty to the cavalry in war, the hostile counter effect, the hostile screen in front and flank. To properly perceive artillery details in actual war is possible only in exceptional cases and, unless seen by an artilleryman, of doubtful tactical value. A special training of cavalry in this direction seems unnecessary.

To conclude, we will answer an objection which undoubtedly will be raised by readers against our method of reconnaissance. This objection may be that our method would mean that an entire squadron or regiment would ride as a patrol. Such a procedure is not meant at all. We again emphasize that the closed up bodies of cavalry mainly gain and hold points of support for the reconnaissance and see that assured and short connection is maintained between these points and general headquarters. The activity of the patrols is to be based on these supporting points. Only in such a manner can we count on an assured, quick message service; only thus can we avoid sending a series of patrols on the same errand into the same direction; and only thus will we be able to avoid the evil of having out patrols who have no point of support, who materially lessen the fighting power in the hands of the cavalry commander and who inordinately and unnecessarily exhaust the physical power of the horses.

INTERNATIONAL HORSESHOW.*

(Under the patronage of the King of Italy, April 28th to May 25th, 1911.)

INTERNATIONAL CHAMPIONSHIP FOR CHARGERS.

First Day.

MARCH of fifty kilometers to be accomplished within three and one-half hours (about thirty miles at eight and one-half miles per hour). The Association reserves the right to increase or diminish the length of the course by a few kilometers, but maintaining the regulation speed of fourteen kilometers and 280 meters per hour. A greater speed will not be considered. On the contrary, competitors who have taken more time will be penalized by a point for each minute late. The course will be partly on the road, partly across country with natural obstacles, and it will be indicated to the competitors one day in advance. The start will take place individually or by groups, according to the number of competitors.

*Translated by Major H. T. Allen, General Staff, U. S. Army.

Second Day.

The course will be about 3,000 meters (about one mile and seven furlongs) with twenty-two obstacles, solid and half solid. The maximum time allowed will be six minutes (a gait of about three minutes and twenty seconds). No credit will be given for a shorter time, but a greater time will be penalized by one point for each two seconds over. Knocking down a part of an obstacle will be penalized by two points, as will be a refusal or a cutting. The fall of the horse or the rider will be penalized three points.

Third Day.

Each competitor will follow a course marked by flags, part on the road and part across country, a distance of about 25 kilometers (about fifteen miles) with various obstacles (obstacles de campagne). The maximum time of two and one-half hours will be allowed (a gait of six miles per hour). The competitors will leave in the order that will be established later and will receive at the moment of departure a plan of the course. The arrival will be at the Hippodrome of Tor di Quinto.

Only the thirty most successful competitors of the two preceding days will be permitted to compete. In case one or more competitors have an equal number of points of the thirty class they will be permitted also to enter. The total number of points given to the first one to finish will correspond with the number of competitors. The second will have one point less and so on to the last, who will have only one point. If two or more competitors finish in the same time they will get the same number of points. Each competitor will have the difference between the total figure and the number of the rider who precedes him.

Final Classification.

One hundred points will be given to each competitor. From these 100 points will be taken the total number of points that he has been penalized. The final classification will be determined as follows: After having deducted from each competitor the points lost in the first two trials and added those won in the third the greatest number of points will be taken as the base.

The prize for this championship will be 35,000 francs, divided into five prizes.

Eligibility.

Officers of the Italian Army and those of foreign armies in active service mounted on horses belonging to them and used as their chargers or on regimental horses. The first test will be in campaign uniform and the two others in dress uniform without sabers.

Military International Cup Presented by the King of Italy.

The cup will be competed for by teams of six officers from each nation. Teams will be arranged in alphabetical order, Italian last. The officers of each team will be numbered from 1 to 6, according to their registering, and will appear in that order. Numbers 1 of each team will be called first, then the numbers 2, and so on. The course of 3,000 meters must be run within seven minutes. It will comprise fifteen obstacles without wings, with a front of at least three meters and an initial height not exceeding 1.15 meters. Each officer will take the course separately, the total number of points obtained by the six riders composing the team will constitute the number of points for that team; however, in order that any team be classed first, it must have at least ten points more than the second. In case this does not occur between the two first teams, they will go over the course with the obstacles made higher until one team shall have acquired the difference of ten points required. Each refusal or cutting will be penalized two points, as well as the total or partial knocking over of the obstacles. The fall of a horse or rider will be penalized three points. If, for instance, a rider does not finish the course, he will be penalized (in addition to the points that he will have lost in the part of the course already covered) as many times two points as there are obstacles not taken. The victorious team will secure the cup of his Majesty.

Class for Hunters.

For horses having hunted regularly in Italy or abroad during the season of 1910-11, ridden by gentlemen who are reg-

ular members of a hunt, or by officers authorized to hunt in a hunt club.

First Trial—The competitors should cover in one morning the distance of about ten kilometers across country, over fixed natural obstacles not surpassing 1.30 meters high in the maximum time of forty-five minutes. Horses which do not take the prescribed obstacles or which do not arrive in the fixed time will be dropped.

Second Trial—A course of about 3,000 meters with fixed and half fixed obstacles maximum height of 1.30 meters, maximum time six minutes and forty-five seconds. Horses which do not finish in the prescribed time will be dropped.

The following are the penalties: For each refusal or cutting, 1 point. Knocking off the mobile part of the obstacle with feet, 1 point; knocking off the mobile part of the obstacle with front feet, 2 points; falling of horse or rider, 3 points. In case of a tie, the obstacles will be increased according to the wishes of the jury. Prizes to consist of 10,000 francs, divided into seven parts.

In this class entries should be accompanied by the certificate of a Master of Hounds, saying that the horse has hunted in the season of 1910-11, and that the riders are regular members of the club, or that they are officers who are entitled to hunt with that club.

The hunt club will include fox, stag and boar hunts. Paper hunts and drags will not be included.

Gentlemen Riders—Class A.

For horses of all breeds and of all countries, ridden by gentlemen. The course about 3,000 meters with mobile obstacles, in height 1.20 meters; maximum time, 6 minutes, 30 seconds. Horses which do not finish the course will be dropped.

The following are the penalties: Refusal or cutting, 1 point; knocking off the top of the obstacle with hind feet, 1 point; knocking off the top of the obstacle with front feet, 2 points; falling of the horse or rider, 3 points. In case of a tie, the course to be ridden over with higher jumps, as the jury may direct. The prize: 4,000 francs, divided into six parts.

Gentlemen Riders—Class B.

For horses of all breeds and of all countries, ridden by gentlemen and officers. Distance about 3,000 meters, over solid and half solid obstacles. Minimum height, 1.20 meters, and maximum height, 1.40 meters. Maximum time permitted, seven minutes. Only those horses finishing in the required time will be considered. The following are penalties:

Each refusal or cutting, and striking the article with the hind feet.....	1 point
Striking the article with the front feet.....	2 points
Fall of the rider or horse.....	1 point

In case there is a tie, the prize will be given to the horse completing in the shortest time. The purse will consist of 5,000 francs, divided into six prizes.

Teams of Four for Officers and Gentlemen.

For horses of all breeds and all countries ridden by gentlemen, the teams to be formed at the time of registration. Distance about 2,500 meters; fixed and mobile obstacles, not passing 1.20 meters in height. Maximum time allowed will be six minutes. The penalties for each four will be as follows:

For each refusal or cutting, for each horse..	1 point
Hitting the obstacle by one or more horses of the four.....	2 points
Fall of the horse or rider.....	3 points

In case of a tie between two or more of the teams, the course will be run over, and the obstacle increased in size, if the jury deems necessary. Teams requiring more than six minutes to complete the course will be excluded from classification.

Training of Horses.

Reserve for Foreign Officers—This is explained in detail in the catalogue, and plates are given to illustrate the requirements.

High Jump for Officers and Gentlemen.

For horses of all breeds and countries, ridden by gentlemen. Course will be over four obstacles of an initial height of 1.30 meters, placed in right line, with distance of fifty meters. The obstacles will be hedge, fence, wall and triple fence. Competitors must keep up the gallop between the obstacles. One cutting will be admitted without a penalty. For the classification, three points will be given to each horse that clears each obstacle clean, two points to the one that hits only with the hind feet, and one point to the one that hits with its front feet. Fall of the horse or rider will be penalized by three points. In case of a tie, the obstacle will be elevated to the degree decided upon by the jury. The purse shall be 5,000 francs, divided into six prizes.

Champion High Jump (American Gate) for Officers and Gentlemen.

For horses of all breeds and countries, ridden by gentlemen. The gate will have an initial height of 1.50 meters. The horse that clears clean will receive three points, the one that touches with his hind feet, 2 points, and the one that touches with his front feet, 1 point. Six faults will be admitted in this trial. The knocking off of a part of the obstacle, refusal and cutting, and falls will be counted as faults. The jury will decide upon how the increase of height will take place. The purse shall be 4,000 francs, divided into five prizes.

Ladies' Class.

For horses which are regularly hunted in Italy or abroad during the season 1910-11, and ridden by ladies who have hunted during that season and are regularly inscribed as members of a hunting club. In this test, all horses will be shown successively at a walk, trot and gallop, will take mobile obstacles not exceeding the 1.10 height and 2.50 in breadth which may be required by the association. In giving the prizes, the jury will take into account the regularity of the gaits and the total of qualities required by hunter trained for lady. Prizes will be objects of art.

Consolation Prize for Officers and Gentlemen.

For horses of all breeds and countries, which ridden by gentlemen have not obtained prizes in the preceding trials. The course will be about 3,000 meters, with obstacles not exceeding 1.20 meters in height; maximum time permitted will be seven minutes. Only those horses finishing in this time will be considered. The following will be the penalties:

Each refusal or cutting.....	1 point
Knocking off of the mobile part of the obstacle with the hind feet.....	2 points
Knocking off of the mobile part of the obstacle with the front feet.....	2 points
Fall of the rider or horse.....	3 points

In case of a tie, the course will be ridden again, with the larger obstacles as may be determined by the jury. Purse, 5,000 francs, divided into seven prizes.

Grand International Military Steeplechase.

Sunday, May 14. Steeplechase. Officers in active service, belonging to the Italian army and to foreign armies; 10,000 francs given by the Association, 2,000 of which will go to the second, 1,500 to the third and 500 to the fourth. The horses must be four years old and over and may be of any breed and any country, but they must be qualified hunters and registered on service rolls for a period of two months. Entries 200 francs, forfeit 100 francs if he is declared Friday, the 12th of May, before 3 o'clock at Rome, and 25 francs only if he is declared Friday, the 28th of April, before 3 o'clock at Rome. Weight: 4-year-old can carry 68 kilograms; 5-year-old, 73 kilograms; 5 years and more, 75½ kilograms. Horses winning a steeplechase in Italy of 3,000 francs or a steeplechase of 10,000 francs in 1910 will carry 2 kilograms extra; horses winning abroad a steeplechase of 2,000 francs, or a steeplechase of 10,000 francs in 1910 will carry 4 kilograms extra; horses winning in Italy two steeplechases of 3,000 francs, or a steeplechase of 20,000 francs in 1910 will carry 4 kilograms extra; horses winning over two steeplechases of 3,000 francs, or a steeplechase of 20,000 francs in 1910, will carry 6 kilograms extra. Horses

of all countries trained in Italy from the 1st of February, 1911, will receive three kilograms. These horses will receive besides two kilograms off after the 1st of February, 1911, if they have not won a steeplechase of 2,000 francs. The distance will be about 4,000 meters. Entries will be made up to the 7th of April, before 3 o'clock, at Rome, to the Secretary of the Association. Horses belonging to foreign officers which have taken part in this race and have not won 100 francs during the meet will receive 500 francs as a gratuity for traveling expenses.

Farnese International Military Steeplechase.

For officers belonging to the Italian army and to foreign armies. The purse will be 4,000 francs, of which 500 will go to the second, 350 to the third and 150 to the fourth. The race will be open to qualified hunters of over 4 years of age, of all breeds and all countries, but they must have been Government horses for a period of two months and have not won in the year a steeplechase of 5,000 francs. Entrance 75 francs, forfeit 25 francs if he is declared the 23d of May before 3 o'clock at Rome. Distance about 4,000 meters. Entry should be made by the 12th of May at Rome to the Secretary of the Association. The weight will be published the 16th of May at 8 o'clock in the morning at Rome. Horses winning a prize after publication of the weight will carry two kilograms extra. Those winning two prizes or a handicap after that date, 2½ kilograms.

General Information.

Foreign officers sent by their governments will enjoy special advantages. They will have free entry to the frontier at Rome and will be quartered in the capital during the meet. Their horses will be transported free from the frontier at Rome, where they will be sheltered and fed during the entire course of the meet. All trials except those of patrols will be international. Uniform will be obligatory for officers, and hunting costume for gentlemen.

Gentlemen will be qualified in accordance with the conditions prescribed by the Regulations of the Jockey Club and the Steeplechase Society of Italy. The Association will be

charged with the regulation of disagreements which may arise during the meet, and its decision will be without appeal. Entries should be made to the Executive Committee in writing, always accompanied by the entrance fee, which is 20 francs for each horse, whatever be its class. For the charge of championship and the cup of the team of Italy, entries will be closed the 20th of April. For the other classes, entries will be closed May 1st, for the teams of four and for the Consolation class, the evening before the test. The races are governed by the Regulations of the Steeplechase Society of Italy.

