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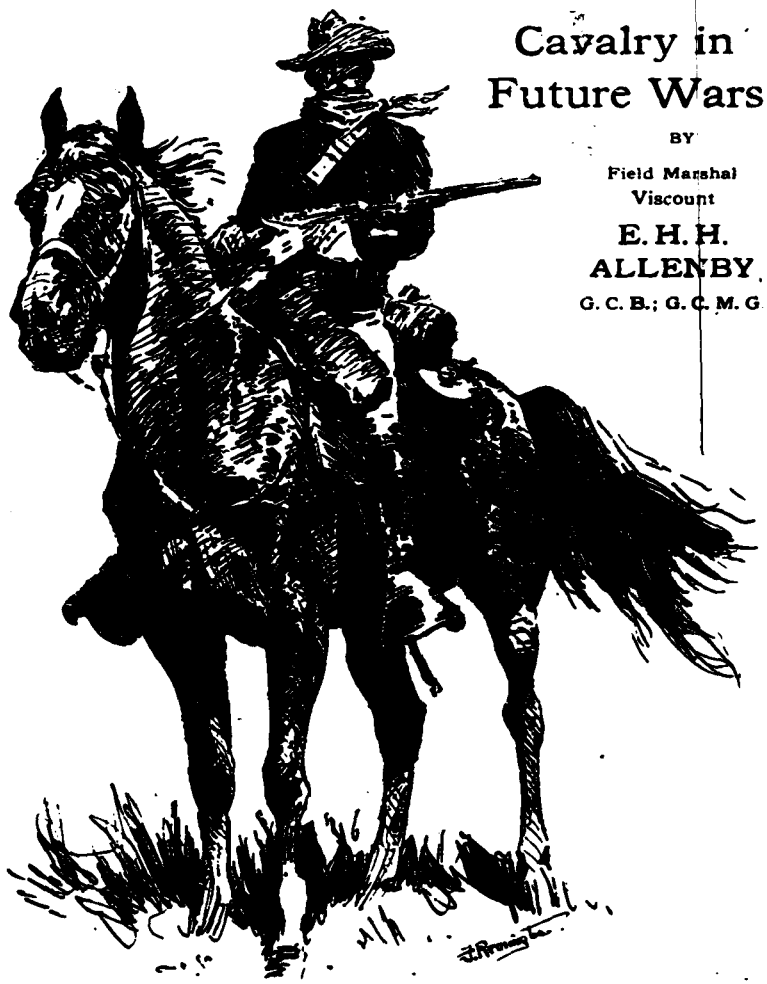

Cavalry in Future Wars

BY

Field Marshal Viscount

E. H. H. ALLENBY

G. C. B.; G. C. M. G.

JANUARY 1921

THE UNITED STATES CAVALRY ASSOCIATION

WASHINGTON, D. C.

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Devoted to the Interests of the Cavalry, to the Professional Improvement of Its Officers and Men, and to the Advancement of the Mounted Service Generally

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MAJOR OF CAVALRY

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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 III of the Constitution.

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Field-Marshal Viscount E. H. H. ALLENBY, G. C. B., G. C. M. G.,
Colonel 5th Lancers and 1st Life Guards

From the picture by Captain Adrian Jones, M.V.O.

THE

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Cavalry in Future Wars

BY

Field-Marshal VISCOUNT E. H. H. ALLENBY, G. C. B., G. C. M. G.

LONDON, *October* 23, 1920.

To the Editor of the CAVALRY JOURNAL,
Washington, D. C.

DEAR SIR: I am greatly honored by the request made in your letter of the 8th instant, that I shall send a message to the American Cavalry.

I have been a Cavalry officer ever since I joined the Army, in 1882, and I have never felt more confidence in the future of our arm than I do today.

Those detractors who—before and even during the late war—were wont to declare that the Cavalry arm was obsolescent have been proved wrong. Recent inventions and appliances affecting the conditions of war, so far from lessening the power and the scope of Cavalry, have added thereto.

The principles of war are constant, but the methods of their application are ever changing; and the Cavalry arm, the arm of opportunity, always eager for ideas, has kept alert and vigilant. It has retained the good, rejected the bad, and has not shrunk from the new.

Armed with modern weapons of precision, rifle and machine-gun, in addition to its old-time equipment of sword and lance, and supported by mobile quick-firing artillery, Cavalry can adapt itself to any conditions. We used to hear, especially in peace maneuvers, that such or such a tract of country was suited to Cavalry action. The truth is, that Cavalry can and will fit its tactics to any country.

This has been shown repeatedly during the war just ended—in the wire-inclosed fields of Flanders, the holding clays of Picardy, the deserts of eastern and western Egypt, the alluvial areas of Mesopotamia, the rocky hills of Judea, the plains of the Palestine coast, the deep valley of the River Jordan, and the mountains of Moab.

In the task of strategical reconnaissance, Cavalry has in a great measure been displaced by the recent development of the Air Service. Distant reconnaissance is carried out infinitely more expeditiously and more efficiently by aircraft than by horsemen. This effects economy in horse-power and man-power, and the Cavalry is thereby saved for its ever-important duties of tactical reconnaissance and of battle.

Tactical reconnaissance, including the keeping of touch and the filling of gaps on the long front of present-day battlefields, is still the business of the horseman.

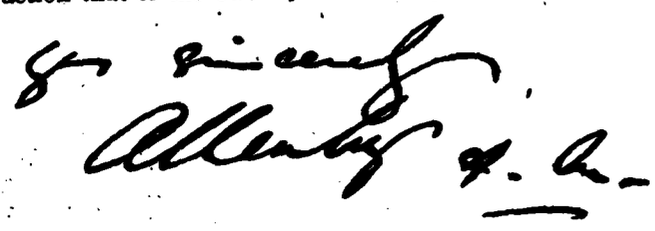
The battle value of Cavalry increases with the breadth of vision bestowed by aircraft. The Air Service, by enlarging the horizon, renders possible such bold strokes by masses of horsemen as were seen in Mesopotamia, Palestine, and Syria.

Cavalry enterprise is aided, too, by mechanical means of transport—lorries, tanks, armored cars—assuring supply, while fighting cars and swiftly moving tanks can work in co-operation with Cavalry and horse artillery over any ground. The machine-guns and automatic rifles, now forming part of the armament of our Cavalry, give of themselves great independence of action.

By adopting every helpful device, the mounted arm can continually improve its fighting power. Nevertheless, it must not lose faith in its old and tried weapons, the sword and the lance. The Cavalry leader who has the knowledge and the nerve will again and again find his opportunity to go in with the cold steel. Losses must be faced; but in modern war, as of old, experience teaches that a mounted attack exactly timed is almost always successful and is less costly than a prolonged fire fight.

The Cavalry leader, though he must be quick to see and to seize the opportune moment, must also have prudence and foresight. He should know exactly what he intends to do and what those under his command are capable of doing. Then when he takes a risk he takes it with open eyes and clear mind.

Finally, he must remember that he is a part of the whole, an auxiliary to other arms, with whose action that of the Cavalry must always be co-ordinated.



Leadership

BY

Major-General CHARLES P. SUMMERALL

THE SUBJECT of leadership presents phases that are not easily reduced to words. Military history emphasizes the value of the personal power of leaders, and there are many familiar names that pre-eminently hold our admiration because of the power of the personality of those who bore them in dominating armies and peoples in the crises of great wars. Interest at present naturally centers about more recent events, and it is believed that leadership was never more highly developed in either the civil or the military sense than during the World War. That there was civil leadership of the first order in all nations no one can doubt, but it is rather the application of the term to military men that is of interest to soldiers.

The exercise of the qualities that make the leader is almost as varied as the men themselves. Some act by speech and some by silence; some possess bearing or manner that carry conviction, while others, not so gifted, dominate by the force of will and the power of knowledge. In all, however, the greatest assets are personality and the understanding of that personality by all grades of a command. Military leadership requires technical ability and knowledge, not only of the profession of arms, but of human nature. It calls for deep sympathy, for the power of seeing from the point of view of others, for vision of accomplishment, and for a confidence in oneself and a faith in others that carry irresistible conviction. It requires example and courage, and loyalty to superiors and subordinates alike. A leader *may* know how to punish, but he *must* know how to reward; and he must never forget those who have served him faithfully and well. He must know how to delegate full responsibility to others, whether staff or line, but he must know also when to function for those who fail, when to make decisions and when to add his personal influence over the troops themselves. It has often been asked where a commander should be during an operation. No definite rule could be prescribed; but he must be at the place where he is most needed at the moment, whether at his post of command or with the troops. His judgment alone can guide him, but he must at all times be master of the situation.

The skillful leader will not give his men too great a task. It is remarkable how often the psychology of those who are to execute missions is overlooked by those who assign them. The effect, for example, of taking an intermediate objective gives new strength for the next step, while men will stabilize in their progress toward a too-distant objective upon meeting difficulties that are sure to be encountered.

Leadership is quite as important in the lower as in the higher grades. A leader must be known by his officers and men. It is quite surprising how

many men do not know their officers, even their platoon commanders; yet men fight and die for their leaders rather than for the abstruse questions of international politics that produce wars. They will go forward for the officer they like or trust, when threats or fear of punishment will have no effect upon them. There is no better way for a platoon commander or a company commander to become a real leader of his men than by actually drilling and instructing them. An officer's deportment, the inflections of his voice, and the expressions in his face have a determining influence in gaining the confidence and control that are essential to leadership. Courage is an attribute that, happily, is common to men. There are few real cowards. It is, however, a weakness of human nature to surrender one's individuality and initiative at times of crises, such as battle. The difficulties of natural obstacles, fatigue, and danger combine to overwhelm men's determination to progress. It is here that the skillful leader becomes indispensable. His presence, the sound of his voice, and the expression in his face are sufficient to restore confidence and to prevent that disintegration which is a greater obstacle to success than the enemy's fire.

By way of illustration, there comes to mind one of the most able regimental commanders in the war. He lived constantly among his men and demonstrated his courage by sharing their dangers. He knew every officer and many of the men by name. He showed them that he was familiar with their difficulties and their deeds and that he had a genuine affection for them. He spoke to them kindly, yet always as their leader, and he never failed to commend and reward them for conspicuous acts. He talked to them and made them think as he thought. Yet he did not spare them in their tasks, and he sent them to the assault with unflinching determination. Even when his losses were disabling, he executed an order to attack with perfect stoicism, though he received it with the full expectation that it would direct the relief of his regiment. His loyalty was such that he did not question authority, even in his thoughts, and his own character permeated his command. His officers and men really loved him, and after battle it was pathetic to hear many men, suffering grievously from their wounds, ask eagerly if the Colonel came through safely. He combined the real elements of leadership, and he showed these same qualities when he commanded a brigade and a division. He was the type of leader who could always be relied upon to take his objective, and the taking of objectives is the real business of war.

Many examples of leadership could be cited in the Allied and in the American armies during the war, but it is believed that the distinguished Marshal Pétain has given expression to the highest qualities when he stated some of the reasons for his own success. Upon being asked after the Armistice the methods by which the French Army under his command attained such a high state of morale and efficiency, he replied somewhat as follows:

"When the war began I was a colonel. People thought I was cold because

I had been an instructor at the staff college; but I really loved my soldiers. The mentality of our men is such that they respond to approval more than to disapproval. For example, when I commanded a battalion and my men made a mistake at drill, I did not criticise them, but told them that the error was my fault, as I had not made them understand me, and I explained the movement again. Then they would instinctively blame themselves, and try the harder to execute the movement correctly.

"When I took command of the army I found that many gallant deeds had not received recognition, and I awarded the Croix de Guerre wherever it was deserved. I also instituted the decoration of troops *en masse* by awarding the Croix de Guerre to regiments and decorating their colors. This raised the morale and the *esprit de corps* of the entire command. I also instituted the *fourragere* as a reward to regiments that particularly distinguished themselves in battle. Then I established the canteens, where soldiers could buy little luxuries and find recreation and comfort. I also ordered that men should be given furloughs, and that they should not be recalled for any emergency during their furloughs.

"*Men think as their platoon leaders think.* I visited every division and talked to the officers. I also visited the lines and the observation posts and talked with the artillery about the accurate adjustment of their fire."

Here indeed was not only a military genius, but a psychologist and an ideal leader of men. It cannot be wondered that the French Army responded like magic to his touch. He genuinely liked his soldiers and he could see from their point of view. He rewarded them and made them proud of their commands. He contributed to their comfort and their happiness by giving them privileges which were not detrimental to the success of his arms. He talked to his officers and implanted in their minds his own high purpose and his inflexible resolution, which they in turn transmitted to their men. He showed the troops that he knew the details of their technical work, and that he expected the best results from them. Thus he in turn inspired affection and confidence in the entire army. All knew him, though he could know only a very few, but his personality became a vital force in every grade.

There is really nothing new in these fundamental truths. In establishing the Legion of Honor, Napoleon more than realized his prophetic words to Lannes, and it will be recalled that when Nelson was congratulated after the Battle of the Nile, he replied simply: "It was my fortune to command a band of brothers."

For my own part, I feel that whatever success I may have had in the war was due to staffs and troops whose loyalty, devotion, and efficiency have never been surpassed and have seldom been equaled. On passing a group of soldiers in the late days of July, 1918, one of them remarked: "There goes the guy that patted the doughboys on the back at Soissons." I knew then that I had qualified as their leader.

Revision of Regulations

BY

Colonel GEORGE H. CAMERON, Cavalry

(Commandant, The Cavalry School)

BEFORE THE APPEARANCE of our Field Service Regulations of 1905, I read with much interest in General Kessler's "Tactique des Trois Armes" his views on employment of Cavalry, as follows:

> "Reconnaissance for armies [he stated] is made by cavalry divisions *called independent.** . . . But corps commanders have equal need of information of the enemy; . . . and especially since their immediate front may have been completely uncovered by the cavalry division. For this purpose the commander of an army corps makes use of the corps brigade. The service performed by such a brigade of cavalry is called, in the act of May 28, 1895, 'front line security.' . . . but it is really service of information.
>
> "It is to be regretted that regulations should use different terms for services absolutely analogous. This complication in definitions, explaining very simple matters, may lead to confusion in the minds of students; in a way, it tends to create two kinds of cavalry and to minimize the rôle of the corps cavalry.
>
> "If the word *independent* is meant to convey the idea of independence of maneuver, it is superfluous, because every commander must have free choice of methods to carry out a *mission* with which he has been entrusted."

General Kessler's remarks made a lasting impression upon me on account of the two salient ideas: (*a*) There is *danger* in classification. (*b*) *Independent*, as applied to cavalry, is a word to be regarded with misgiving.

I wonder what the distinguished French general would say today, if for the last fifteen years he had followed the revisions of the U. S. Field Service Regulations, carefully noting the definitions and methods of employment of "independent cavalry," "divisional cavalry," "advance cavalry," and "advance-guard cavalry."

As to precision in distinguishing these four terms, I have frequently observed his apprehended "confusion in the minds of students," and, for that matter, one can even now start an endless debate thereon among our older officers.

* All italics are mine.—G. H. C.

REVISION OF REGULATIONS

In our Field Service Regulations of 1905 appears the first definition of "Independent Cavalry" that I can find, viz:

> "Cavalry detached from and operating at such a distance from a command that *tactical contact therewith is severed* is known as independent cavalry. Its commander must often act on his own initiative in carrying out orders which emanate from the commander of the whole force and render him temporarily independent of subordinate commanders."

Much of the "Field Dienst Ordnung" of 1900 was incorporated in our manual, including the term "divisional cavalry." The German manual reads:

> "Reconnaissance on a large scale is performed by *cavalry divisions;* . . . the reconnaissance duties of *divisional cavalry*, while following the same principles, are confined to narrower limits."

The adoption of the term "divisional cavalry" is believed to have been the beginning of our troubles. The term means nothing if not the cavalry of the division; the division commander may certainly use it as he sees fit. But F. S. R., 1905, states:

> . . . "The divisional cavalry takes charge of *exploration* in the vicinity of the command. . . . Squadrons not required for the immediate *protection* [security?] of their divisions may be employed as independent cavalry."

By whom? It must be admitted that here is ground for confusion. The term "advance-guard cavalry," fortunately, cannot be misunderstood.

The revised edition of F. S. R. of 1910 introduces changes:

> "Independent cavalry [it states] is that cavalry which, operating under the direction of the commander of an army or *separate* command, is detached on some special *mission*."

Here is to be noted little emphasis on the idea of severance of tactical contact and a stressing of the idea of a special job, and we also observe that a division in a corps cannot send off, as independent, squadrons not needed for protection.

The 1910 edition, in speaking of security, states:

> "When not preceded by independent cavalry, the advance guard must, as a rule, be strong in cavalry; in such cases the commander [of any force?] determines whether to attach all of the *divisional* cavalry to the advance guard, or to retain a part for some special service."

After cavalry has been attached to the advance guard, we have a new term, *advance cavalry*, which is defined as "that part of the advance-guard cavalry preceding the support." However, we note that the same term, *advance cavalry*, has taken the place of the unambiguous outpost cavalry.

In the revision of 1914, there is increased confusion. The definition of independent cavalry has disappeared (probably due to the impossibility of

reconciling adherents to the two widely opposite definitions previously cited), but the term itself is preserved. Divisional cavalry is now stated to be—

> "the cavalry attached to an infantry division. When the division is operating independently, the divisional cavalry acts also as independent cavalry; when the division forms part of a field army, the divisional cavalry is known as *advance cavalry*."

And this revision still retains the definition of advance cavalry as "that part of the advance-guard cavalry," etc., and again uses the term in connection with outposts.

The 1914 edition was republished as "corrected to July 31, 1918," with no changes in the points above mentioned.

I now come to what prompted this article. In a very able lecture delivered recently at the School of the Line on "Tactics and Technique of Cavalry," the instructor, in speaking of reconnaissance, says:

> "Another classification that is sometimes made is based on the methods employed rather than on the objects to be attained. The three types under this classification are protective, contact, and independent reconnaissance. . . . All such classifications and definitions are *academic* rather than *practical*. They are useful only to furnish a few terms to be used *in the discussion of methods*. The men engaged in the *work* of reconnaissance, and sometimes even the commanders sending them out, would have difficulty in classifying it."

Further along, in discussing corps cavalry, the lecturer says:

> "In certain situations, when two or more divisions are advancing abreast, each division may have cavalry attached to it as divisional cavalry, and each division may use its cavalry either as *advance-guard cavalry* or as *advance cavalry*."

This statement is incontrovertible and easily understood by older officers, but how about the young student who reads in his Bible, the F. S. R., that "the advance cavalry is that part of the advance-guard cavalry," etc.?

Enough has been said to show the necessity of abolishing classifying terms that are not practical. Army Cavalry, Corps Cavalry, and, when attached, Divisional Cavalry, are terms to be used concerning organization—*i. e.*, as showing to what body the units belong. They should never be used as descriptive of duties to be performed.

Outpost Cavalry, Advance or Rear Guard Cavalry, and Flank Guard Cavalry cannot be misunderstood and are unobjectionable; but these terms should be used, not in connection with methods of employment, but as indicating the body to which cavalry units belong, albeit temporarily.

Let us do away with *independent* and *advance* cavalry.