THE BROOD MARE A FACTOR IN THE FRENCH REMOUNT SYSTEM.*

UNDER the French Remount system, the breeder of a three year old saddle mare which he has sold to the government may retain the animal in his custody for two breeding seasons, under the express condition that the mare will be served by a government registered saddle stallion. Four year old mares may be retained for only one breeding season.

Following is a translation of the most important clauses of the contract between the Remount Department and the breeder:

Three year old saddle mares suitable for breeding purposes will be purchased by the Remount Department and temporarily placed in the custody of the breeders who have sold them and who will contract to have them served for two consecutive seasons, at three and four years of age, by a registered government stallion, such stallion to be designated in the foregoing contract by the military authorities.

The breeder binds himself to feed these animals, to keep them in good condition and to use them only for light work (such heavy work as ploughing, hauling dirt, sand, building materials, drawing heavily laden coaches and wagons is strictly forbidden). He further takes unto himself the expenses of all

*Translated from the French by M. F. De Barneville.

kinds incident to the general care and the shoeing of the mares, as also the purchase of medical supplies in case of sickness.

Unless ownership of the mare be relinquished by the government to the breeder, for such reasons as will be set forth later, the latter can in no case claim ownership of them; but the foals born of these mares will be his property and he may dispose of them as he sees fit.

In case of a change of residence, the breeder entrusted with the care of an army mare is required to give due notification of same to the officer in charge of the Remount Station, through the commandant of the local *gendarmerie*. Failure to comply with this clause may occasion the withdrawal of the mare from his custody, should the War Department so decide.

The mares are placed under the supervision of the military authorities who may at any time exercise their right of control through such means as may be deemed advisable.

Besides this right of control and while in the custody of a breeder the mares are liable to inspections by the remount purchasing board. These inspections occur after July 1st of the second year after they have been placed in custody in order that they may be presented, as the case may be, with their first foal.

To this effect, the board, while touring the territory, summons the breeder, custodian of a mare, to present his charge for inspection at one of its meetings. After inspection, the board decides whether the breeder is entitled to a premium as a reward for the mare's good condition and the care which has been bestowed upon it, or, should the reverse be the case, the board will take such steps as the circumstances may warrant.

In reporting to the board, the breeder will present the foregoing contract and the certificate of service of the mare by a government stallion.

If, for no valid reason, a breeder fails to report to the board, he loses thereby all right to the premium. In this case, the officer in charge of the remount depot, who is also president of the board, summons him to present the mare, with the least practicable delay, either at the remount station or at a subsequent meeting of the board, and invites him to make

known the reason why the mare had not been presented at the first summons.

If the breeder pays no heed to the second summons, the officer in charge of the depot orders the withdrawal of the mare from his custody, unless its ownership be relinquished altogether by the government, as will be explained further.

The mares are turned over by the breeders to the military authorities to be assigned to a regiment before December 31st of the year preceding that when they will have reached the age of six.

However, the military authorities have the absolute right of withdrawing the mares before that period, at any time and without warning, either to meet the demands of the army, or as a result of ill-treatment and lack of care on the part of the breeder-custodian, or for any other reason.

The withdrawal by the government of a brood mare for failure of its custodian to present it for inspection, or for lack of care and ill-treatment reported at other times than during the inspection by the board, will impose upon the custodian the obligation of taking the mare at his own expense to the Remount Station.

On the other hand, the custodian of a brood mare may, after the first foal has been weaned, or after October 1st of the year when the mare has reached the age of four, relinquish voluntarily the custody of the animal. In this case the custodian will, at his own expense, bring the mare to the Remount Station.

In case of sickness of, or serious accident to the mare, the custodian will notify the officer in charge of the Remount Station.

Should the sickness or accident result in death or in a considerable depreciation in the value of the animal, a thorough investigation will be made by the commandant of the local *gendarmerie* as to the causes of the sickness or accident. This investigation should clearly establish whether the mare has been placed in proper time under the care of a veterinarian or if the necessary medicaments have been administered.

This investigation is in order to determine whether or not the custodian is responsible for the causes leading to the death

of the mare and has taken proper measures to prevent it. If the death is found to be a result of his carelessness or neglect, he is ordered to reimburse to the government the amount of the purchase price and of any premiums he may have received. Should he be found not responsible, the carcass of the animal is left to him in payment of the sum of 15 francs (\$3.00).

In order to encourage the custodians of brood mares to give all the care and attention necessary to keep in good condition any animals that may be entrusted to them, cash premiums may be awarded in recognition thereof for any mare kept in excellent shape.

In estimating the value of these prizes, the board will compute the amount in proportion to the increase in value of the mare since purchased and judged from its present condition. This amount cannot exceed 250 francs (\$50.00) the first year and 450 francs (\$90.00) the second year. These maxima shall be reduced to 150 francs (\$30.00) if the mare has remained unimpregnated.

Should the case happen, that, through lack of care, through negligence, abusive treatment or any other cause engaging the responsibility of the custodian, the original value of the mare has been depreciated, the board will estimate and decide upon the amount of the depreciation which should be charged up against the custodian, such sum to be paid by him to the government district treasurer.

If the board finds that the mare has become unfit for service in the army as a result of ill-treatment, it decides that the animal shall be relinquished to the breeder-custodian who shall refund to the government the amount of the purchase price as well as any premium which he may have received.

The findings of the board are without appeal.

BLOODED HORSES FOR THE CAVALRY.

THE following clipping from a New York paper has been sent us with a note that it should be of interest to all cavalrymen:

On February 15th, at New York, sportsmen from the North, South, East and West sat down to table at the Waldorf-Astoria at the first dinner of its kind in this country. Called in the interests of sport in general, there were more than 300 present, among them financial and social leaders in New York, Boston, Philadelphia, Cleveland and other cities.

August Belmont, chairman of the Jockey Club, which controls racing throughout the country, presided. Among others present were Hollis Rinehart, of Washington, D. C.; Dr. C. C. Burton and William H. T. Huhn, of Philadelphia; James W. Graves, of Richmond, Va.; Andrew Freedman and Charles K. Harrison, Jr., of Baltimore; Robert Glendenning, of Philadelphia; Thomas F. Ryan, of New York and Richmond, and Reginald Vanderbilt.

Henry W. Smith, a gentleman steeplechase rider and all-around sportsman, in introducing Mr. Belmont as toastmaster, said:

"This is not a dinner of racing men, polo men, or hunting men, but of sportsmen, in the broadest distinction. As Lord North truthfully said: 'There is a vast difference between a sportsman and a sporting man.' I know that every gentleman interested in the future of sport feels that the Jockey Club and its chairman have done their best to uphold clean sport under the laws of the state of New York.

"No matter how successful a country, a race of men, or a breed of animals is, there is always the necessity of infusing new blood, and for that reason I felt sure that the mingling of gentlemen from all parts of the United States with those here in Manhattan would bring most valuable results."

The responsibility for sport in America, Mr. Smith de-

clared, rested upon the shoulders of the true sportsmen. He thought that all ought to work together, and suggested that the work could be done much better if all worked from a central meeting place.

August Belmont, on being introduced, said with emphasis that the banquet had not the remotest connection with any movement looking toward legal relief for horse racing or appeals to the lawmakers for enabling legislation. Later he announced that he would offer to the government six stallions to start a national breeding bureau, following the lines of France, Germany, Canada and other countries. Included in his six are Henry of Navarre, which once brought \$30,000 at auction, and Octagon, the sire of Beldame, winner of a Suburban handicap, one of the greatest horses ever bred in any country.

Continuing, Mr. Belmont said: "Convinced as we are that our cause is a common one, we are gathered here tonight, as I interpret it, to promote, by means of friendly intercourse, every healthy, clean and invigorating sport where the horse plays a part. Every other nation of the first class encourages the development of the thoroughbred.

"The great nations of Europe and their governments foster the racing and breeding of thoroughbreds for the value they know they possess. That racing furnishes a recreation for the public is subordinate. There are attendant evils, and sportsmen and lovers of the horse should be encouraged in their efforts to correct and eliminate them.

"But destroying racing as a public institution is not helping the community. Upholding it and doing it justice by passing intelligent criticism upon racing faults is right, and we should frown upon the bigot, whose gloomy pessimism would turn God's flowers of the fields to a monotonous gray."

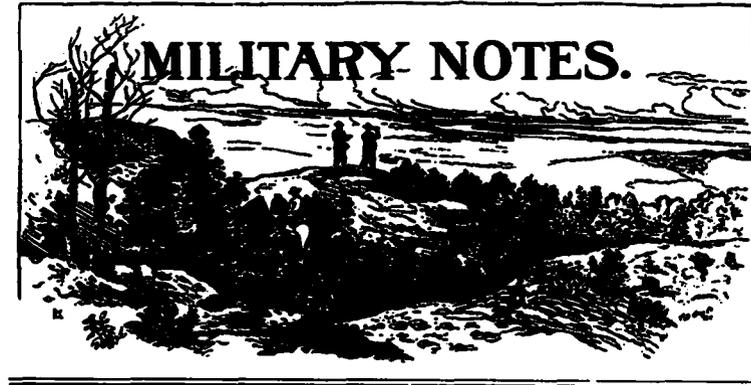
Mr. Belmont said the army is beginning to complain that it cannot readily find horses required for the cavalry.

"What would happen in case of war," he said, "if the cavalry had to be quadrupled, and instead of a good cavalry horse lasting ten years, as they do in times of peace, the remounts of the cavalry were lasting but sixty days, which, on good military authority, I am told is the average? Where would they come from?"

"I told General Frederick D. Grant last November that I would present to the army six good stallions, and I am going to offer this year and next to whoever the Secretary of War indicates to me to be the proper recipient, Henry of Navarre, Octagon, two Rocksand colts and two from other sires. Added to this, I shall offer free use of my stallions in Lexington."

Henry of Navarre is a famous horse, one of the most famous in the Belmont stables. Knight of Ellerslie was his sire and Moss Rose his dame. Among the races for which Henry of Navarre will be remembered was his winning of the Suburban handicap in 1896. While he was running he brought many victories to the Belmont colors.

Octagon is estimated to be worth about \$20,000. As a youngster he came out as a remarkable two-year-old in 1906, and he was a great sprinter in the three succeeding years. He was by Rey d'Or out of Ortegal. Those who were about the tables figured that, with Henry of Navarre and Octagon, the two Rocksand colts and the two others Mr. Belmont had promised, the value of his gift would be in the neighborhood of \$120,000.



A HIGH JUMP.

THE following extract from a letter from Captain Edward L. Anderson, the author of "Modern Horsemanship," "Horses and Riding," "Curb, Snaffle and Spur," etc., and who has always taken a lively interest in our cavalry, will be of interest to our readers:

"That mysterious packet which Captain-Commandant Crousse sent to me in your care, turned out to be some photographs of that splendid rider on his horse Conspiracy.* I have had one of these copied and am sending you an example that you may see what our officers are 'up against' at the London show. I am not afraid of Guy Henry or the others that we are sending, but I know that the horses against which they must contend are seasoned and well trained jumpers of first rate quality.

*See photograph of Captain Crousse, on Conspiracy, on page 722 of the Cavalry Journal for April, 1909.

"Conspiration must be at least twelve years old and his photograph shows with how much ease and grace Crousse and his charger are clearing seven feet, six and one-half inches. Of course Crousse is the champion, but Loenstein and many others are close behind him."



CAPTAIN CROUSSE WINNING THE CHAMPIONSHIP OF ST. SEBASTIAN BEFORE THE KING OF SPAIN.

(Height of jump 2.30 meters.)

THE SEAT AT OBSTACLES.

THE method of taking obstacles has been the subject of discussion at various times in the past few years in other countries as well as in our own. The fact that a particular individual may be successful at his jumps does not warrant the statement that his method is correct, and this could be carried still further by saying that the method of any particular country, however generally it be practiced in that country, is also not

sufficient to carry conviction as to superiority. In spite of the marked success of the Britishers at Madison Square and at Chicago it was clear to those who saw the riding and to those who examined photographs of the competitors of the several nations that the Britishers were not the best riders. They did, however, have horses that were superior to those of the other countries and they were well trained as a whole.

The practice of the Italian officers, the hunting field, the tendency of our own officers with increasing experience, and the seats of the majority of the best riders to obstacles wherever they be, confirm the wisdom of departing from the old custom of sitting vertical or of leaning backwards with legs thrust forward at jumps.

In recent years it is clear that Saumur has followed the method suggested in the article from *Le Sport Universel*, October 17, 1909, which follows:

"The full and complete utilization of the horse at obstacles is not in general practiced by our riders at Saumur. Many still keep up the old method of approaching the obstacle, that in vogue prior to 1900, which consists in maintaining the body at least vertical and more often leaning back, in not unloading the loins of the horse, and in maintaining one's own back horribly bent, the legs three-quarters of the time extended to the front with no point of contact with the saddle except the length of the thighs. This manner of jumping (be it understood with horses which are well trained and do not have to be carried to the obstacle), takes away from the mount a third of its strength and in racing makes him lose two lengths at each obstacle. It takes away from the rider all his suppleness and compels him to disastrous grabbing of the reins on the race-course and even in the horse show ring. Moreover, it does not give him an ounce more of solidity on landing when the horse is collecting himself.

"Let us suppose that our riders train their horses first over small obstacles, then over medium ones on the longe, then mounted; let us suppose they give their horses the habit of jumping and the necessary freedom which are the A, B, C of the profession, and the active equitation of which Captain Feline has spoken; finally, let us suppose them with stirrups somewhat short, adopting a method infinitely easier and more practical, therefore better than the old one.—then we would see obstacles taken that are unknown in the magnificent riding halls of Saumur,—obstacles of the type Caprilli, that extraordinarily clever and very advanced founder of the Italian method."