No cavalry is ever really independent, unless perhaps some such irregular command as that of Pancho Villa, and, under our latest F. S. R., advance cavalry has three different meanings.

Where the F. S. R. reads "acts as independent cavalry," we should simply say, "is detached" or "may be detached," and we then have a phrase with which all are familiar and that is correctly descriptive. This does not mean that any such term as "detached cavalry" should be allowed to grow up—a term requiring definition. By no means!

Let me illustrate: In par. 13, substitute for "independent" the words "that has been detached," and the sentence reads: "As a rule, only general instructions are given to a leader of cavalry that has been detached. It is usually sufficient to indicate," *etc.*

Paragraphs 14 and 15 would read:

> "14. *By Army Cavalry.*—Reconnaissance by Army Cavalry will give, in a general way," etc. "On very wide fronts an army is generally covered by two or more bodies of the Army Cavalry," etc.
>
> "15. *By Corps Cavalry.*—The cavalry of a separate corps may be detached in whole or in part, as previously explained; or, units thereof may be attached to the divisions, and are then called *divisional* cavalry; a separate division may detach its cavalry in whole or in part.
>
> "When the Army Cavalry has been detached to the front, corps cavalry is frequently used under its corps commanders for a closer reconnaissance embodying security. It prevents surprise," *etc.*

This last is our "advance cavalry" and the French "front-line security." But no name other than corps or divisional is necessary. Its mission will be prescribed in the orders of the day, as explained later. If the Army Cavalry uncovers it and there is necessity of reconnaissance further to the front, the corps cavalry may be detached for the purpose by order or by authority of the Army Commander.

I am firmly convinced that one of the ideas in adopting the expression "independent cavalry" was to have what was considered a suitable heading in the column of "troops" of a written order. Why not write simply "Cavalry"?

For an advance, if the cavalry is *in front*, its organization and commander are given under (*a*) cavalry, and under 3*a* is stated its mission. Nobody will split hairs as to whether it is "independent" or "advance," yet everybody will be well informed as to where it is and what it is sent to accomplish. If the cavalry has been sent away on a special mission, *not in front*, we would have (*a*) Advance Guard and (*d*) or (*e*), Cavalry; under 3(*d*) or 3(*e*) would be stated its mission, if considered advisable or desirable. If not, the order might read: "The cavalry has been detached under special instructions, discretionary order," etc. For advance guards and outposts if we read (*a*) Cavalry, we know at once that the *specified* cavalry is out in front, and that the remaining cavalry is in the support, where also it is *specified*. For a retreat or rear guard, we would have (*c*) or (*d*) Cavalry, not Rear Cavalry.

Finally, take the case of a separate division to which a regiment of cavalry has been attached. General A decides to send Colonel A, with two squadrons, off on a secret mission. (F. S. R. independent cavalry.) He also feels that he

needs reconnaissance well to the front and detaches Major B, with three troops, retaining control himself. (F. S. R. independent cavalry or advance cavalry? To the beginner there is room for argument.) He assigns Troop H to the advance guard.

This situation is very simply handled in the order. In the column of "Troops" we would have (*a*) Cavalry: Major B, 2d Squadron, 1st Cavalry (less Troop H), and (*d*) Cavalry: Colonel A, 1st Cavalry (less 1 Squadron). Under 3*a*, instead of the customary "The advance cavalry will do thus and so," we would write: "Major B's command will start at 6 a. m., trot to Easton, scouting," etc., and under 3*d* we would write: "Colonel A's command has been detached under special instructions." Troop H would, of course, appear in its proper place under (*b*) Advance Guard.

FOCH'S TRIBUTE TO THE CANADIAN CAVALRY

A FINE TRIBUTE has been sent to the Canadian Cavalry by Marshal Foch, who expresses his admiration of them and his pride at having had such soldiers under his command. He says:

"In the month of March, 1918, the war was at the gate of Amiens. It was vital for us to maintain close union between the British and French armies. On March 30th, at Montreuil, and on April 1st, at Santerre, the Canadian Cavalry Brigade succeeded, by its magnificent and unconquerable dash, in breaking the spirit of the enemy attack. Thanks to this brigade, the situation, agonizing as it had been at the opening of the battle, was saved."

The Relations Which Should Exist Between the War Department and the Forces in the Field

BY

Brigadier General FOX CONNER

THE RELATIONS between the War Department and the forces in the field have as their ultimate object success in war, and it is, therefore, from considering the nature of the larger problems of war that we must in the first instance form a conception of the ideal which these relations should approach.

The very definition of war, as *"the armed conflict resulting from irreconcilable differences between the policies, ideals, or aspirations of two or more States or peoples,"* establishes the fundamental principle that the general ends to be attained by war are political in their nature and must be determined by governments—interpreting, in democracies, the will of their peoples. But since ends sought make varying demands on resources, and since military considerations may force changes in those ends, it is evident that that part of the military organization which is charged with the preparation of basic plans should be a part of, or in the closest possible touch with, the government.

If, now, we search the lessons of the past as constituting the best guide for the future, we may lay down a postulate of success in modern war, as follows: *The successful prosecution of war on a great scale requires that all the resources of the nation, in men and material, be rendered available; that these resources be augmented from the neutral world, and that the forces thus assembled be employed from the beginning, so as to obtain quick and decisive, or at least far-reaching, success.*

The proof of the above statements is hardly necessary, and all military men will probably admit these three prerequisites: (1) the necessity for government defining the ends sought by war; (2) the necessity for rendering available all the resources of the State; and (3) the necessity of so employing those resources as to assure success from the beginning.

Admitting so much, we must conclude that an ideal organization for modern war would have as its head a single authority, on whom would fall the burden of actuating all the parts of the vast machine of the nation in arms, and with whom would rest the ultimate decision and power over all questions as to the ends to be attained by the particular war; of putting the resources of the State into the field, of supplementing these resources by drawing on the world at large, and of actually employing the available resources in battle.

Manifestly such a single authority would be the head of the State—in fact, if not in name. But it is equally evident that, even though the head of the State have all the qualities of a Napoleon, no single authority can decide all the multitudinous questions arising in modern war, and for that reason a sound organization, existing, perfected, and functioning in peace time, is more necessary today than ever before, and will be more necessary tomorrow than today.

Many minor differences of opinion as to organization may exist, but any considerable study necessarily leads to the conclusion that the fundamental test of sound organization requires that each subdivision be made on clear-cut functional lines. If we apply such a test, not only to an ideal organization, but to any workable system of handling the nation in arms, it at once appears that the line of demarcation between the first great subdivisions is only to be found between the functions of mobilizing the resources in men and material and the actual employment of these forces against the enemy.

Summing up, without more ado, an ideal organization, from the purely military standpoint, and using concrete names for subdivisions, we may say: The head of the State should be the supreme authority in war, and he should have the necessary ability and training to qualify him for command in the field. Under such a supreme commander and with their heads actuated by him alone, there should be two distinct co-ordinate bodies—the War Department, charged with exploiting to the maximum resources in men, money, and material, and the General Headquarters, charged with planning in time of peace and with executing in time of war actual operations in the theater of war.

The nearest approach, in modern times, to such an ideal system was that existing in Germany in 1914. While we should avoid any evils, militaristic or other, into which Germany may have fallen, we should not blind ourselves to the efficiency of her organization, as evidenced by the fact that its overturning required more than four years of the most strenuous efforts of virtually the whole of the civilized world—and of much of the uncivilized world as well.

The important feature of a more or less ideal system is, then, the absolute divorce of the War Department from operative control of armies actually engaged with the enemy. The opposite of such a system is found in the detailed control of campaigns from the seat of government by War Department officials; and history records many examples of such attempted control. Typical among these are the Aulic Council at Vienna during the early Napoleonic Wars—result, Austria crushed; the attempted control from Paris of operations in the Crimea—solved by the commander in the field cutting the cables; Stanton and Halleck in the Civil War—consequence, the Union constantly threatened with defeat by the Confederacy, notwithstanding the relatively weak resources of the South, until Grant was given supreme authority as the Commander-in-Chief of all the Northern Armies. Happily, our own participation in the World War was free from any War Department interference with actual operations; but the numerous examples of such interference by the war ministries of associated powers invariably appear to have been accompanied by deplorable results.

But, desirable or not, our institutions do not permit the militaristic organization in which the head of the State is at the same time the active military as well as political leader. With us, the sole active authority in peace-time military preparation is, so far as the government is concerned, the Secretary of War. Yet the history of the Civil War after the advent of Grant and our participation in the World War demonstrate that our system of government and the genius of our institutions are admirably adapted to the waging of war, provided only that those in authority know how to apply and utilize them.

In fact, the convention presided over by Washington, and with the lessons of the seven-year struggle for independence fresh in their minds, could hardly fail to harmonize with our institutions a thoroughly satisfactory system of war powers and to write those powers into the Constitution. Thus the Constitution provides for obtaining the maximum popular support by placing upon the representatives of the people in the Congress the sole responsibility for declaring war. But, once war has been declared, the Constitution gives unlimited power to the President; the word "unlimited" is used without reservation, for neither Tsar nor Emperor has ever had greater powers than are confided to the President of the United States in time of war.

Coming to a more specific consideration of the functions of commanders in the field and their relations with the War Department, we may at once agree that all the forces in a single theater of operations must be under a single commander, and that higher authority must give that commander full powers, intervening only so far as may be necessary to co-ordinate the activities of the particular theater of operations with events in other theaters. If this be assumed, and it must if we have learned any one of the innumerable lessons of the past, then the question reduces to whether we should place the several commanders of theaters of operations, in the event that there are more than one, under a Commander-in-Chief in the field, or whether each commander of a theater of operations should be directly controlled by the War Department.

Now, it is apparent that two or more theaters of operations may be so closely interrelated into a single theater of war as to require, to insure success, a co-ordination of effort comparable to that necessary in a single theater of operations. Thus, while theaters of war continue to monopolize most strategical questions, the great masses employed in modern war have made it necessary to break down the monopoly enjoyed by theaters of operations over tactical questions and have therefore emphasized the importance of a single commander in the field for each theater of war. An example of this was shown on the Western Front in the World War. During most of the war the Western Front was, at any particular time, divided into distinct theaters of operations. Almost without exception, each of these theaters of operations had its own single commander; and yet all agree that real co-operation on the Western Front was not

reached by the Allies until the principle of unity of command was accepted and a single commander appointed for this theater of war.

To examine every possible theater within which we may wage a future war, and to determine for each concrete case whether such close interrelation of theaters of operations exist as to demand a single commander in the field, is hardly practicable.

We may, however, so classify the future wars in which we might be involved as readily to reach at least a theoretical conclusion. For our purposes, we may further confine our classification to such major wars as would require something approaching our maximum effort. Major wars may at once be divided into those waged on our own frontiers or those in which all principal theaters are at a distance from our shores. Our geographical position is of itself sufficient to lead us to conclude that, unless the enemy or combination of enemies is powerful enough to bring the conflict to our frontiers, we must go at least three thousand miles from our shores to reach a possible theater of war.

Again, a glance at our own geographical position and that of other first-class powers is sufficient to justify the conclusion that, should we once more be called upon to wage a great war beyond the seas, we will find, as we did in 1917, a single theater within which the concentration of our efforts will clearly lead to the earliest decision. In other words, we would in another great war beyond the sea necessarily confront very similar conditions to those which we faced in 1917-1918. To recall briefly those conditions, we may say that the theater of our participation in the World War was three thousand miles from home; our frontiers and coasts could hardly be molested, much less seriously threatened, and it was evident to all but a very few visionaries that the decision was to be sought on the Western Front, and, accordingly, that all our important operations must be concentrated under a single commander in France. Our real work in the World War, then, lay within a territory but little larger than a single one of many of our States, and there could be no serious question of dispersing our resources.

We must, however, admit that in the event of another overseas war we may have to employ a distinct force, so peculiar in nature, so small in size, or so detached from vital theaters of operations, or so partaking of all these characteristics, as to make it desirable to place the commander of such a force directly under the War Department. As a historical example of such a case, we may consider the American force in Siberia during the World War. This was a relatively minor force, organized more for political than military ends, far removed from the main theater of war, and unable to influence events in that theater. Manifestly, the War Department solution of making the Siberian force an independent one, directly under the Department, was desirable.

Putting the conclusions concretely, it is believed that, in so far as concerns war overseas, we should repeat the policy of 1917-1918, namely, appoint a Commander-in-Chief for all our land forces in the theater of war and give that

commander absolute control over all questions of employing all the resources which the War Department succeeds in making available, the possible exceptions to such absolute control being found only in minor forces employed, for political reasons, far away from the main theater.

It must, however, be recognized that a certain danger exists in making exceptions of even minor forces. Events may cause such forces ultimately to become a considerable drain upon resources, and crises may well be expected in which the presence of even a few thousand additional troops in the decisive theater might mean our definite success. Not only should detached forces be instinctively disfavored by the War Department, but, as a practical working rule, the Department would do well to call for the recommendations of the principal commander in the field before diverting even an insignificant force from the principal theater.

Coming to the assumption of a war on our own frontiers, we find a very different situation from that which existed in the World War. While we must seek means whereby we may gain the advantage of initiative—and such means are available—we were foolish not to realize that, as against any combination powerful enough to bring a war of magnitude to our frontiers, our problem is largely one of strategical defense. Whatever the opportunities for the offense, we must hold Panama and Hawaii and we must protect our immense coast line.

Considering now our several frontiers, a mere glance at an up-to-date map of communications indicates that against an attack from north, east, west, or south our corresponding frontier region constitutes a single theater of war, one within which the closest possible co-operation of all available forces is the price of success, and one which should therefore be under a single commander in the field. In fact, if we compare the possibilities along any one of our frontiers with the historical example of the Civil War, we may well conclude that the means of communication of today between New York and Seattle, Seattle and Los Angeles, New York and Charleston, or similarly important points on our southern frontier, are little, if any, inferior to those which existed between Virginia and Kentucky or Tennessee at the time when it was found essential to give Grant supreme command over the Army of the Tennessee as well as over the Army of the Potomac.

Such general considerations lead to the conclusion that, in the event of a war in which any one of our frontiers becomes the main theater, it is essential that all the troops in that theater be under a single commander in the field.

Detailed strategical and tactical studies in which possible hostile combinations and the means of meeting such enemies are considered but reinforce the conclusion that a single commander in the field is essential. Other lines of thought also lead to an identical conclusion. For example, if we assume that, in spite of all, the War Department attempts to exercise a detailed control, it certainly cannot do so without closer contact with the armies than is to be

found in the rooms of the War Department. This means the establishment of some sort of a headquarters in the field. This in turn implies the detaching of personnel from the War Department General Staff and the War Department bureaus; and if there is any single lesson to be learned from the World War it is the evil effects of breaking up the War Department machinery by detaching trained personnel on the outbreak of war. Then, too, the personnel sent from Washington to the northwest could, in the event of that becoming for the time being the most important center of operations, hardly have merely the status of inspectors or liaison officers; and this implies that either the Chief of Staff or a principal assistant must establish an advance headquarters and spend much of his time there. If the first lesson from the World War is that the outbreak of war must not be a signal for the disruption of the War Department personnel, the second lesson is that in time of war the Chief of Staff and his principal assistants are taxed to the utmost in solving the vast problem of mobilizing our resources.

But we have as yet only considered the question of the command of the forces within a single frontier region which might of itself be the principal theater of war. Undoubtedly there would be such a principal theater; but any combination powerful enough to bring a great war to our shores may not, and probably will not, limit itself to a single theater, and we must foresee the necessity for putting important forces into other theaters. This brings up the question as to whether or not in a war on our continent we should place all our forces in the field under a single G. H. Q.

The argument that the rôles of Panama and Hawaii and of the seacoast districts are purely defensive, and that, aside from those coast forts within the anticipated theaters of war, there can be no question of direct co-operation between their garrisons and the armies, is not enough to justify the divorce of these garrisons from G. H. Q. control. The real function of G. H. Q. is to decide upon the vitally important points, to determine the degree of risk that can be run at less important points, and to concentrate all available power in obtaining the decision at the point selected.

If G. H. Q. is to be really free to concentrate all possible forces on the decisive points, the War Department should give the commander in the field power over all the resources which it has succeeded in making available. This does not mean that the War Department should wash its hands of any control over G. H. Q. The War Department must retain that control, and of course the War Department may order a certain disposition of troops. But such an order should only be given for a good and sufficient reason and, as a rule, for one having additional grounds than purely military ones. If the War Department can find an infinitely wiser commander and an incomparably more skillful G. H. Q. staff, then the old should be deposed and make way for the new; but the powers and the responsibilities of the G. H. Q. should be well-nigh absolute in all that affects combat troops and their immediate auxiliaries.

To summarize: I believe that, in the event of war with a combination powerful enough to make North America the principal scene of hostilities, we should have a G. H. Q., and that G. H. Q. should have control over all the land forces which are ready for combat, reserving to the War Department the, if anything, even more difficult task of making our resources available.

But the complete control which is advocated for G. H. Q. need not and should not exactly parallel in all its details the system which was employed in France. In France the G. H. Q., A. E. F., had complete control, not only over all combat troops, but over *all* troops, replacements, and supplies in Europe; and such control was essential to meet the conditions that existed. Conditions, however, would be quite different in a great war on our own continent. Our forces would be immediately based on the home territory and the work of the large S. O. S. organization functioning directly under G. H. Q., which was necessary in France, could well be taken care of otherwise. Each theater of operations would of necessity have a certain service of supply, but the great reserves of supply, both in men and material, would be better placed in interior depots, and these depots should, it is believed, depend directly upon the War Department. Nevertheless, all decisions as to *priorities* of supply should be vested in the G. H. Q., for the simple reason that available resources are habitually less than the demands, and that, consequently, the allotment of supplies is of equal strategic and tactical importance as the allotment of combat units, even though the former follows to a degree the latter.

Due to its great importance, I would repeat that, while there should not exist an S. O. S. under the direct orders of G. H. Q., all questions of priorities of supply should be settled by the War Department in accordance with the requests of G. H. Q. Under this solution it must be noted that the G-1 and G-4 sections of the G. H. Q. would require practically the same strength and organization as though the S. O. S. were immediately dependent upon G. H. Q., the outstanding exception in working methods being that regulating officers would depend upon the headquarters of the several theaters of operations, and that the commanding generals of the several services of supply of these theaters would draw against War Department depots on some system of credits made on recommendation of G. H. Q.

I believe that the conclusions which have been given are sound. If we accept this as true, the final question is to apply the conclusions to our existing military machinery, and if that machinery is not complete, to supply any missing cogs.

It seems probable that at least three of the army headquarters authorized by the present law will be established. This is a long step in the right direction, especially if each of these army headquarters be required to prepare and keep up to date complete plans for possible operations within its respective territory. But it is not possible so to arrange army territories as to include within any one of them the entire field of probable operations in any considerable war.

The plans prepared by the several army headquarters would, therefore, be of little practical value unless such plans were based upon and co-ordinated by a comprehensive plan for the solution of the problem presented by each possible hostile combination as a single problem of national defense.