Probably the seat most to be commended for obstacles may be described as the one which requires the rider to be well down in the middle of his saddle, firmly gripping his mount with the calves of his legs and knees, body slightly forward, and hands

down. That seat should not involve rigidity of body, yet the hold on the horse should be so strong as not to bump him on landing. Under no circumstances should the horseman fail to give his mount full and complete immunity as to his head while jumping.

H. T. A.

EFFORTS TO IMPROVE THE ARTILLERY HORSE IN FRANCE.

REPORTS have frequently been made on the work of the National Society for the Encouragement of Army Horses. The work of this Society, though not intentionally, has been very largely devoted to the improvement of the *cavalry* horse acquired for the army. The "National Harness Horse Society" has now entered into the same field, with four competitions and prizes looking to the improvement of the draft horse for artillery. These competitions or horse shows are reported to have had a very real success, both in regards number of horses shown, their quality and encouraging results. Some of the trials were rather original, for instance, horses were required to go in harness three and one-half miles at rapid gaits, not only on roads, but over ploughed ground, fields, up steep slopes some of them one on five, hauling a minimum of 1,000 pounds. The same horse, immediately afterwards, would be saddled and made to trot and gallop over rough ground. These tests are said to have met with a great deal of approbation on the part of buyers, not merely for the army, but for general purposes. It was remarked that after having seen a horse tested in this way, a man ought to know what he was buying.

About a year ago the Minister of War instituted a series of very extended tests to determine the qualifications of a good artillery horse. The results of these tests were published in the *Revue d'Artillerie*. The most salient point brought out seems to have been that the big horse, the one frequently heretofore

preferred for artillery, could but rarely hold his own in a severe competition over all sorts of ground with the rather small, thick-set, sturdy beast which won the honors of most of these trials.

These competitions seem to have served to indicate the model of horse most likely to do good service in the artillery. The Harness Horse Society is doing all it can to stimulate the raising of draft horses of this model. The army will benefit by their efforts as well as the horse raisers.

T. B. M.

HORSES FOR OUR CAVALRY.

WE have been furnished with copies of two letters written to a horse breeder in Pennsylvania which show the lively interest that the War Department authorities are now taking in this question, which is of such vital importance to our Cavalry. They are given herewith below:

Dear Sir:—The Chief of Staff has fully expressed my views in his reply to you. The ideal hunter is the top-notch charger. Perhaps the views expressed by Lieut. Col. Lockett and Major Foltz, both of the Cavalry, regarding the clean bred horses they inspected at Mr. Thomas Hitchcock's farm on Long Island might be interesting in this connection:

"We first inspected a lot of young thoroughbred horses, ranging in age from yearling to four years old, with a view of determining whether the disposition and conformation of these horses were such as to make the type suitable for Cavalry practice.

"We found the horses remarkably gentle, docile and intelligent, of powerful and splendid conformation and perfectly suitable in every respect for Cavalry service. Of course, the cost of such animals would make it out of question for the Government to purchase these as mounts for the Army, but sires and dames of this type might be purchased by the Department of Agriculture, and so distributed as to introduce the type into the various horse-breeding sections of the country."

Naturally we cannot find, and do not expect to get, such extraordinary animals as the ideal hunter and horses such as some of those included in the number mentioned by these two

gentlemen, but the officers of the mounted service should always keep in mind a high standard type towards which their energies should be devoted. The Government would indeed be fortunate if it could secure half-breds of good temperament and conformation. A number of years will be required to bring that about.

In 1897, Count Lehndorf informed me that in seven years he had succeeded in increasing the blood (thoroughbred) in the horses of the German Cavalry by only about 10 per centum.

The horse that will suit the Cavalry will also be a most useful animal for nearly all farm purposes. It seems to me, therefore, that breeders would find a general demand in addition to the Government market for their young horses of the type described, and would be justified in breeding to it.

Very truly yours,

H. T. A.

R. P. McGrann, Esq., Lancaster, Pa.

Dear Mr. McGrann:—Replying to your communication regarding the most suitable horse for Cavalry purposes and the best way of breeding such animals, I beg to state that the primary considerations in the Cavalry horse is the capacity to carry considerable weight over rough country for a long period and oftentimes at a rapid pace.

The first condition eliminates a very light horse; the second and third require activity and endurance; and the fourth necessitates some speed. It is clear that certain types must be wholly eliminated and that suitable animals are to be found now in large numbers in very few localities in our country. This fact causes this Department to take the keenest interest in the subject of breeding service horses. The temperament of these animals is hardly less important than either of the essential attributes suggested above.

The principally recognized breeds of this country—Standard, Morgan, Hackney, Saddle—as is well known, are largely indebted to thoroughbred ancestry for some of their most noteworthy traits. This fact helps to confirm the opinion that good,

big graded mares, almost regardless of predominating strains, when crossed with selected thoroughbred stallions, should produce fairly good Cavalry horses. Probably the highest type of a charger would result from crossing a large thoroughbred mare, of excellent temperament and of big bone and muscle, with a stallion of similar qualifications. The Government cannot expect to secure such progeny as that would assure in sufficient numbers. The type of sire, however, crossed with good graded mares should give satisfactory mounts, and in general horses of much farm usefulness. If that policy of breeding were adopted by the farmers, in the course of a few years the Government would be able to secure enough young horses of a proper type to satisfy its peace requirements.

The following gives you a notion of what is now demanded of the service horse owned by officers:

Suitable mount (charger) as published in General Orders No. 125, War Department, 1908, is hereby interpreted to mean a horse with a minimum height of 15 hands, 2 inches and with a minimum weight of 1,000 pounds. The horse should be of good appearance and of such breeding and substance as will enable him to carry his owner over jumps of reasonable stiffness, including hurdles, ditches, fences and other obstacles simulating those which ordinarily would be met in going cross country.

Thanking you for your patriotic interest in improving the horses of the country, I am,

Very truly yours,

(Signed) LEONARD WOOD.

L. P. McGrann, Esq., Lancaster, Pa.

THE REVOLVER.

IN RE COLONEL GEORGE L. COWAN'S LETTER TO THE SECRETARY OF WAR.

THE revolver is pre-eminently the arm of the officer and of those who carry no other shooting weapon. If our troopers did not have a good repeating rifle, which is better for mounted work in large bodies than the revolver and equally as good in small detachments, it would be necessary to keep the revolver for all. For individual work, such as falls to members of patrols, many claim that the revolver is a peculiarly fit weapon. To meet that condition the revolver should be left in the hands of officers, of non-commissioned officers and of trumpeters.

The revolver served the Confederates well in a number of charges. They did not have a repeating rifle such as our present one. For horseback work this rifle would easily be the equal of both fire arms carried in the Civil War.

In all the Confederate charges it is clear that the horse was the principal weapon, and with the boldness displayed by Forrest, Stuart and Mosby on various occasions, even a good club in addition to the horse would have been highly effective. Frederick the Great absolutely prohibited the use of fire arms mounted. He compelled his troopers to rely entirely upon their horses and sabers. It has been claimed that out of twenty-two successful battles fought by him, fifteen were won by his cavalry.

In numerous ways we have departed from the practices of the Civil War. It is true we came out of that War with three weapons for the cavalry; we also came out of that great struggle with what are known to have been antiquated organizations and arms for all branches of the mobile army. The cavalry alone has retained its archaic organization and its equally out of date armament. We are still at variance with the best practice of all the rest of the world as regards cavalry armament and organization.

In spite of the intimate knowledge possessed by military nations of the achievements of the revolver in our Civil War, not one has seen fit to adopt it as an arm for its troopers. These nations have, however, recognized theoretically and practically the lessons learned from that War in regard to the use of one good fire arm for mounted troops—an arm that can be used both on foot and on horseback.

Considering all the circumstances connected with Colonel Cowan's service, the proportions of the engagements, the stage of development of the troops, the availability of various arms, his statements regarding General Forrest—"killed at least half a dozen men with his saber," "General Forrest himself thought highly of the saber." etc.—and the description of the engagement at Plantersville, wherein he says one volley with the carbine "emptied about twenty saddles," it would not be illogical to deduce from his letter that repeating carbines and sabers are the best weapons for our mounted service.

General Wesley Merritt confirms General Forrest's estimate of the saber in the following language:

"The pistol, in one form or another, is as old as gunpowder. Is it not strange then if all that is now said of it is true, that some little of its merits have never been known before? Mind you, I am not prepared to say that much that our essayists have written is not true, but I beg of these gentlemen, for the sake of their own cause, not to attempt to discredit a weapon (saber) whose record is a blaze of glory, by an arm (revolver) whose single exploit dates back to the Civil War, and whose one title to effectiveness is the massacre of a party of unskilled, undrilled volunteers by a band of Confederate 'irregulars'."

The following by Colonel William Brooke-Rawle, who participated in the Rummel's Farm attack by Generals Hampton and Fitz Lee, shows that the saber was gaining adherents over the revolver as the war progressed:

"The orders of the Confederate officers could be heard, 'Keep to your sabers, men, keep to your sabers!' for the lessons they had learned at Brandy Station and at Aldie had been severe. There the cry had been, 'Put up your sabers! Draw your pistols and fight like gentlemen.'"

It is no longer a question between saber and revolver, but a question as to whether cavalry, in such large bodies as future wars will demand, should have two modern fire arms.

The present contention is: the modern rifle or carbine is for mounted fire in large bodies superior to the revolver; for other mounted work it is by and large the equal of the revolver; while for action on foot it is absolutely indispensable. Our present policy of having two shooting weapons is, therefore, unnecessary, burdensome, and expensive.

Officers, non-commissioned officers (sergeants at least) and trumpeters should have revolvers, but not carbines or rifles.

X.

POLO IN THE ARMY.

To The Editors:

Knowing that the subject of Polo is an interesting one to most of your readers, I am taking the liberty of suggesting the publication of photographs of model Polo horses of the different army polo teams.

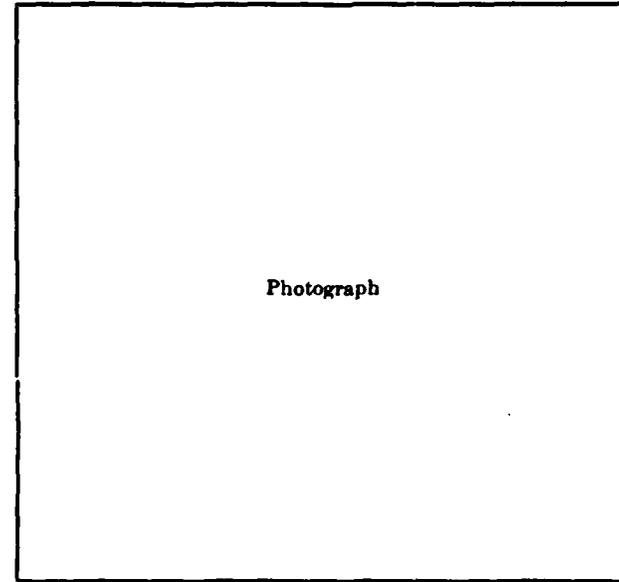
I am enclosing a form which we use here for registering all polo horses of members of our polo club.

If you care to use any of our set of photographs, I shall be glad to lend you the same from which you may be able to select interesting types.

F. B. HENNESSY,
Captain and Comissary Third Field Artillery,
Polo Manager.

POLO HORSE DESCRIPTIVE LIST.

Name of Horse..... Name of Owner.....
Purchased:
From whom..... When..... Where.....
Sex..... Color..... Age.....years. Height.....Hands. Weight.....lbs
Breeder..... Sire..... Dam.....



Photograph

Registered Polo Manager.

The Editor will be glad to receive and publish cuts of horses not only that are suitable and typical polo ponies but also of other horses that are believed to be those best suited for troop horses and officers' chargers. This for the purpose of obtaining the views of our horsemen as to the best types of horses for service and sport and of conveying their ideas to our readers. We hear many conflicting statements as to the relative merits of the Virginia and Missouri horses to be seen at the Fort Reno Remount Depot and as but few of our mounted officers are able to inspect these horses personally, photographs of the best of those from different sections of the country would be interesting and instructive.

The following from the Daily Express of San Antonio will be of interest to our polo players:

"The Third Field Artillery polo team was given the hardest fight it has had this season yesterday afternoon on the

Lower Post parade at Fort Sam Houston. After a fast game, in which each side used subs, the Artillery defeated the Freebooters by the score of 9 to 3.

"The game was marred by an accident to Dr. J. A. Edmunds, the veteran polo expert, who played awhile with the Freebooters. In a collision nearly in midfield his horse fell with him. At first he was thought to be severely injured, but he was able to walk from the field, having nothing more serious than a twisted right shoulder and a general shaking up.

"The game was a full one of eight periods, and it was fought hard all the way. The Freebooters team played far better than it had ever before, Noland and Meadows in particular showing improvement. The Artillery had a shade the better of combined play, and in this manner was their game won. The line-up:

Artillery (9).

Freebooters (3).

Lieuts. Mortimer-Downer..No. 1.....Mr. Meadows
 Capt. McIntyre (captain)..No. 2...Dr. Edmunds-Mr. Noland
 Capt. Hennessy.....No. 3.....Lieut. Krogstad
 Lieut. Hughes.....No. 4..Mr. Noland, Lieut. Baehr"

We have received inquiries from a foreign publisher for the names and addresses of polo clubs in the United States Army and will be pleased to receive the same from managers or the presidents of such clubs.