At present the only agency for the preparation of such a plan is the War Department. Aside from any question of defective organization within the Department, our present system would either throw upon a hastily assembled personnel the burden of carrying out a plan with which it would be wholly unfamiliar, or else would necessitate the disruption of the War Department on the outbreak of war. Neither of these evils is to be chosen, but both are strenuously to be avoided, and it therefore seems to me that the provision in time of peace of at least the nucleus of a G. H. Q. is of vital importance. I believe I will be supported in this by any officer who knows anything of the struggles of A. E. F., G. H. Q., to give birth to itself.

There may be several ways in which at least a nucleus for each of the higher staffs might be satisfactorily formed; but from my experience in France I am *certain* that they *must* be formed in some way or other, and that it is *utterly impossible* to improvise an effective staff within a less period than is counted in months. Unless we form *in time of peace* the necessary higher staffs, divide those staffs on functional lines, and charge them in time of peace with their appropriate part of planning and preparing, we shall, in the event of having to meet in battle a combination powerful enough to bring war to our own shores and in the absence of allies behind whose lines we may spend months and months in preparing, court disaster, or at best run the risk of seeing the enemy's rule temporarily established on American territory, as it was in 1812.

A Jaunt Around the World, with Some Fleeting Observations

BY

Lieutenant-Colonel GEORGE A. WINTERBURN, Cavalry

EARLY IN JANUARY, 1920, General Frank T. Hines, then the Chief of the Transportation Service, called me into his office and asked me how I would like a trip around the world. The proposition was certainly alluring and, forgetting my addiction to *mal de mer*, I replied that nothing would be more acceptable.

A few days later I received confidential instructions, which were published the next day, for the benefit of a few friends, in the *Washington Post*, to proceed to Vladivostok, Siberia, as special representative of the Transportation Service in connection with the repatriation of troops of Czechoslovakia that were marooned in Siberia.

Under an agreement between the British and the American Governments, approximately 72,000 Czechoslovaks, Poles, Serbs, Rumanians, etc., were to be transported from Siberia, each government assuming the repatriation of 36,000 to Europe. The Secretary of War had designated General Hines to assume entire charge of the American part of the repatriation.

My original instructions contemplated only a short stay in Vladivostok; then a return to New York on one of the transports carrying the Czechoslovaks to Trieste, Italy, via the Suez Canal. At Trieste all of the Czechoslovaks were to be disembarked and entrained for Prague.

Accordingly, I set forth on my long voyage, leaving San Francisco on the *Mount Vernon*, the transport assigned this duty. When about 900 miles out, engine trouble occurred, and we made an about face for San Francisco. A fresh start was now made from San Pedro, California, on the transport *Edellyn*, bound for Yokohama and Vladivostok. Very rough weather was encountered crossing the Pacific, deck-houses and life-boats being washed away. I am rather of the opinion that some vessels do not need bottoms, as I never recall the time that the *Edellyn* was not lying on her port or starboard beam.

From Yokohama I proceeded by rail to Tsuruga, on the west coast of Japan. I had always thought that a Mex. Colonel in full regalia, wearing ribbons indicating fierce struggles in the United States, during the Spanish War; mortal combats in the Philippines; heroic service on the Mexican border, together with a few indicating athletic prowess, would impress all foreigners. Not so with the Russian consul at Tsuruga. In spite of diplomatic approach, threats, and offers of bribery, he refused to allow me to depart on the good Russian ship *Penza*. All this because I had forgotten the mere formality of securing a pass-

port. I then decided to use purely Russian methods, and through a Danish interpreter found that by loaning one of the steamer's stewards 20 yen I could be locked in a stateroom and not discovered until the ship was at sea. My G-3 plans worked admirably and on March 19 I arrived at Vladivostok.

Upon reporting to Major-General Graves, Commanding the Siberian Expeditionary Forces at Vladivostok, I was handed a cablegram directing that I remain at Vladivostok in charge of the repatriation of the marooned Czechoslovaks who were to be handled by American transports.

On April 1 the last of the American Siberian Expeditionary Forces evacuated Siberia and I, with Major W. M. Dixon, Q. M. C.; Captain James B. O'Toole, Q. M. C.; Second Lieutenant J. R. Northup, Corps of Interpreters, and Sergeants Guth and Myers, Q. M. C., remained in Siberia the sole representatives of the War Department.

On April 4, about 11 p. m., while sleeping at Red Cross headquarters, I was awakened by machine-gun and rifle fire. Upon arising and investigating, I found that this fire not only came from buildings and streets in the immediate vicinity, but the entire city of Vladivostok resounded with noises of combat. Lieutenant-Colonel Eichelberger, Intelligence Division, who was awaiting transportation to Japan, and I determined upon a tour of investigation, but just as we were leaving the main entrance of the Red Cross Building two Czech soldiers, mortally wounded, were brought into the Red Cross Hospital. It appeared that the Japs were firing at everybody and everything that moved. Deciding that discretion was the better part of valor, and that one need not necessarily dodge bullets to get medals, we decided to postpone the investigation.

The Japanese Army Headquarters claimed that the action was taken as a defensive measure against attacks by Russian patrols. I do remember having seen a Russian soldier with a gun and a few cartridges the day before. At any rate, the Japs won and have stayed one since that date. There were comparatively few casualties, outside of denting the fronts of buildings and smashing windows, although the streets of Vladivostok were filled with flying missiles for hours.

Vladivostok at this time was certainly a point for study in nationalities. One had only to sit at the Embarkation Office window on Svetlanskaya and see a kaleidoscopic stream of Russians, Chinese, Japanese, Koreans, Italians, Poles, French, Czechs, Rumanians, Serbians, Kamchatkans, Indians, Jugoslavs, Austrians, Germans, with a small percentage of British and Americans, pass in endless procession. As these representatives of the various nationalities composed both military and civilian personnel, one can visualize the moving picture it made. One must remember that nobody works in Vladivostok except Chinese and Korean coolies.

The maritime provinces of Siberia are not completely occupied by Japanese

troops, and while a Russian Government functions, this government owes no allegiance to Lenine and Trotsky. These Russian officials are imbued more or less with Bolshevistic tendencies, but Japanese control prevents any demonstration really partaking of Bolshevism. When looking at the blood-red flags which are flown from all government buildings, and then at similar ones indicating street repairs and dangerous points, I could not help but wonder if both did not indicate the same thing.

Living conditions among the general population were intolerable. However, all allies maintained military or diplomatic missions at Vladivostok and many formal and elaborate social functions were in order.

During the early part of May, I made a trip to get first-hand information as to the railroad movement. As the trip from Vladivostok to Harbin, Manchuria, a distance of about five hundred miles, took ten days, one can gain some idea of the transportation difficulties.

Harbin was found to be a haven for many exiled Russian officials and many ex-army officers. The night life partook of the old Russian atmosphere. Cabarets and theaters opened their doors at midnight and continued open until daylight. All these exiled Russians seemed to be living in the hope that they would one day return to their own and the old life. Futile hope!

As the Czechoslovak troops were stationed along the Siberian Railway for a distance of over 3,000 miles, the task of transporting them to the Pacific coast was no easy one.

The Siberian Railway was guarded and operated by various allies. Its equipment was depleted and in poor condition, through continued strife and abuse. Numerous obstacles that must necessarily arise from divided control made traffic difficult. In every way the movement of this large number of troops over a railway practically out of commission demonstrated what can be done with the impossible.

In connection with the operation of the Siberian railways, too much credit cannot be given the American Siberian Railway Corps operating under the direction of the State Department. These American railway men, operating at a distinct disadvantage, in spite of deliberately placed obstacles, at points of duty involving danger and intolerable living conditions, wrought wonders. It is safe to say that, without their help, the Czechoslovak repatriation would have been greatly retarded.

During the entire period of Czech operations in Siberia, practically all the organizations had been using the rolling stock of the Siberian Railway as barracks. So, when the movement westward was ordered, motive power was the only difficulty, and as fast as engines could be provided those echelons farthest west (Lake Baikal District) were started on their long journey eastward, which in some cases lasted for months. Echelons moved as opportunity offered, stopping at sidings for protracted periods. The trains of these ech-

elons, as they proceeded eastward, took on a very gala appearance. Cars were gaily decorated with paintings, both inside and out. Rustic galleries containing miniature gardens were built on the sides of the cars, and many fantastic arrangements calculated to please the eye and increase the comfort of the personnel were visible. As the trains carried the wives and children of the troop personnel, the echelons, which filled every siding for hundreds of miles, presented quite a domestic appearance. There being no cubic air laws in Siberia, all cars were densely packed. The Czechs found it necessary to come up for air only during the summer.

It might be well to explain just how the Czechoslovak troops came to be in Siberia. These troops originally formed a part of the Austrian Army operating against the Russians in Galicia. They deserted from the Austrian Army during the years 1914 and 1915. After surrendering to the Russian forces, they were held as prisoners for a period of nearly two years, or until the upheaval in Russia resulting in the downfall of the Czar. An agreement was then made with the Russian *de facto* government and Czechoslovak legions were formed. These legions operated with the Russian forces against Germany and Austria until the Russian Bolshevik gained the upper hand.

The legions were at this time in the vicinity of Kief, Ukrania, and, not being in sympathy with Bolshevik cause, the Allies, in February, 1918, decided to transfer them to the French front via Vladivostok, Siberia.

This almost impossible task was immediately commenced, and had so far progressed when the Armistice was declared, in 1918, that one regiment had already reached Vladivostok. The rear guard, consisting of two regiments, was at this time on the Russian Volga. The balance of the force, over 50,000 troops, was scattered along the Siberian Railway a distance of over 5,000 miles.

It was later found that these troops would not be needed in France, and hence it was decided to use them to operate against the Bolsheviks in Siberia and in aid of Admiral Kolchak, who was commanding the forces in eastern Siberia, attempting to re-establish the old régime, or rather to overthrow the Bolsheviki.

Early in the summer of 1919 it evidently became apparent to the Czech forces that the atrocities and crimes committed by the reactionary forces under Kolchak were just as vicious as those attributed to the Bolsheviki, so that no further support was given Kolchak and a neutral attitude was assumed in connection with Siberian affairs. About this time conferences were commenced in the Supreme Council, in Paris, with the view to repatriating the marooned Czech forces, with the result that final arrangements were made late in the fall of 1919 for their repatriation.

All of the operations of the Czechoslovaks in Russia and Siberia were accomplished only by force of arms, a recountal of which would fill volumes and picture battles, marches, expeditions, and incidents that would rival fiction.

From a cavalry point of view, there was not much to speak of in connection with Siberia. Very little cavalry was used during the Kolchak and Bolshevik operations. The Japs have a few squadrons on duty in the vicinity of Vladivostok. All these squadrons are comparatively well mounted, having secured many suitable animals during their Siberian service. The Jap, however, is not built to be a dashing cavalryman, although he takes the arm very seriously. The Czechoslovak legions also maintained two regiments of cavalry. As these squadrons were officered by ex-officers of the Austrian Cavalry, they presented a very creditable appearance. Outside the animals obtained for the Japanese and Czechoslovak Cavalry, which consisted of the pick of the horses found over a great area of Siberia, only small, hardy Siberian and Manchurian ponies are encountered. Strange to say, one very seldom sees an animal poor in flesh, which fact results from the feeding of soybean, which is grown in abundant quantities in Manchuria and Siberia.

Trotting and running races are held from time to time at the Vladivostok hippodrome, but the class of animals entered is very mediocre and the sport exceptionally crooked.

In Vladivostok I discovered a new use for mounted men when I found a pilot could be sent on horseback to board a ship and pilot it into the harbor. I might explain that the pilot rode out on the ice.

On September 2 the last American transport, the *Heffron,* took aboard its Czech personnel and proceeded to Trieste, Italy, via Panama Canal, and at this writing is en route to New York, having reached Trieste November 10.

On August 24 I, with all office personnel except Captain O'Toole, who accompanied the U. S. A. Transport *Heffron,* boarded the transport *President Grant* and commenced my long journey homeward via Suez. This vessel carried approximately 6,000 Czechoslovak troops, completing the total of 36,000 that were repatriated in American vessels.

At Singapore a stop of one day was made; this was ample to motor over the island and enjoy a good meal at the Hotel Raffles.

Arriving at Colombo, Ceylon, September 15, there was a stop of five days. Visits were made to Kandy, the ancient seat of the Singalese kings, and to Galle, the original Dutch settlement. This being the home of precious jewels, nearly everybody invested, but trading with Singalese stone merchants only verified the statement I had heard previous to arrival, "No matter what you buy or what price you pay for anything in Colombo, you are stung."

I noted many good polo ponies at this point, where the game, as in all India, is one of the principal sports of the British residents.

After visiting Hongkong, Singapore, and Colombo, one could not help but note the orderly and clean appearance of all British colonies, but everywhere rumblings were heard and every place reflected the unsettled condition of peoples.

Then followed a torrid trip through the Indian Ocean and the Red Sea. In passing through the Red Sea, I found that my Biblical education had been sadly neglected, as I had great difficulty in determining whether the Ark had rested on Ararat or Sinai, nor was I quite sure who lead the hosts across the Red Sea.

At Port Said, a trip to Cairo was in order. The Pyramids and Sphinx appeared to be everything claimed for them and looked their age. The Egyptian does not take kindly to the new British program and was willing to discuss the matter with any one who would listen. I am inclined to think this unrest will be difficult to curb.

A fine sight for a cavalryman in Egypt is viewing the wonderful specimens of Arab horseflesh seen, both in harness and under saddle, in the streets of Cairo and vicinity. They are certainly beautiful animals, and while a little under our required height for cavalry, would come nearer filling our specifications than anything I have ever seen.

The camp at the British base on the Suez Canal from which General Allenby's operations against Palestine were conducted was full of interest. As these troops were principally cavalry, I spent an interesting day visiting the camps and was very cordially treated during my stay. The troops were principally Indian, and I was impressed with their discipline, their horsemanship, and particularly with the excellent care they gave their mounts. The mounts appeared to me to be good and all appeared to have blood.

Arriving at Trieste, Italy, October 13, arrangements were made to leave the vessel, make a short trip through Europe, visiting points of interest and the battlefields, and rejoining the transport at Gibraltar.

At Trieste the usual daily strike was encountered. Upon boarding the train for Venice at 5 p. m., we were informed that a strike of railroad employees would take place, lasting two hours. We were further informed that if we would stay over until next day we could enjoy the nightly riot. The daily sport seems to be to hold a universal rejoicing, celebrating the release from Austrian tyranny; and, after spending an hour or two at this, to choose up sides, pull off a riot, and tear down a few buildings, etc. The police and soldiers are well protected during this sport, being kept in fortified barracks only reducible by artillery.

Arriving at Venice, it was found full of water, as advertised. They had gondolas and everything. Seriously speaking, the Plaza of St. Marks was the most impressive sight seen. Sweet-throated Italian singers serenaded us beneath our lattice. We listened enthralled, and, upon appearing at said lattice to thank them, were roundly cussed for our pains. It seemed it was not thanks, but cash that was wanted.

This is the only point in my travels that I am willing to concede is not suitable for cavalry operations.

The Cathedral at Milan was on the job, but that was about the only thing in Milan that was. During our visit there dense crowds thronged the streets, and inquiry evolved the information that a strike or strikes were in order.

At Genoa a stop was made, and then we took a beautiful ride along the Riviera. Monte Carlo had no attractions, as it was too far from pay-day.

Paris—why speak of Paris; it would probably bring blushes to the cheeks of many of my army comrades.

An interesting trip was made from Chateau-Thierry along the battle lines toward Rheims. This was interesting and instructive, particularly to one whose light was hidden beneath a bushel during the late trouble, and who was not allowed the privilege of killing several thousand Boche.

I spent an interesting two days in southern France with Captain Roy, a Frenchman who was in the French Army during the war and who was associated with me in purchasing remounts in the western part of the United States during 1917. Captain Roy is greatly interested in horses and has some wonderful hunters as well as coach animals. He states that ordinary work-horses are now worth three times their pre-war price. He also said that the American artillery horses sent to the A. E. F. brought a very high price at the end of hostilities and were doing a wonderful work in the reconstruction of France.

While in southern France I witnessed an inspection of cavalry mounts being purchased for the Portuguese Cavalry. The horses shown all had blood, but were too light and could not have been accepted for our cavalry. A week or two previous to my visit, Colonel W. C. Short, Cavalry, had been in this section of France securing polo mounts for the forces at Coblenz.

Gibraltar was reached via Marseilles and the sea. From Gibraltar, Tarifa, Seville, and Algeciras were visited—all interesting points, where the Spanish merchant buried his pride and took what few remaining dollars I had.

My principal impressions of those parts of Europe through which I passed were: That France will rapidly regain its feet; for as one passes through the provinces, one sees all backs bent, and "Work! work! work!" seems to be the slogan. Italy appears in a transitory state, but labor seems to be gaining the upper hand. If this victory is used properly, no great damage can result. It is hoped labor's victory will be tempered with reason.

The present rates of money exchange certainly tempt an American to move abroad. Our dollar will go a long, long way. The only reason I would not personally make the change is that I refuse to live in any country where liquor can be purchased so cheaply. Liquor is worth much more than Europeans charge for it, and I positively refuse to take advantage of their ignorance.

The voyage from Gibraltar to New York was made without incident. Upon first seeing the Statue of Liberty, I felt somewhat like the darky trooper returning from France, who, upon catching sight of the statue, exclaimed, "Old gal, if you ever expects to see me again, you'll have to 'Bout face!"

Cavalry and Aircraft

BY

Major WILLIAM C. SHERMAN, Air Service

The earth has its ends and the sea has its beaches,
But the air stretches forth to the uttermost reaches.

THE AIR SERVICE can number but a few years of existence. When we reflect that the next younger of the combatant arms counts its life by centuries, it is obvious that the work of the air force lacks something of the stability of technique that long experience has developed in other arms; but, although its years are few, it grew with tropical luxuriance in the heat of war. An inevitable result of this rapid development has been a tendency to adopt as normal all the peculiarities of that singular struggle we call the World War. Properly regarded, the World War was not a campaign, nor yet a series of campaigns, of the type that has ordinarily characterized war. It was essentially a siege, marked by those sporadic sorties that we learned to term "offensives." The technique of co-operation between the air forces and other arms reached a high degree of proficiency in all that pertains to siege warfare. Because of this, for sieges are inherently hostile to the employment of cavalry, cavalry and aircraft have not yet learned to use each other's powers to the same extent as have aircraft with infantry and artillery.

But the experience of the World War is by no means valueless. On the contrary, a broad study of the work of the air force shows certain clearly marked characteristics. To translate the methods of siege warfare into terms of mobile operations, to adapt the experience gained with infantry and artillery to the uses of cavalry—these things offer no insuperable difficulty. It is too early as yet to go into minute detail; of necessity there will be constant change. But the lines of past development of air-work point out unmistakably the work of the future, and we may now delimit with some assurance of accuracy the lines of future growth of the Air Service and the part it is destined to play in war.

There has been noted a regrettable tendency on the part of the overhasty to assert that aircraft have rendered cavalry useless for future wars. It is undeniable that certain functions that belonged to the cavalry of old can now be assigned more suitably to aircraft. But the nature of cavalry demands that the utmost stress be laid on mobility; indeed, this is its *raison d'être*. It is a corollary of this, that time is the essence of the thing. Opportunities for the employment of cavalry will be fleeting; the sudden thrust is the aim. The proper employment of aircraft will inevitably increase the number of these

opportunities, and in so doing enhance the power of cavalry. Far from regarding each other with unfriendly eyes, there should be a spirit of camaraderie, based on the very real service that each may render the other.