INCIDENT IN AN ARGENTINE RIDING SCHOOL.

From the British Cavalry Journal.

"When visiting the barracks of a cavalry regiment in the Argentine Republic recently I was shown a recruits' ride where they were taught to ride over a series of jumps without reins or stirrups. In order to show that they were not losing their heads with the strain of riding, they had to keep shouting aloud the theoretical training which they had imbibed that morning.

"One recruit was galloping around shouting, 'The Republic has as its President the distinguished Senor Don Porro.' Just then his horse hit a fence hard and rolled over, but the gallant recruit, as he turned a 'cart-wheel' in the air, went on to shout, 'And the name of the Adjutant General of the army is Aguirra.' And as he sat up, finally landed, bruised and dizzy, he was still heard crying, 'And the colonel of the regiment is Marco di Palo.'

"R. S. S. B-P."



 CAVALRY TRAINING AND ORGANIZATION.

THE article in the March number of the CAVALRY JOURNAL on the subject of cavalry training and target practice and the two comments thereon have attracted much attention from our cavalry officers, and many deem it the most important question that has been discussed in the JOURNAL for many years.

Herewith below will be found extracts from some of the letters received upon this subject and other kindred matters:

"The March number of the JOURNAL was received this evening and I wish to say that this number has given me hope that there is really to be something done about getting rid of the infernal infantry rifle and all the trouble that it causes.

"In my humble judgment the comments on Captain Booth's article itself should be agreed to heartily by every officer of cavalry. To my mind these gentlemen have told the truth, and it is a source of a great deal of pleasure to read these articles, for I have been preaching these very ideas for some time. Please say to the officers who wrote these comments on Captain Booth's article that I congratulate them, and him also.

"I also think Captain Short's article should be read and remembered by all cavalymen and that we should see to it that the Mounted Service School is kept up along these lines.

"Major Mott's article is splendid and every cavalry officer should read it.

"This is as far as I have read this number, but there are enough to animate the true cavalry spirit in any one having a spark of it in him and I simply had to stop to inflict this hasty note on you.

"This is not meant for publication, but is just to let you know that I appreciate your work and judgment in the selection of articles for the JOURNAL and to place myself on record as being in line with the spirit and desires of the writers of the articles mentioned."

"It is a source of much satisfaction to know that the officers at Leavenworth are giving the cavalry branch special and earnest consideration. It is quite probable that we are on the eve of some valuable and rapid strides in the improvement of our arm. It is to be hoped that by the time the next Congress convenes we will have adopted a well-rounded policy for a proper mobile army, in which the cavalry will receive a modern organization. The armament, I trust, will be settled before that time arrives; in fact, the Cavalry Board ought to be in possession of a decision now in order that it might be prepared to make the necessary recommendations as to equipment, adjustment of weight, etc.

"Besides organization and armament, the question of the stationing of cavalry is now to the fore. As you know, strategic reasons and economical considerations have had far less to do with determining our stations than political exigencies and concessions. In my opinion, we have gone decidedly far in the direction of time given to target work as suggested in Captain Saxton's paper. I very much doubt, however, whether, under the prevailing sentiment in all countries in favor of a cracker-jack long range weapon we could now successfully advocate a carbine, but it seems to me, however, that a discussion of this matter in the CAVALRY JOURNAL would be opportune.

"We are accomplishing certain matters administratively that have considerable bearing on the mounted branch. For example: in the orders to be published at a very early date, a description of a suitable mount and also a description of the cavalry seat such as conforms to the best modern usage. The value of a remount station continues to show that its conception was most wise and beneficial to the service. We hope that the same may be said of the training that these new horses will get

when they arrive at the various posts. The establishment of a field officers' course at Fort Riley, to take effect April 1st, ought also to have a very far reaching effect on the mounted service. All in all, there is reason to believe that some headway is being made, but it is altogether too slow and we are handicapped by the most fundamental of all things connected with our service—an archaic organization."

"In re Leavenworth Plan.

"This is most interesting. The professional zeal is indicative of a progress that all of us keenly desire.

"The fundamental requisite to success in the direction indicated is a *cavalry* organization—not an infantry one nor a three-fourths (three battalions of three troops each) infantry one. Upon that all of us should unite, for as soon as it be attained the rest of the Army, as well as ourselves, will take the cavalry for what it should be—'a special corps belonging to the Army.'

"All the other improvements are unimportant as compared with this in bringing out the special corps idea.

"From various cavalry sources a composite opinion is left of an unnecessary backwardness in proclaiming, or rather in stating, our requirements. There seems to be a conflict between timidity and cold reason cloaked under what might be called policy or political exigency. This is shown by the modest drafts of proposed reorganizations for the cavalry and the unpretentious measures suggested for its advancement. Possibly the timidity may be army conservatism, a characteristic which thrives when rank and responsibility are not commensurate with age. It is not fair to the Service nor just to Congress to advocate any measure that falls short of what theory and best practice declare correct.

"In spite of our wonderful cavalry experience in the Civil War, we should not rest complacently on the organizations and armaments with which we emerged from that great struggle. Barring the cavalry, the organizations and armaments of the rest of the mobile army have been largely changed. We emerged from the Civil War with many ideas that have weighed heavily

upon our military efficiency by delaying acceptance of modern methods. Surely our aim should be up-to-date policies and measures, and in arriving at them we must be influenced by the best practices of progressive and aggressive nations. If all the nations of the world, including Oriental ones, adopt practically the same organization and the same armament for the same branch, it is not a chance measure, but should be highly suggestive to us. To say that American terrain and American tradition and character differentiate us from all other nations to such a degree as to demand a radical departure from universally accepted practices is a reflection on our judgment.

"It is a fact that no nation has a cavalry regiment consisting of more than six troops (most of them smaller), and no nation gives its mounted men more than two weapons each. If the above premises be sound, then Army conservatism rather than reason is dominant when regiments of more than six troops and more than two weapons for troopers are advocated.

"Frederick the Great was enormously successful with his cavalry, yet he forbade it using any whatever fire arm. Under changed conditions all the world has seen fit to give its cavalry one shooting weapon—a long range one; but no nation except our own has seen fit to provide two shooting weapons for its troopers.

"It therefore follows that as to armament and organization of cavalry all other nations of the world are wrong. If this last statement be correct, then we are right; if it be incorrect, then we are wrong, in which case we should use our most earnest efforts to change our system of organization and armament."

WASHINGTON AND CAVALRY.

REFERRING to the article, under the above title, that appeared in the January, 1911, number of the CAVALRY JOURNAL, by General Charles Francis Adams, we have received from Lieutenant G. C. Thayer, First Troop Philadelphia City Cavalry, copies of correspondence had by him with General

Adams regarding the statement made in that article that Washington had no cavalry in his army during the campaign of Trenton and Princeton.

The following are extracts from this correspondence:

LIEUTENANT THAYER TO GENERAL ADAMS:

"I have read with much interest your article recently published in the CAVALRY JOURNAL concerning the absence of mounted troops with Washington during the Revolutionary War.

"I desire to call your attention, however, to what is apparently an error in your article in the statement that Washington had no mounted troops with him during the battles of Princeton and Trenton.

"The First Troop Philadelphia City Cavalry, then known as the 'Philadelphia Light Horse,' under the command of Captain Samuel Morris, accompanied Washington's Army during this campaign and took part in the above mentioned battles.

"The Troop regards with particular pride its record in this campaign. The original Troop standard carried during that period is at present in the Armory, as well as a portion of a Hessian flag taken from a body of Hessians whom they captured during the battle of Trenton.

"In January, 1777, the Troop received an autograph letter from General Washington, thanking them for their services. The original of this letter * * * is at present in possession of one of the descendants of Captain Morris. * * *

"I enclose for your information a *fac simile* of this letter."

GENERAL ADAMS TO LIEUTENANT THAYER:

"I do not recall that I had said that Washington had with him no mounted troops at all during the affairs of Princeton and Trenton. If, however, I did make any such statement I at once accept your correction. In the different accounts I have read of those operations I had come across no mention of the presence of mounted troops of any description. In fact, during the whole of Washington's operations, from Kips Bay in early September down to the Trenton affair in January, I do not recollect a single reference to cavalry as cutting any figure in what occurred.

"I am, therefore, under the impression that the Philadelphia Troop must then have acted as a species of headquarters escort, or what might be termed a body-guard for Washington in person. That as such it did escort and orderly service, and was repeatedly more or less under fire could not admit of any question. I should like further evidence, however, that it was ever engaged in what are known as cavalry warfare.

"The first suggestion of such warfare I have come across is in the case of what was known as Pulaski's cavalry at the battle of Germantown. Then for the first time this arm of the service had been brought under the command of what might be considered a cavalry commander. Both previously and then the cavalry organizations had been largely divided up under the immediate direction of those in command of divisions of infantry.

"It was during the Valley Forge winter that the first attempt was made towards a distinct cavalry organization, proposed to be used as such.

"I am now engaged in preparing a paper on the subject to which you refer, as part of a volume of Miscellaneous Papers, and if I am in any way in error as to the above, I should like to be advised thereof, and also have my attention directed to sources of information which have escaped me."

FAC SIMILE OF WASHINGTON'S LETTER:

The Philadelphia Troop of Light Horse under the command of Captain Morris, having performed their Tour of duty are discharged for the present -

I take this opportunity of returning my most sincere thanks to the Captain and to the Gentlemen who compose the Troop, for the many essential Services which they have rendered to their Country and to me personally during the Course of this former Campaign. Tho' composed of Gentlemen of Station, they have shown a noble example of discipline and subordination, and in several Actions have shown a Spirit of Bravery which will ever do Honour to them, and will ever be gratefully remembered by me.

*Given at Head Quarters at
Morris Town this 23^d Jan. 1777.*

G. Washington

REORGANIZATION.

THE CAVALRY JOURNAL wants some well thought out papers on this timely subject.

Our cavalry, besides differing from that of all other armies in methods and training and in the lack of attention given to the horse and to horsemanship, differs from all others in organization.

Long dissertations on what "I think" with little or no basis therefor are not of much use, but deductions from cavalry history, except that confined to Indian or partisan warfare, or based on the principles enunciated by great cavalry leaders or on a consensus of the opinions of all other nations, modified to agree with our political and other conditions, are greatly needed.

Below are some of the points which need careful study by the officers of our arm:

1. The number of units most suitable in the troop, squadron and regiment.

In large commands the three unit system meets tactical requirements. In the regiment and smaller units, the three unit system makes it practically impossible to go into mounted action except in three lines of equal strength. The necessity for our present organization is usually stated to be because it is more suitable for dismounted action. A dismounted squadron has about the same number of rifles as a foreign company. No foreign battalion is made up of three companies.

For the work of the contact squadrons about 200 sabers makes the most suitable force for each road. Both theory and history shows that to be true.

2. The necessity for a "home squadron" and localized recruiting.

We once tried or alleged to have tried having "home squadrons" and soon gave up the experiment. Abroad they are universally used. Localized recruiting and a sort of permanent home station have many points of superiority over our present lack of system.

3. Hand in hand with the second proposition goes the

necessity for in peace devising some means for recruiting men and horses in time of war. If the localized recruiting district and home, or better "training," squadron is not to be used, what can we devise as a practicable measure for keeping our cavalry up to efficient strength in time of war?

4. Strength of our regiments. Foreign regiments are much smaller than ours but are gradually increasing in size.

5. The rank of officers. Nearly all reorganization schemes are devised to give promotion to some one or more officers. Can we not consider this question on the basis of the best arrangement for promoting the fighting efficiency of our cavalry? Foreign squadrons are commanded by captains. The squadrons are made up of platoons under the command of lieutenants. These squadrons are smaller in size than ours but larger than our troops. Between the platoon and the regiment is one intermediate organization instead of two as with us. Foreign infantry battalions are commanded by a major. His command can put about the same number of rifles on the firing line as our regiments. He can at least put on the firing line twice as many men as can our battalions. So parallels in rank of foreign commanders are not to be obtained in either arm. Independent of jealousies as to rank or promotion what is the most useful organization in respect to officers? Considering, as we must do, their jealousies, etc., what is the most suitable arrangement for us?

6. Machine gun troops. Should they be troops as our organization now makes them or should there be only a platoon? Or, should they be armed with a very light weight machine gun and one or two with a pack horse of ammunition be a permanent part of each squadron?

This question of reorganization of our cavalry is going to come up in the near future, possibly before the next Congress, and it behooves our cavalry officers to consider it fully and, if practicable, settle in their own minds what is wanted or needed to put the cavalry arm on a basis of fighting efficiency.

We have many capable officers who are able to intelligently discuss this matter and it is hoped that they will "get busy" and let us have their best efforts in this line. The Executive Council will pay for good articles under this head.

BOOKS.

"Of the making of books there is no end."

AS has been noted several times in the CAVALRY JOURNAL, our Book Department was organized with the sole end in view of supplying our members and subscribers with the best and latest military books at the lowest practicable cost to them and with no idea that it was to be a money-making business. Of course, it was not intended or expected that the Association would lose any money in the business but, at the same time, it was the intention to make only enough profit to pay for the extra clerical work that it would entail and to insure the Association against loss.

With the above object in view, the prices of books published by the Association were fixed as low as would clear the Association in a reasonable length of time and, after paying all expenses, return a small profit. Also, in selling books published by others, the discounts obtained have been divided between the Association and the purchaser in case the latter is a member of the association or a subscriber to the JOURNAL. In other words, we have a lower price for our members and subscribers wherever our contracts with authors and publishers do not prohibit such lower prices.