Before discussing its relationship to cavalry, it is desirable to point out the doctrine that must animate the Air Service in its operation. The Air Service really comprises four branches, each with very distinctly differing functions. There is but one efficient means of combatting aircraft. From the essentially defensive nature of all ground protection, it follows that aircraft, which alone may take the offensive against hostile aircraft, constitute the only effective weapon to strike at them. Friendly aircraft can operate only where control of the air has been attained. The first duty of the air force, therefore, is to seek out the hostile air force and destroy it, wherever found. This duty falls primarily on the pursuit groups. Thereafter the air forces—by this we mean the offensive aviation, in contradistinction to observation aircraft—endeavors to destroy material and to attack ground troops. These duties devolve largely on the bombardment and attack squadrons.

The rôle of pursuit is so distinctively aërial that no further mention need be made of it in connection with cavalry; nor need we attempt to secure close liaison between cavalry and bombardment or attack aviation. It goes without saying that a wise commander will not fail to place all of his strength in the final mass of attack; so there will be seen on future battlefields many a combined attack of cavalry and aircraft. Especially will both of these arms find a peculiar power in the pursuit. Aircraft, by blocking cross-roads and disorganizing columns in retreat, can perform for the cavalry much the same holding service that the latter does for the infantry. But these duties must need be assigned aircraft by commanders of large units or undertaken, as opportunity offers, by the air force commanders. In the very nature of the undertaking, intimate liaison between the actual troops on the ground and the assaulting planes is neither practicable nor necessary.

From the point of view of defense, however, cavalry will have to take cognizance of the air force. A recently returned aviator from Poland has given a most interesting account of the havoc wrought in Soviet cavalry columns by the Polish air force—testimony fully corroborated by intercepted radio messages sent by Budenny. Of course, the Poles had no aërial opposition, and the standard of discipline in the Soviet armies may not be of the highest.

Night marches, too, may obviate some of this danger, but night marches cannot be made the rule in open warfare, as they were in the latter stages of the World War, and night operations by aircraft are becoming increasingly effective. Such attacks are certain to be frequent in future wars and are peculiarly demoralizing. Cavalry must be taught to withstand attacks from the air, defending itself with rifles and machine-gun fire.

It is with observation aviation, however, that cavalry must have intimate liaison. This branch of the Air Service is, therefore, of general interest to

cavalry. Certain of the limitations of aircraft are worth enumerating. Today the aviator has overcome practically all the difficulties of weather save one. Dense fog and low-lying clouds and mist, by reducing visibility, render flying extremely difficult and even, in some cases, impossible. But many minds have attacked this problem and already the solution seems to be in sight.

Night flying has developed rapidly. After sufficient experience, the aviator can proceed almost as well by night as by day, and with the use of flares can bring wide stretches of country under effective observation.

It is worth noting in this connection that, in spite of the extreme precautions against aërial observation adopted by Ludendorff in the 1918 offensives, which demanded organization and accuracy of timing impracticable save in trench-warfare conditions, nevertheless aërial observers, before every such "drive," obtained a great amount of evidence of the approaching blow. Nor does broken or even heavily wooded country offer great obstacles to the air observer. Under such conditions his work is obviously more difficult than in open plains, but only complete overhead cover can defilade troops from his view—a condition not likely to be met with often in mobile warfare and practically impossible for cavalry.

Continuity of observation is admittedly impossible for one plane; but the solution of this lies in a simple radio message to a relieving plane, whenever such is needed. Even a cursory study of the elaborate system of information we borrowed from our allies in the World War will show that it is unsuited in every detail to open warfare. O. P.'s, listening sets, sound ranging, flash ranging, prisoners—the whole complicated ensemble are useless for procuring tactical information in time to be of value, save locally or in sieges. In open warfare, methods of local reconnaissance by cavalry will remain unaltered; but for procuring in time that information of wider import which is needed by higher commanders for a proper estimate of the situation, the airplane is the chief, almost the only, instrument.

There is, however, a serious limitation to the airplane's activity. The observer must free his mind and change his methods from the formalism of trench warfare. In this, observation was more nearly mechanical, fixed, formal in its application, and therefore easier to do; for routine observation and photography is always less difficult than the solution of situations, no two of which are ever the same. It is not numbers of observation planes that count; but, in order to be of use in open warfare, the observer must be highly trained tactically, so that he may know what to look for and realize accurately the meaning of all he sees. This is our most difficult problem and one the Air Service is putting forth every effort to overcome.

With highly trained observers, the cavalry may rely on the Air Service for practically all of its extended observation. It can furnish the cavalry commander with a complete and accurate location of all enemy units within two or three days' march. It can give him a station list of his own units.

It can provide him with almost all of the information essential to dispel the "fog of war," save one—the enemy's intention. When we reflect how often chance either modifies or sheerly becomes design, it is obvious that the true intention of the enemy will ever be unknown. The best that can be achieved is to obtain enough facts to enable us to deduce the logical results of our enemy's past actions.

A French general who had been proved on more than one battlefield was asked what thing above all others should be sought by the command in battle. His answer came instantly: "Liaison! C'est tout!" Those who have endeavored to piece out a picture of the whole from the apparently inextricable confusion of a battlefield will be inclined to indorse this opinion. The elaborate network of liaison employed in the World War almost invariably ceased to function at the very time when communication was of pre-eminent value. It violated the fundamental principle that in war all things must be simple; the simplest things are difficult, and complicated things quite impossible of performance. One agent of liaison finally came to be relied on for active operations—the messenger; and, foremost of all, that messenger who could move at a speed greater than achieved by man in any other way—the aviator.

In this chain of information and of liaison, however, certain links remain to be forged. Communication between the airplane and ground troops has not yet attained to the desired degree of proficiency. Panels and signal lights, the method employed between aviator and infantryman in the World War, functioned successfully, it is true, but only where both arms were highly trained; attempts at liaison with new American divisions reaching the front almost invariably resulted in total failure. With cavalry, the difficulties are even greater, due to superior mobility; and our limited experiments between cavalry and airplanes on the border indicate that a satisfactory solution has not yet been made.

Radio was the normal means of communication in fixed positions, and will continue to be so, for those higher headquarters whose movements are less frequent. It combines speed and accuracy to an extent that renders it the method superior to all others, where it can be used at all. But cavalry columns are somewhat loath to burden themselves with the equipment, fearing the loss of mobility; and in fact the time necessary to set up and "tune in" makes it of doubtful application in many cases.

The so-called DR system—semaphoring with dots and dashes—has proved of value in some cases; but it is too slow, uncertain, and permits only the shortest and simplest of messages. Dropped messages are perhaps the simplest, quickest, and best method of communication between airplane and ground troops, but possesses the obvious disadvantage of being one-way only. The ideal solution, of course, is for the observer to land and give his report and receive his instructions verbally; but the high speed of modern planes makes it impracticable for them to land without "crashing," save in fairly large and

unobstructed fields; too often such are unavailable. This disadvantage, too, the Air Service is striving to overcome, not without some prospect of ultimate success.

The problem, therefore, that lies closest to hand is that of obtaining rapid and accurate communication between airmen and cavalry. In the nature of the thing, there is no insuperable obstacle. It is primarily a matter of working in earnest co-operation, each confident that the other has both the same ability and the same animating desire. To this the material obstacles will not fail to yield, and cavalryman and aviator will discover that, far from being opposed in their aims, they are mutually complementary, and each will derive new powers from the assistance of the other.

"NOUS AVONS CHANGÉ TOUT CELA"

"ON THE BARRACKS' wall at Delhi, India, this inscription will be found: 'When war is on and strife is nigh, God and the soldier is all the cry; when war is o'er and peace is cited, God and the soldier are quickly slighted.'"

Hamilton and 1920*

His Foresight as a Soldier Equal to His Vision as a Statesman

BY

Major-General WILLIAM HARDING CARTER

ALEXANDER HAMILTON'S military services during a quarter of a century, 1775 to 1800, were interspersed with so many other duties of a high order that he has never received that recognition as a leader of general staff thought which he so well merited. His success at the bar and in civil office so clearly established him in the public mind as a statesman of the first rank that his rare military ability suffered eclipse. His versatility was extraordinary, and he became a master mind and leader in every field he entered. Owing to the destruction of the military archives during the occupation of the capital by the British in 1815, the extent of Hamilton's interest in army matters remained unknown until his private papers were published, more than a century subsequent to his early service.

It seems almost uncanny to read in one of Hamilton's letters on the subject of preparedness, written a hundred and twenty years ago, to the Secretary of War:

> "It is a pity, my dear sir, and a reproach, that our Administration have no general plan. Certainly there ought to be one formed without delay. If the Chief is too desultory, his Ministry ought to be more united and steady, and well-settled in some reasonable system of measures. It should be agreed what precise force should be created, naval and land, and this proportioned to the state of our finances. No sentiment is more just than this, that in proportion as the circumstances and policy of a country forbid a large military establishment, it is important that as much perfection as possible should be given to that which may at any time exist. Military science in its various branches ought to be cultivated with peculiar care, in proper nurseries, so that there may always exist a sufficient body of it ready to be imparted and diffused, and a competent number of persons qualified to act as instructors to the additional troops which events may successively require to be raised."

Under far-reaching and sometimes overwhelming difficulties, the regular Army has continued to confront emergencies under just such conditions as were set forth by Hamilton. The willingness of Congress to give proper attention to matters of national defense habitually declines as the prospect of war

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diminishes. Against official indifference and positive neglect modest men often succumb and cease to press for the attention they know their plans should receive. Hamilton had served in Congress and Cabinet prior to being called back into the service in the threatening presence of another war. He recognized the nation's unreadiness, and his plans for preparedness stand out as the one oasis in the generally barren field of military literature between the Revolution and the Civil War.