The Secretary of the Association is willing and anxious to serve our members and subscribers in looking up the best and latest books on any subject, military or otherwise, and has in the past been of service to many in this line. Scarcely a day passes but that some inquiries are made regarding the latest and best authorities on certain particular subject or to quote prices on certain lists of books.

In addition to supplying books, the Association has recently arranged to place orders for subscriptions for periodicals of all kinds and the business in this line has been no small item. Many troops have availed themselves of this opportunity to order their subscriptions through us, and, it is believed, to their satisfaction as well as profit. We are prepared to quote prices on nearly all foreign military periodicals and to supply them at the lowest possible cost.

We have recently published two books that are attracting attention and which should be in the hands of every reading officer. The first of these, while being a cavalry book, yet is of enough general interest to the officers of the other branches of the service, especially to those who keep up with the operations of all arms, as to be of use to them also. This is Captain Gray's "Cavalry Tactics as Illustrated by the War of the Rebellion" which is a peculiar book in many respects. It is made up from extracts from reports and accounts, taken principally from the Rebellion Records, of cavalry engagements during the Civil War and the author's comments thereon. Each extract shows the source from which it was taken and on the margin are notations showing when and where the battle or engagement took place and short, pithy remarks as to what it illustrates.

The reviews and notices of this book have been flattering and there is no doubt but that every cavalry officer of our service should have a copy of it.

This is Part I of the complete work that Captain Gray expects to bring out. He writes that the third part is ready for publication but that it will be impossible to complete the second part until he returns to the states where he can have access to the necessary maps and books of reference.

The following is an extract from a review of Captain Gray's book that appeared in a recent number of the *United Service Magazine*:

"The author further considers that there is no modern accepted principle of cavalry tactics which was not fully illustrated in the American Civil War, and that no subsequent campaign has added, in any respect, to the cavalry tactics therein daily applied. Captain Gray then gives a brief history of the organization and armament of the United States Cavalry and devotes the remainder of the book to the brief enumeration of the examples of cavalry operations taken from the Records—for the most part Federal—of the War of the Rebellion and especially from the opening of the 1863 campaign, when the Federal cavalry was beginning to emerge from what may perhaps be described as its novitiate.

"This purports to be Part I of a larger work, of which

the second portion—the troop-leading of cavalry—is to illustrate the decisions based on the principles here shown."

The other is that of Krueger's translation of the first volume of the fourth and latest edition of Balck's *Tactics*. Those who are familiar with the previous editions of this work, which is a standard authority in Europe as well as in this country, know that the original is in six volumes and covers all the principles of tactics throughout its various ramifications.

This first volume is entitled, "Introduction and Formal Tactics of Infantry" and while, as its title indicates, it is devoted mainly to the tactics of infantry, yet it deals with general tactical questions that should be known by all officers, especially the chapters devoted to "Infantry vs. Cavalry" and "Infantry vs. Artillery."

The second volume of this work is now being translated and will be published in the near future. It relates to the subjects of the tactics of Cavalry and Field Artillery.

We have under consideration the question of publishing the translation of this second volume serially in the *CAVALRY JOURNAL*, or at least that portion of it relating to cavalry, and later in book form. Also, it is just possible that the *Journal of the Field Artillery Association*, when started, may publish the part relating to that arm.

Throughout Colonel Balck's work, he illustrates every principle laid down by what was done, or should have been done, in different wars and comments freely upon the actions in the Russo-Japanese War, the Boer War, as well as others, and illustrates the changes in tactics by the experiences gained in these wars. He also tells what is considered the best tactics of all other armies and draws freely from their Field Service Regulations.

THE AMERICAN RED CROSS.

THE American Red Cross announces, in connection with the International Conference of the Red Cross which will be held at Washington, D. C., in May, 1912, that the Marie Feodorovna prizes will be awarded.

These prizes, as may be remembered, represent the interest on a fund of 100,000 rubles which the Dowager Empress of Russia established some ten years ago for the purpose of diminishing the sufferings of sick and wounded in war. Prizes are awarded at intervals of five years, and this is the second occasion of this character. These prizes in 1912 will be as follows:

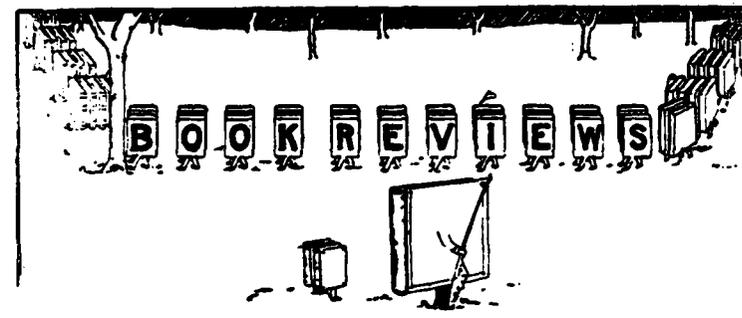
- One of 6,000 rubles.
- Two of 3,000 rubles each.
- Six of 1,000 rubles each.

The subjects decided upon for the competition are:

- (1) Organization of evacuation methods for wounded on the battle field, involving as much economy as possible in bearers.
- (2) Surgeon's portable lavatories for war.
- (3) Methods of applying dressings at aid stations and in ambulances.
- (4) Wheeled stretchers.
- (5) Support for a stretcher on the back of a mule.
- (6) Easily portable folding stretcher.
- (7) Transport of wounded between men-of-war and hospital-vessels, and the coast.
- (8) The best method of heating railroad cars by a system independent of steam from the locomotive.
- (9) The best model of a portable Roentgen-ray apparatus, permitting utilization of X-rays on the battle field and at the first aid stations.

It rests with the jury of award how the prizes will be allotted in respect to the various subjects. That is to say, the largest prize will be awarded for the best solution of any question irrespective of what the question may be.

Further information may be obtained by addressing the Chairman, Exhibit Committee, American Red Cross, Washington, D. C.



Organization.*

To give our readers an idea of the contents of this admirable book, it is only necessary to quote the first paragraph of the author's preface: "The author was led to compile this account of Army Organization owing to his inability to discover any book dealing systematically with that subject. Military writers do, of course, make frequent allusions to organization, but a previous acquaintance with the subject is generally assumed. One looks in vain for an explicit account, either of the principles underlying organization, or of the development of its forms or methods." Part II of the book describes the organization of the British Army in considerable detail. The appearance of the opinions of the distinguished author at this time is very opportune, for the principles enumerated by him, and backed up by eminent authorities, should be carefully studied by those in our own service who may be concerned with a proposed reorganization of our cavalry. It is not going too far to venture the opinion that we now have a most desirable organization for United States Cavalry, as tested by certain principles well set forth in this book. That continental nations have not such an or-

*"ORGANIZATION: HOW ARMIES ARE FORMED FOR WAR." By Colonel Hubert Foster, Royal Engineers. Hugh Rees, Ltd., London, 1911.

ganization, and that they do not advocate it for themselves, is due, more than likely, to the fact that they cannot afford it, and not to the fact that they do not recognize it as desirable.

This is a book that every officer of the army should read and thoroughly digest the principles therein contained. Those concerned with our cavalry organization might then conclude that what our cavalry needs is not *reorganization*, but a war strength of about eighty men per troop, *maintained in times of peace as well as in times of war*, thus obviating fifty per cent. efficiency by filling up with recruits and untrained horses at the very moment when 100 per cent. efficiency is most needed.

In Part II the author states that the British Army, just reorganized after a most careful study of the organizations of all the important foreign armies, and with the lessons of the recent large wars fresh in mind, is the best organized army in the world and gives his reasons therefor. This statement alone offers data for study and reflection, sufficient to impel the reading of the book. S. X.

**Yin-kou
and
San-de-pu.***

This, the fifth volume of the German Official Account of the Russo-Japanese War, was received for review some weeks since and turned over to the officer who has written the reviews of the four preceding volumes. Owing, however, to his absence with the forces concentrated on the Mexican border, he has been unable to furnish the promised review in time to appear in this number of the CAVALRY JOURNAL.

The following notice of this publication has been taken from the United Service Magazine for April, 1911:

"In this volume are contained accounts of operations which had no particular bearing on the result of the campaign, and

*"Yin-kou and San-de-pu. German Official Account of the Russo-Japanese War." Authorized translation by Karl von Donat. Hugh Rees, Ltd. London, 1911. U. S. Cavalry Association Sole Agent for the United States. Price \$3.00.

which were undertaken during the general cessation of hostilities consequent upon the exhaustion experienced by either belligerent after the ten days' fighting on the Scha-ho. The first of these operations was the cavalry raid under Mishtshenko—one which is of supreme interest because it is the first example in modern war of the strategic employment of cavalry outside its sphere of reconnoitering and protective duties, and of cooperation with the other arms on the battlefield; and there appears small doubt that much might and ought to have resulted had the raid been properly carried out, and had it been combined with the general resumption of the Russian offensive. But no steps were taken to insure secrecy—the raid had been openly discussed long before it took place; it was an isolated operation; while the main objective ought to have been the Japanese lines of communication, this—the interruption of the railway line—was practically abandoned in favor of what was a purely secondary object—the destruction of the magazines at Yin-Kou; and finally in the actual execution are noticeable a want of energy, a slowness of movement, an anxiety rather to keep open the line of retreat than to carry out the allotted task at all risks, and at whatever cost. The battle of San-de-pu was an attempt to employ the great numerical superiority of the Russians in the delivery of an overwhelming attack before the Japanese third army could reach the theater of operations. In this battle Kuropatkin had a balance to the good of something like 80,000 men, and the initial results of the fighting were on the whole favorable to the Russians. But the attack was halting and undecided; the Russian commander seemed throughout to be not so much bent on annihilating the enemy as on guarding himself from defeat; although the plan was good and the moment favorable, Kuropatkin's energy did not equal his intelligence; and a large portion of his fighting strength was permitted to lie idle. In this official account of the battle of San-de-pu, it is correctly described as an episode; but it was one which resulted in a wholly disproportionate number of casualties, and which again surrendered the initiative to the Japanese. The operations are described in great detail and the comments are very just; the maps are fully equal to those which have accompanied the earlier volumes."

**Tenth
Foot.***

This is an interesting account of the services of the Xth Foot of the British Army from its organization in 1685 until the

present time.

Instead of briefly recording the services of the regiment, the author relates them in connection with the events of which they form a part, thus greatly enhancing the readability of the work.

Perhaps no other regiment of the British service, and certainly none of any other army, can look back upon more varied service than the Xth, which served in Ireland, Flanders, Canada, the United States, the West Indies, India, Egypt, Gibraltar and other Mediterranean stations, Straits Settlements, Japan, and South Africa, and fought at Blenheim, Ramillies, Oudenarde, Tournay, Malplaquet, Lexington, Bunker Hill, Mooltan, Goojerat, Luknow, and Omdurman, and participated in the Peninsular Campaign and the South African War.

To us, naturally, the most interesting feature of this history is that which deals with the part played by the Xth in our Revolution, in which the regiment participated in practically all the important engagements until reduced to only 39 men, according to the monthly return of the regiment for January, 1779, whereupon it was sent home to recruit. There is a striking similarity between the British policy of letting a regiment dwindle away until practically nothing was left of it and our own policy during the Civil War.

The work contains many interesting details in regard to recruitment, pay, bounties, uniforms and equipments since its organization.

Apropos of recruitment, a fac simile of an ancient recruiting poster is shown on p. 337 (Vol. 1), which is interesting as showing the conditions governing enlistments at the close of the 18th Century. This poster states among other matters:

"Let all those who delight in the honorable profession of arms, and disdain the drudgery of servitude, repair without

*"The History of the Tenth Foot (Lincolnshire Regiment)." By Albert Lee, Ph. B., F. R. G. S. Published for the Regimental Committee by Gale & Polden, Ltd., Wellington Works, Aldershot, England. Price 25s. net.

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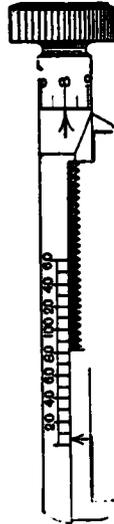
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A complete list of all the officers who served in the regiment: its organization with a record of their services is appended to volume two.

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No greater compliment can be paid the author than to say that the regiment has indeed been fortunate in the selection of its historian.

K.

Das
Pferd.*

We have received sample copies of a new foreign periodical under this title, the first number of which was issued in December last. It is a semi-monthly that is devoted entirely to literature on the subject of the horse and is probably the only one in the world that is exclusively a horse magazine. It is edited by Oscar Fritz and published at Basel, Switzerland, on the 15th and last of every month.

It is said that the Editor, who is the "Kantons und Universitats Stallmeister," has traveled in England, France, Germany and Austria and knows all that is worth knowing about the horses of those countries and the men who breed and ride them. The magazine is well illustrated and, judging from these initial numbers, would be of great interest to those of our horsemen who can read German. The subscription price is nine francs.

+ | **Publisher's Notices.** | +

REVIEW OF REVIEWS COMPANY.

Attention is called to the advertisement of the CIVIL WAR PICTURES that have been reproduced by this firm. The originals were made by the famous photographer, Mathew Brady, who followed the army in the field during that war.

WARNOCK UNIFORM COMPANY.

This well known firm, dealer in military goods, again appears among our advertisers. It having been established in 1838, makes it probably the oldest firm of its kind in the United States.

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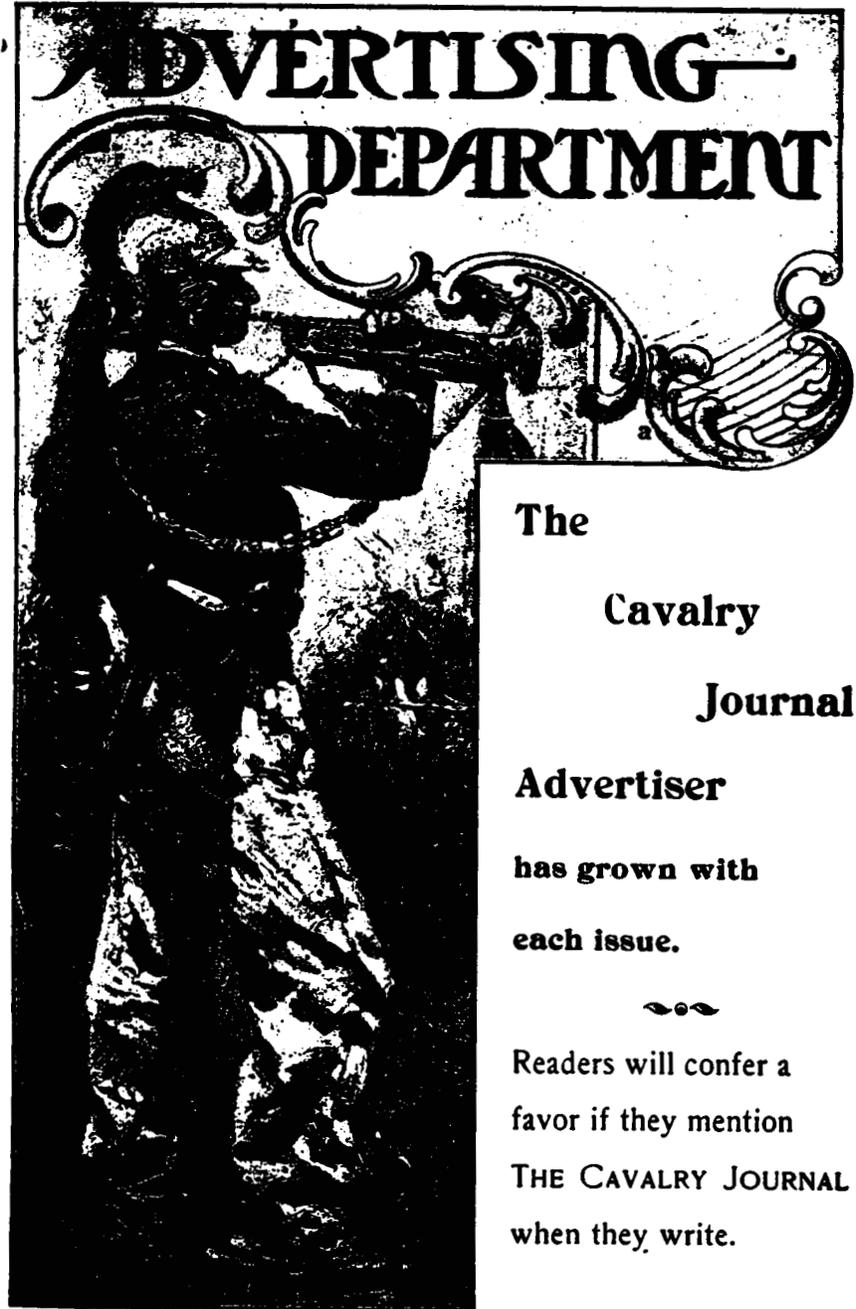
This firm, dealers in ATHLETIC SUPPLIES, has been well recommended as one that has built up a reputation for fair dealing and reliability. They claim to supply "only the best."

THOS. J. CONROY.

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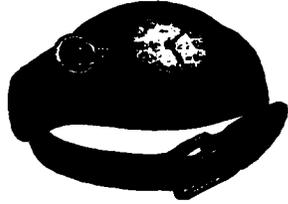
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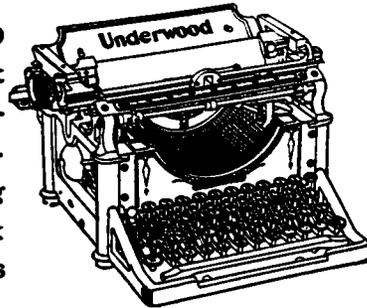
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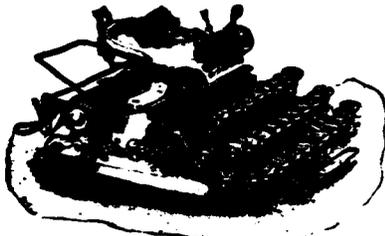
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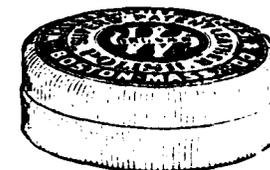
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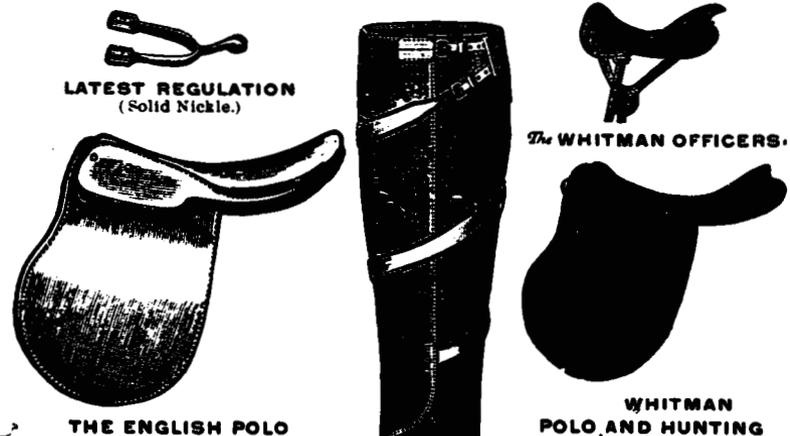
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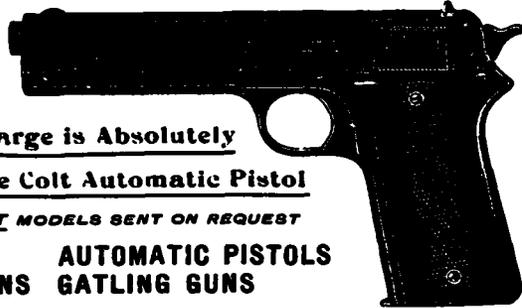
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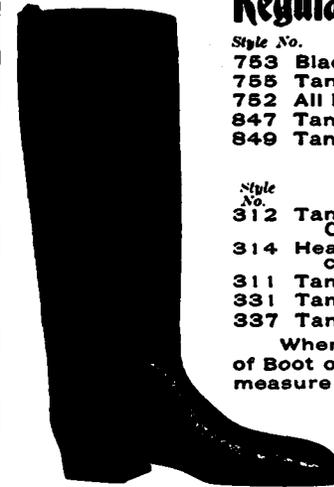
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INDEX.

	PAGE
Abandoning the Pistol, Reference to (Military Notes).....	391
Advanced Guards of Armies, Composition of. (Translation).....	335
Advanced Retrogression of Our Cavalry, The.....	1153
Aeroplanes with Cavalry. (Reprint).....	311
Aeroplane Under Fire, The First. (Translation).....	1128
Airships and Cavalry in the Reconnaissance Service. (Translation).....	873
American Horse, Notes on the Progenitors of Certain Strains of the Modern	437
<i>Vet. Coleman Nockolds</i>	
American Red Cross, The. (Editor's Table).....	986
Apology, An. (Editor's Table).....	985
Armament and Equipment of the Cavalryman.....	76
<i>E. H. Gilpin</i>	
Armament and Needs of Modern Cavalry. (Translation).....	113
<i>Harry Bell</i>	
Armies of the Nineteenth Century, Improvised. (Reprint).....	532
Arms to be Carried by Cavalry. (Military Notes).....	147
Army, A Mobble. (Editor's Table).....	1187
Army, Developing a Reserve.....	299
<i>Capt. J. S. Barrows</i>	
Army Officer in Japan. (Book Review).....	958
Army Remount Problem, The. (Reprint).....	1104
Army, Remount in French. (Military Notes).....	770
Army, The Chilian.....	483
<i>Lieut. F. A. Ruggles</i>	
Associations, Branch. (Editor's Table).....	785, 984, 1198
As to Polo. (Book Review).....	572
Bag Cookery, Paper. (Book Review).....	393
Barrack Life, The Russian Soldier's. (Military Notes).....	148
Barr and Stroude Range Finder and its Use in Night Firing	401
<i>Lieut. Col. W. C. Brown</i>	
Barr-Stroud Range Finder, The. (Editor's Table).....	787
Battle of Shiloh. (Book Review).....	157
Battle of Shiloh, The.....	428
<i>J. W. Rich</i>	
Best Color for Horses in the Tropics.....	848
<i>Capt. C. C. Smith</i>	
Best Color for Horses in the Tropics.....	243
<i>Lt. Col. Chas E. Woodruff</i>	
Boat, Submarine. (Book Review).....	961
Books, Three Valuable.....	1150
<i>Maj. M. F. Steele</i>	
Boy Scouts. (Reprint).....	357
Branch Associations. (Editor's Table).....	785, 984, 1198
Breeder's Cup, The. (Editor's Table).....	2000
Breeding Horses for the United States Army. (Reprint).....	97
<i>A. D. Melvin</i>	
Breeding in Hungary, Horses.....	417
<i>Maj. H. T. Allen</i>	
Cadet Life at West Point. (Book Review).....	573
Campaign, Medical Service in. (Book Review).....	957
Campaigns, Maneuver Camps vs. Maneuver.....	85
<i>Capt. W. D. Chitty</i>	
Campaigns, Maneuver Camps, vs. Maneuver. (Military Notes).....	375
Camps, vs. Maneuver Campaigns, Maneuver.....	85
<i>Capt. W. D. Chitty</i>	
Camps vs. Maneuver Campaigns, Maneuver. (Military Notes).....	375
Care of the Cavalry Horse. (Book Review).....	980
Castrametation, Notes on.....	766
<i>Col. James Parker</i>	
Cavalry. (Editor's Table).....	1196
Cavalry, A Chief of. (Editor's Table).....	1194
Cavalry, Aeroplanes with. (Reprint).....	311
Cavalry and Training Army Horses for Field Service, Remounting. (Trans-	116
<i>lation)..... M. F. De Barnestille</i>	

	PAGE
Cavalry, Armament and Needs of Modern. (Translation).....	113
<i>Harry Bell</i>	
Cavalry, Arms to be Carried by. (Military Notes).....	147
Cavalry Drill Regulations, Our. (Military Notes).....	947
Cavalry Equipment. (Military Notes).....	384
<i>Capt. W. C. Short</i>	
Cavalry Equipment Board, The. (Editor's Table).....	879
Cavalry Fight at Judsjatun. (Translation).....	315
<i>Harry Bell</i>	
Cavalry Horse, Care of the. (Book Review).....	960
Cavalry Instead of Less, More. (Editor's Table).....	972
Cavalry in the Reconnaissance Service, Airships and. (Translation).....	873
<i>Harry Bell</i>	
Cavalryman, Armament and Equipment of.....	76
<i>E. H. Gilpin</i>	
Cavalry Machine Guns on Pack Animals or Carriages. (Reprint).....	343
Cavalry, Machine Guns with. (Book Review).....	958
Cavalry, Night Exercises in the. (Translation).....	696
<i>Capt. N. K. Averill</i>	
Cavalry Notes.....	562, 585
<i>Maj. H. T. Allen</i>	
Cavalry Notes. (Editor's Table).....	579
Cavalry of the Regular Army, Reducing the.....	1010
<i>Maj. A. L. Dade</i>	
Cavalry Organisation.....	814
<i>Maj. H. T. Allen</i>	
Cavalry Organisation.....	650
<i>Maj. J. T. Dickman</i>	
Cavalry Organisation and Tactical Use of Machine Guns with.....	451
<i>Capt. E. M. Leary</i>	
Cavalry Organisation as Viewed in the Light of its History and of Legislation,	995
Our.....	
<i>Capt. H. E. Hickok</i>	
Cavalry, Outline of a Single Rank, Movement System for.....	1057
<i>Gen. F. K. Ward</i>	
Cavalry Regiments of Foreign Armies, Organisation of. (Military Notes).....	383
<i>Lt. Col. W. C. Brown</i>	
Cavalry Reorganisation. (Editor's Table).....	167
Cavalry Reorganisation.....	5
<i>Capt. M. E. Hanna</i>	
Cavalry Reorganisation. (Military Notes).....	264, 567
<i>Capt. H. R. Hickok</i>	
Cavalry Reorganisation. (Various Officers).....	19
Cavalry, Role and Employment of. (Reprint).....	128
Cavalry Saber.....	131
<i>Capt. Alonzo Gray</i>	
Cavalry Saddle—Packed, The French. (Military Notes).....	1166
Cavalry Single or Double Rank for.....	906
<i>Brig. Gen. F. K. Ward</i>	
Cavalry Studies. (Translation).....	553
<i>Harry Bell</i>	
Cavalry Tactics—Col. Balck. (Translation).....	744, 877
<i>Lt. W. Krueger</i>	
Cavalry, The Advanced Retrogression of our.....	1153
<i>Capt. G. B. Rodney</i>	
Cavalry, The Evolution of the Ideas Concerning the Role and Employment	689
of. (Translation).....	
<i>Coleonel Aubier</i>	
Cavalry, The Reorganization of the.....	797
<i>Maj. Gen. J. E. Davis</i>	
Cavalry, the Second U. S. (Editor's Table).....	389
Cavalry, The Strength of the. (Editor's Table).....	962
Cavalry, What Horse for the. (Book Review).....	1183
Cavalry, Why We Need. (Editor's Table).....	966
Chargers, Officers. (Military Notes).....	566, 1178
Charging Unit, The (An Officer Abroad).....	414
Charging Unit, The. (Military Notes).....	772
Chief of Cavalry, A. (Editor's Table).....	1194
Chilian Army, The.....	483
<i>Lieut. F. A. Ruggles</i>	
Chinese—Japanese Characters. (Book Review).....	392
Color for Horses in the Tropics, The Best.....	243
<i>Lieut. Col. C. E. Woodruff</i>	
Commander, More Responsibility for the Troop.....	307
<i>Lieut. B. K. Edmunds</i>	
Command, Peace Training for. (Reprint).....	515
Composition of Advanced Guards of Armies. (Translation).....	335
<i>Harry Bell</i>	
Conduct of Operations with Green Troops, The. (Reprint).....	677
Cookery, Paper Bag. (Book Review).....	393
Correction, A. (Editor's Table).....	387
Cost of a Regiment of Infantry and a Regiment of Cavalry, Relative.....	969
(Editor's Table).....	
Council of National Defense. (Editor's Table).....	1189
Cup, The Breeder's. (Editor's Table).....	2000
Daily Diary of Equitation Work at the Mounted Service School.....	663, 832, 1091
<i>Capt. John S. Barrows</i>	
Developing A Reserve Army.....	299

INDEX TO VOLUME XXII.

	PAGE
Dictionary, Japanese—English. (Book Review).....	391
Diplomatic Studies, Military and. (Book Review).....	783
Double or Single Rank.....	944
Double Rank, Experimental Drill in.....	687
Double Rank for Cavalry, Single or.....	806
Double Rank Formation, The. (Military Notes).....	773
Double Rank, Single or.....	940
Dress Officers'. (Military Notes).....	1168
Drill in Double Rank, Experimental.....	687
Drill Regulations, Our Cavalry. (Military Notes).....	947
Ellis Self Scoring Target, The.....	952
Elimination of Revolvers. (Military Notes).....	777
Elimination of the Revolver, The. (Editor's Table).....	791
Employment of Cavalry, Role and (Reprint).....	128
Employment of Cavalry, The Evolution of the Ideas Concerning the Role and (Translation).....	689
English—Japanese Dictionary. (Book Review).....	391
Equipment Board, The Cavalry. (Editor's Table).....	579
Equipment Cavalry. (Military Notes).....	384
Equipment, etc., Organization. (Book Review).....	576
Equipment of the Cavalryman, Armament and.....	76
Equitation Work at the Mounted Service School, Daily Diary of.....	663, 832, 1021
Evolution of the Idea Concerning the Role and Employment of Cavalry The. (Translation).....	689
Examiner, Military Law. (Book Review).....	574
Exercises in the Cavalry, Night. (Translation).....	686
Expeditionary Force, The Mounted Troops of the. (Reprint).....	1131
Expedition to Mexico, Shelby's.....	862
Experimental Drill in Double Rank.....	687
Extracts from a Letter from an Officer at Saumur. (Military Notes).....	1161
Feeding, Forage and.....	949
Fight at Judajatum, Cavalry. (Translation).....	315
Fighting on Foot. (Military Notes).....	961
Fire Problems. (Book Review).....	1185
Foot, Fighting on (Military Notes).....	951
Forage.....	923
Forage.....	1158
Forage and Feeding.....	949
Foreign Armies, Organization of Cavalry Regiments of. (Military Notes).....	383
Formations, Rank in. (Military Notes).....	146
Formation, The Double Rank. (Military Notes).....	773
Fort Leavenworth Horse Show. (Military Notes).....	1169
France, Military Races and Horse Shows in. (Military Notes).....	1163
French Army, Remounts in. (Military Notes).....	770
French Cavalry Saddle, Packed, The. (Military Notes).....	1166
German for Military Students. (Book Review).....	783
Grant's Movement Across the James.....	820
Guide to Promotion. (Book Review).....	575
Hague, 1911, International Horse Show at The.....	230
Handbook for Riders. (Book Review).....	391
History of the McClellan Saddle.....	235
Horse Breeding in Hungary.....	417
Horse, Care of the Cavalry. (Book Review).....	960
Horse for the Cavalry, What. (Book Review).....	1183
Horse, Notes on the Progenitors of Certain Strains of the Modern American (Translation).....	437
Horses at the Maneuver Division, The Hygiene and Treatment of.....	852
Horses for Field Service, Remounting Cavalry and Training Army. (Translation).....	116
Horses for the United States Army, Breeding. (Reprint).....	97
Horse Show at Olympia, The International.....	313, 771

INDEX TO VOLUME XII.

	PAGE
Horse Show at Olympia, International. (Military Notes).....	142
Horse Show at The Hague, 1911, International.....	230
Horse Show, Fort Leavenworth. (Military Notes).....	1169
Horse Show, Montreal. (Military Notes).....	145
Horse Shows in France, Military Races and. (Military Notes).....	1163
Horses in the Tropics, Best Color for.....	848
Horses in the Tropics, Best Color for.....	243
Horses in the U. S., Pure Bred.....	422
Horses, Morgans as Army. (Reprint).....	1147
Horses, The Restricted Climatic Environment of.....	1086
Horses, Watering the Heated.....	1017
Hungary, Horse Breeding in.....	417
Hunt and Polo Club at Vancouver Barracks. (Editor's Table).....	390
Hygiene and Treatment of Horses at the Maneuver Division, The (Translation).....	852
Improved Armies of the Nineteenth Century. (Reprint).....	532
Index of First twenty-one Volumes of CAVALRY JOURNAL.....	170
Indian, Soul of the. (Book Review).....	574
International Horse Show at Olympia, The.....	313, 771
International Horse Show at Olympia. (Military Notes).....	142
International Horse Show at The Hague, 1911.....	230
Italian Army, Riding in the. (Military Notes).....	1164
James, Grant's Movement Across the.....	820
Japan, Army Officer in. (Book Review).....	958
Japanese—Chinese Characters. (Book Review).....	392
Japanese—English Dictionary. (Book Review).....	391
Judajatum, Cavalry Fight at. (Translation).....	315
Law Examiner, Military. (Book Review).....	574
Lee, Notes on. (Reprint).....	347
Let Us Forget. (Military Notes).....	955
Letter by Napoleon. (Translation).....	150
List for Army Officers, One. (Military Notes).....	558
McClellan Saddle, History of the.....	235
Machine Guns on Pack Animals or Carriages. Cavalry. (Reprint).....	433
Machine Guns with Cavalry. (Book Review).....	958
Machine Guns with Cavalry, Organization and Tactical Use of.....	451
Machine Gun Tactics. (Translation).....	1140
Maneuver Camps vs. Maneuver Campaigns.....	86
Maneuver Camps vs. Maneuver Campaigns. (Military Notes).....	375
Maneuver Division, The Hygiene and Treatment of Horses at the (Translation).....	852
Manual, Small Arm Firing. (Military Notes).....	380
Medical Service in Campaign. (Book Review).....	957
Mexico, Shelby's Expedition to.....	862
Military and Diplomatic Studies. (Book Review).....	782
Military Law Examiner. (Book Review).....	574
Military Races and Horse Shows in France. (Military Notes).....	1163
Military Students, German for. (Book Review).....	783
Military Works. (Book Review).....	961
Mobile Army, A. (Editor's Table).....	1167
Modern Cavalry, Armament and Needs of. (Translation).....	113
Montreal Horse Show. (Military Notes).....	145
More Cavalry Instead of Less. (Editor's Table).....	972
More Responsibility for the Troop Commander.....	307
Morgans as Army Horses. (Reprint).....	1147
Mounted Service School, Daily Diary of Equitation Work at the.....	663, 832, 1021
Mounted Troops of the Expeditionary Force, The. (Reprint).....	1131
Nan-Shan and Port Arthur. (Book Review).....	571
Napoleon, Letter by. (Translation).....	160
Needs of Modern Cavalry, Armament and. (Translation).....	113
Night Exercises in the Cavalry. (Translation).....	686

INDEX TO VOLUME XXII.

	PAGE
Night Firing, The Barr and Stroud Range Finder and its Use in..... <i>Lieut. Col. W. C. Brown</i>	401
Notes, Cavalry..... <i>Maj. H. T. Allen</i>	585
Notes, Cavalry. (Editor's Table).....	579
Notes, Cavalry. (Military Notes)..... <i>Maj. H. T. Allen</i>	592
Notes on Castrametation..... <i>Col. James Parker</i>	766
Notes on Lee. (Reprints).....	347
Notes on the Progenitors of Certain Strains of the Modern American Horse <i>Vet. Coleman Nockolds</i>	437
Notes, Professional..... <i>Lieut. Col. W. C. Brown</i>	776
Officers' Chargers. (Military Notes).....	566, 1178
Officer in Japan, Army. (Book Review).....	958
Officers' Dress. (Military Notes).....	1168
Officers' Inter-Regimental Races in Russia. (Military Notes).....	569
Olympia International Horse Show..... <i>Maj. F. S. Folts</i>	213
Olympia, International Horse Show at. (Military Notes).....	142
Olympia, The International Horse Show at..... <i>Maj. F. S. Folts</i>	771
One List for Army Officers. (Military Notes)..... <i>Capt. LeRoy Ellings</i>	558
One List for Line Officers..... <i>Lieut. Col. E. R. Stuart</i>	817
Operations with Green Troops, The Conduct of. (Reprint).....	677
Organization and Tactical Use of Machine Guns with Cavalry..... <i>Capt. E. M. Leary</i>	451
Organization as viewed in the Light of its History and of Legislation Our Cavalry..... <i>Capt. H. R. Hickok</i>	995
Organization, Cavalry..... <i>Maj. H. T. Allen</i>	814
Organization, Cavalry..... <i>Maj. J. T. Dickman</i>	850
Organization, Equipment, Etc. (Book Review).....	876
Organization of Cavalry Regiments of Foreign Armies. (Military Notes)..... <i>Lieut. Col. W. C. Brown</i>	353
Outline of a Single Line Rank Movement System for Cavalry..... <i>Gen. F. K. Ward</i>	1057
Pack Animals or Carriages, Cavalry Machine Guns on. (Reprint).....	343
Packs in the Philippines, Pony..... <i>Maj. C. C. Smith</i>	616
Paper Bag Cookery. (Book Review).....	398
Patrolling, Scouting and..... <i>Col. W. E. Wilder</i>	287
Peace Training for Command. (Reprint).....	515
Philippines, Pony Packs in the..... <i>Maj. C. C. Smith</i>	616
Pistol, Reference to Abandoning the. (Military Notes)..... <i>Maj. J. A. Cole</i>	381
Pocket-Book, Star. (Book Review).....	960
Polo, As to. (Book Review).....	572
Pole Club at Vancouver Barracks, Hunt and. (Editor's Table).....	390
Pony Packs in the Philippines..... <i>Maj. C. C. Smith</i>	616
Port Arthur, Nan-Shan and. (Book Review).....	571
Principles of Sanitary Tactics. (Book Review).....	780
Problems, Fire. (Book Review).....	1185
Professional Notes..... <i>Lieut. Col. W. C. Brown</i>	776
Progenitors of Certain Strains of the Modern American Horse, Notes on the <i>Vet. Coleman Nockolds</i>	437
Promotion, Guide to. (Book Review).....	875
Proposed Saber, A..... <i>Maj. N. F. McClure</i>	777
Protest and Reply, A. (Editor's Table).....	385
Publications of Military Interest, Recent. (Editor's Table).....	577
Pure Bred Horses in the U. S..... <i>G. M. Rommel</i>	423
Races in Russia, Officers' Inter-Regimental. (Military Notes).....	569
Range Finder and its Use in Night Firing, Barr and Strouds..... <i>Lieut. Col. W. C. Brown</i>	401
Range Finder, The Barr-Strouds. (Editor's Table).....	787
Rank, Double or Single..... <i>Maj. H. T. Allen</i>	944
Rank for Cavalry, Single or Double..... <i>Brig. Gen. F. K. Ward</i>	806
Rank Formation, The Double. (Military Notes).....	773
Rank in Formations. (Military Notes).....	146
Rank, Single or Double..... <i>Maj. A. Gray</i>	940
Recent Publications of Military Interest. (Editor's Table).....	577

INDEX TO VOLUME XXII.

vii

	PAGE
Reconnaissance Service, Airships and Cavalry in the. (Translation)..... <i>H. Bell</i>	873
Reconnaissance Service, The Strategic. (Translation)..... <i>Harry Bell</i>	523
Red Cross, The American. (Editor's Table).....	936
Reducing the Cavalry of the Regular Army..... <i>Maj. A. L. Dade</i>	1010
Reference to Abandoning the Pistol. (Military Notes)..... <i>Maj. J. A. Cole</i>	381
Regulations, Our Cavalry Drill. (Military Notes).....	947
Relative Cost of A Regiment of Infantry and a Regiment of Cavalry. (Editor's Table).....	909
Remounting Cavalry and Training Army Horses for Field Service. (Trans- lation)..... <i>M. F. DeBarnsville</i>	116
Remount Problem, The. (Editor's Table).....	1191
Remount Problem, The Army. (Reprint).....	1104
Remounts in French Army. (Military Notes).....	770
Reorganization..... <i>Lieut. Col. Boughton</i>	137
Reorganization, Cavalry. (Editor's Table).....	167
Reorganization, Cavalry..... <i>Capt. M. E. Hanna</i>	5
Reorganization, Cavalry..... <i>Capt. H. R. Hickok</i>	264, 567
Reorganization, Cavalry. (Various Officers).....	19
Reorganization of the Cavalry, The..... <i>Maj. Gen. G. B. Davis</i>	797
Reply, A Protest and. (Editor's Table).....	385
Reserve Army, Developing a..... <i>Capt. J. S. Barrows</i>	299
Resolution, A. (Editor's Table).....	923
Responsibility for the Troop Commander, More..... <i>Lieut. B. K. Edmunds</i>	307
Restricted Climatic Environment of Horses, The..... <i>Col. C. E. Woodruff</i>	1086
Retrospection of our Cavalry, The Advanced..... <i>Capt. G. B. Rodney</i>	1163
Revolvers, Elimination of. (Military Notes).....	777
Revolver, The Elimination of the. (Editor's Table).....	791
Revolver, The. (Military Notes)..... <i>Lieut. B. K. Edmunds</i>	378
Riders, Handbook for. (Book Review).....	391
Riding at West Point. (Military Notes).....	568
Riding in the Italian Army. (Military Notes).....	1164
Riot Duty, Troops on. (Book Review).....	1184
Rising to the Trot. (Editor's Table).....	387
Role and Employment of Cavalry. (Reprint).....	128
Role and Employment of Cavalry, The Evolution of the Ideas Concerning the. (Translation)..... <i>Colonel Aubler</i>	699
Russian Soldier's Barrack Life. (Military Notes).....	148
Russia, Officers' Inter-Regimental Races in. (Military Notes).....	566
Saber, A Proposed..... <i>Maj. N. F. McClure</i>	777
Saber, Cavalry..... <i>Capt. Aloaso Gray</i>	141
Saddle, History of the McClellan..... <i>Capt. Edward Davis</i>	235
Saddle—Packed, The French Cavalry. (Military Notes).....	1166
San-de-Pu, Yin-kou and. (Book Review).....	153
Sanitary Tactics, Principles of. (Book Review).....	780
Saumur, Extracts from Letter from an Officer at. (Military Notes).....	1161
Scouting and Patrolling..... <i>Col. W. E. Wilder</i>	287
Scouts, Boy. (Reprint).....	357
Second U. S. Cavalry, The. (Editor's Table).....	398
Service in Campaign, Medical. (Book Review).....	957
Service, The Strategic Reconnaissance. (Translation)..... <i>Harry Bell</i>	523
Shelby's Expedition to Mexico..... <i>Capt. H. A. White</i>	863
Shiloh, Battle of. (Book Review).....	157
Shiloh, The Battle of..... <i>J. W. Rich</i>	428
Single or Double Rank..... <i>Maj. A. Gray</i>	940
Single or Double Rank for Cavalry..... <i>Brig. Gen. F. K. Ward</i>	806
Single Rank, Double or..... <i>Maj. H. T. Allen</i>	944
Small Arm Firing Manual. (Military Notes)..... <i>Swift</i>	390
Soul of the Indian. (Book Review).....	574
Spanish, A working Knowledge of. (Book Review).....	394
Star Pocket Book. (Book Review).....	960
Strategic Reconnaissance Service, The. (Translation)..... <i>Harry Bell</i>	523
Strength of the Cavalry, The. (Editor's Table).....	963

	PAGE
Stroede Range Finder and its Use in Night Firing. The Barr and..... <i>Lieut. Col. W. C. Brown</i>	401
Students, German for Military. (Book Review).....	738
Studies, Cavalry. (Translation)..... <i>Harry Bell</i>	563
Studies, Military and Diplomatic. (Book Review).....	782
Submarine Boat. (Book Review).....	961
Tactics, Cavalry. Col. Balck. (Translation)..... <i>Lieut. W. Krusger</i>	744, 877
Tactics, Machine Gun. (Translation)..... <i>Harry Bell</i>	1140
Tactics, Principles of Sanitary. (Book Review).....	780
Target, The Hills Self Scoring..... <i>Capt. A. Lippincott</i>	982
Three Valuable Books..... <i>Maj. M. F. Steels</i>	1150
Training Horses for Field Service, Remounting Cavalry and. (Translation) <i>M. F. De Barneville</i>	116
Training For Command, Peace. (Reprint).....	515
Troop Commander, More Responsibility for the..... <i>Lieut. B. K. Edmunds</i>	307
Troops on Riot Duty. (Book Review).....	1184
Troop, The Conduct of Operations with Green. (Reprint).....	677
Tropics, Best Color for Horses in the..... <i>Lieut. Col. C. E. Woodruff</i>	243
Tropics, The Best Color for Horses in the..... <i>Capt. C. C. Smith</i>	848
Trot, Rising to the. (Editor's Table).....	387
Unit, The Charging. (Military Notes).....	414, 772
Vancouver Barracks, Hunt and Polo Club at. (Editor's Table).....	390
Watching the Heated Horse..... <i>Vel. W. P. Hill</i>	1017
West Point, Cadet Life at. (Book Review).....	573
West Point, Riding at. (Military Notes).....	568
What Horses for the Cavalry. (Book Review).....	1183
Why we Need Cavalry. (Editor's Table).....	966
Working Knowledge of Spanish. A. (Book Review).....	394
Yin-kou and San-do-pu. (Book Review).....	153

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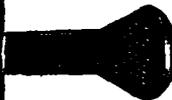
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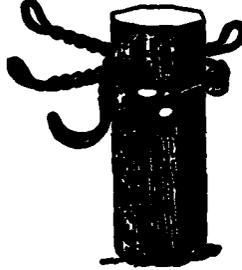


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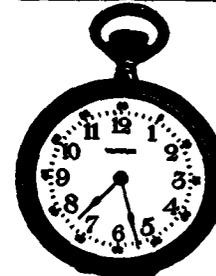
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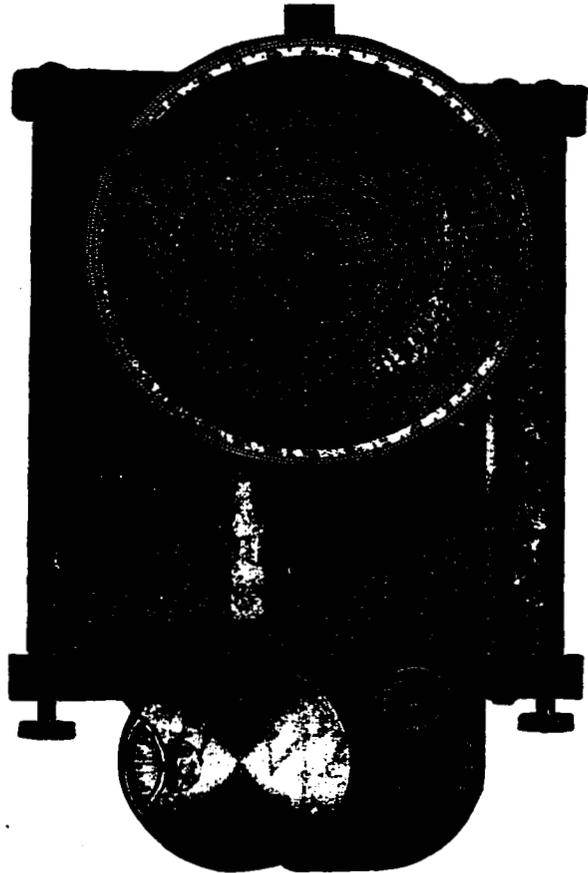
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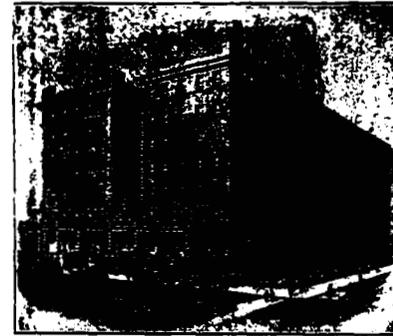
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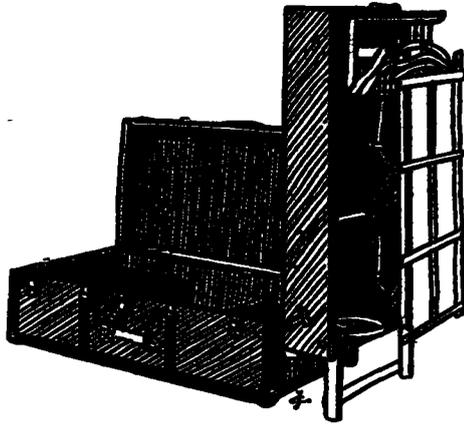
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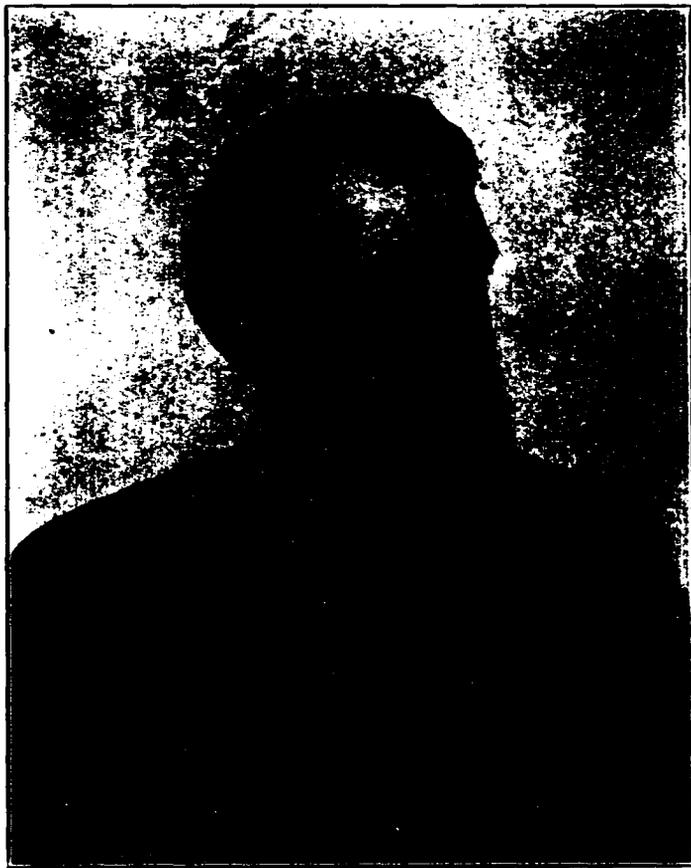
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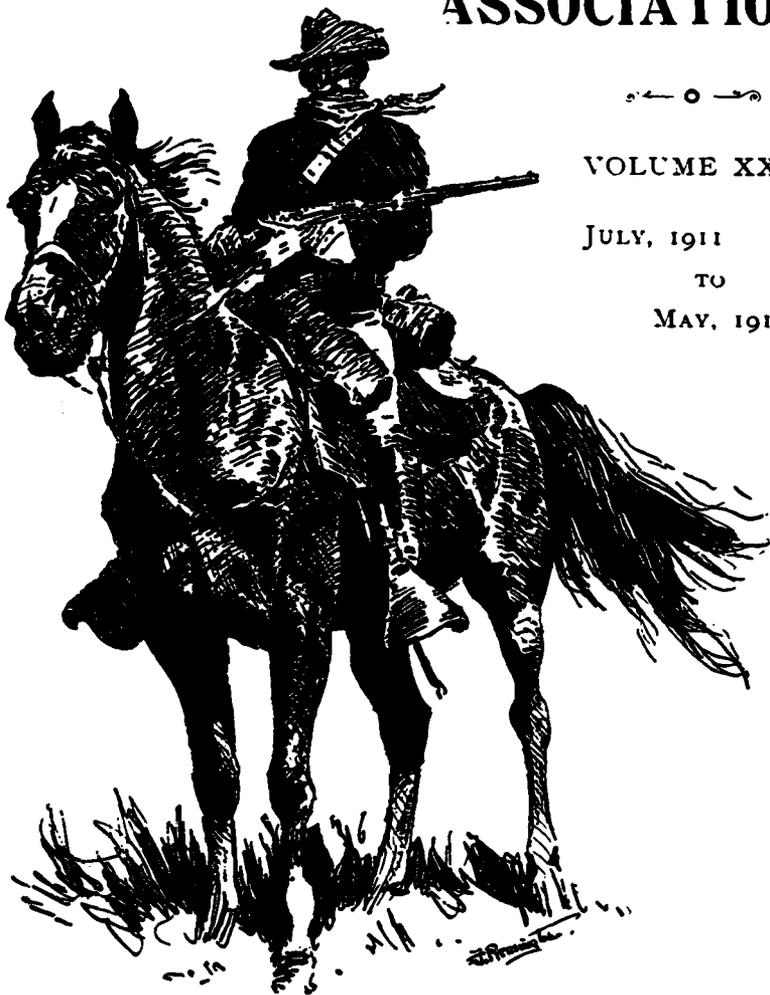
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INDEX TO VOLUME XXII.

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Numbers 85 to 90, inclusive.