The wide range of his military knowledge astonishes the professional student. He had joined the Revolutionary army at nineteen years of age, as captain of a New York battery, and went immediately into action in the Battle of Long Island. He accompanied the Army in its retreat, operating with the rear guard. He had participated in the fighting at White Plains and in New Jersey during a period of six months, and had attracted such attention that Washington took him into his military family as aid, with the rank of lieutenant-colonel. His new environment secured to him the lasting friendship and confidence of the Commander-in-Chief and brought him into intimate contact with all the prominent men of his generation. His knowledge of the French language caused him to be utilized as officer-interpreter at all conferences with French officers, with many of whom he formed friendships of lasting character. In the performance of what has come in the World War to be known as liaison, or connecting-link duty, Hamilton obtained a perfect knowledge of French military methods. His active mind not only absorbed it all, but led him on to make application of that which would be valuable when transplanted for the use of the American Army. Small wonder that in the course of time he became the father of preparedness and the leading student of military policy of the century following the Revolutionary War.

Although Hamilton wrote to the Secretary of War that "a general staff is unnecessary in time of peace, as all its objects may be answered by the War Department," his own studies and persistent efforts along progressive lines establish beyond question the great value that would have come to the nation if a General Staff Corps could have been created to antedate the establishment of the numerous bureaus of the War Department, with chiefs who gradually acquired an independence of military control all but fatal to harmony and efficiency in war.

When a member of Congress, he reviewed the powers of that body in regard to the Army, and prepared a plan for a military peace establishment. No Congress ever acts on questions of defense at the right time. Expediency is the rule until a grave crisis arrives, and then money, material, and lives are thrown madly in the maelstrom to remedy the defects of procrastination. Hamilton's plans involved the fortification of the more important harbors. Congress failed to take the matter seriously, and it was not until after the British had landed and marched into Washington during the War of 1812 that

authority was granted for the employment of a celebrated military engineer, General Simon Bernard, one of Napoleon's staff officers, to do the very things Hamilton had urged many years before.

Under the stress of threatened war in 1798, Hamilton was called back into service as second in rank to Washington. He immediately prepared plans for the organization of the Army, which were approved by Washington, submitted to Congress, and duly enacted into law. His next interest was the betterment of the medical service, and his bill for the creation of a "Medical Establishment" also became a law. While his mind was active along these lines he planned the establishment of a military academy, which resulted in the germ at West Point since becoming the most perfect military school of the world.

In one of his plans, entitled "Measures of Defense," submitted in 1799, Hamilton suggested what has come to be known as the Plattsburg Plan. After selecting officers from those of war experience during the Revolution, his plan continued: "To provide for the immediate raising of a corps of non-commissioned officers, viz., sergeants and corporals, sufficient, with the present establishment, for an army of 50,000 men. The having these men prepared and disciplined will accelerate extremely the disciplining of an additional force."

Like Upton, in the midst of his studies of military policy, Hamilton now engaged in the preparation of tactics for the Army. He went into this in the same painstaking way he did everything, and even insisted upon knowing the reasons which induced the French Army to adopt the particular length of their military step.

Since the close of hostilities in the recent World War many millions of dollars have been expended upon the creation of an infantry school in Georgia. In 1799 Hamilton recommended the establishment of an "infantry school," a "cavalry school" and a list of extra officers to provide for filling vacancies created when regimental officers were detailed to staff duties. It was only a few years ago that Congress was induced to recognize the necessity of extra officers and to authorize their appointment.

With the passing of the years, Hamilton's reputation as a statesman has grown steadily. It is well within the mark to say that his knowledge of military policy and his plans for national defense entitle him to first rank among military students and to recognition as the father of military preparedness in America.

Cavalry Signal Communications

BY

Major O. S. ALBRIGHT, Signal Corps (Infantry)

TACTICAL PRINCIPLES

In discussing signal communications it is necessary to avoid a confusion of terms in order to get a clear understanding of the subject. The term "liaison" is often used in connection with signal communication and, on account of the indefiniteness of its meaning, has created much confusion of thought on this subject. Signal communication is only one factor of liaison.

The French word "liaison" has no English equivalent which expresses its full meaning. The English word "contact" is probably the best translation. As used in military parlance, "liaison" is a broad term and signifies the act or acts of a commander in keeping in touch with the next superior unit and the subordinate and adjacent units, in keeping his immediate superior informed of his progress and his needs, in keeping himself informed of the progress and needs of adjacent units, in keeping adjacent units informed of his own progress and needs for mutual co-ordinative and co-operative effort by each adjacent unit, and in keeping himself informed of the progress and needs of his own subordinate units for the purpose of co-ordinating their efforts so that mutual co-operation between them will result. Liaison includes in general the act or acts of informing, co-ordinating, and co-operating, and the means by which these acts are performed. Signal communications include only the means by which these acts are performed. For example, the origin, dispatch, and delivery of reports from subordinate to superior units are acts of liaison, while only their dispatch and delivery are functions of signal communications. The operation of combat patrols on the flank for purposes of maintaining contact between adjacent units is an act of liaison, but is purely a troop operation in which signal communications play only the part of transmitting necessary messages. The assignment of officers of a unit to the headquarters of adjacent units and the consequent actions of these officers are acts of liaison for which signal communications serve as the means of communication only. On account of its lack of definite significance, it is thought that the term "liaison" should be eliminated from our military vocabulary.

Signal communications deal, then, only with the transmission of official communications and "include the employment of all methods and means of transmitting and receiving orders, reports, and other official messages, except communications which are carried by officers in person, and mail."

The general system of signal communications of any unit consists of a message center, around which are grouped the various agencies of communi-

cation, including telephone, telegraph, radio, panels, light projectors, pigeons, couriers (and runners), and any other organized agency of communication employed. (The message center forms an integral part of the system of signal communications, with all means of communications grouped around it and available for its use at all times.) The organization of message centers of higher units is more elaborate than those of lower units. The organization for lower units is skeletonized to fulfill only necessary requirements adhering to the principle of definitely placing the responsibility for the receipt and dispatch of official communications. The message center of a squadron of cavalry might consist of a non-commissioned officer in charge of the squadron radio set and the group of mounted couriers. This non-commissioned officer would be responsible that messages received either by courier or radio were promptly and properly delivered, and messages to be sent out were sent either by courier or radio, depending upon circumstances at the time.

In selecting the means of signal communications which should be employed within any arm of the military service, definite consideration must be given to the special requirements of the particular arm and to the powers and limitations of the different means of communication which may be employed. The various means of communication which may be employed may be classified into "systems" and "auxiliary means," as follows:

SYSTEMS

(*a*) Wire System:
- Telephone,
- Telegraph,
- Buzzerphone,
- Service buzzer.

(*b*) Radio System:
- Radio telegraphy,
- Radio telephony (not yet developed for general field service),
- Earth telegraphy (T. P. S.)

(*c*) Courier System:
- Motorcyclists,
- Bicyclists,
- Mounted couriers,
- Runners,
- Courier airplane.

(*d*) Visual Signaling System:
- Lights:
  - Projector, Heliograph.
- Signal flags.
- Any other special appliance, such as shutter panels, etc.

AUXILIARY MEANS

(*a*) Pyrotechnics:
- Very pistols,
- Rifle or hand bombs,
- Rockets,
- Position lights (Bengal flares).

(*b*) Panels:
- Identification and rectangular panels,
- Marking panels (for front lines).

(*c*) Airplane dropped message.

(*d*) Carrier-pigeons.

(*e*) Messenger dogs.

(*f*) Message throwing or carrying devices.
- Any means developed.

(*g*) Acoustics:
- Any means available.

(*h*) Arm signals.

In general, the particular method of communication adopted within a unit depends upon the tactical formation employed, the distance between the command posts of the higher and subordinate units, the rate and direction of movement of the command posts. In selecting from the above list the means of communication which are best adapted for use by cavalry, the choice evidently depends upon the method of employment of the cavalry arm and what means are most suitable for use under these conditions.

The employment of cavalry may be considered under the following heads:

(*a*) Acting dependently as advance cavalry for a corps or a division, or as advance-guard cavalry attached to the advance guard of an infantry division or an infantry brigade.

(*b*) Acting independently under the control of general headquarters or as army or corps troops, or perhaps as divisional or brigade troops if the infantry division or infantry brigade is itself acting as an independent unit.

It must be borne in mind that signal communications should follow the normal channels of tactical command. This means that the command post of a unit should be connected to the command posts of the next subordinate units. Communication between the command posts of adjacent units should also be assured.

In order to arrive at definite conclusions as to what means of communication are most suitable for cavalry operations, it will be necessary to consider the cavalry in its different rôles.

ADVANCE-GUARD OR OUTPOST CAVALRY

Since advance-guard cavalry becomes outpost cavalry during a halt of any duration, the application of principles of signal communications may be discussed for both under one head. A cavalry squadron acting as advance-guard cavalry for an infantry division may be taken as a typical example. The cavalry squadron in this case comes under the command of the commander of the advance guard.

The channels of communication necessary for the squadron are from the squadron command post to the command post of the advance guard, and from the squadron command post to the command posts of its four troops.

What means of communication will prove most suitable from the squadron command post to the command post of the advance guard? First in importance would come couriers. These couriers would consist chiefly of mounted men. Motorcycles should be attached to the squadron for courier service whenever needed, but under normal conditions the mounted courier is the logical means of courier communication for a squadron acting as advance-guard cavalry.

Next in importance would come radio. Radio, properly organized, is an ideal means of communication between command posts which move often and at irregular intervals with respect to each other and when the direction and distance of movement of one of the command posts is as variable as in the

case of a squadron carrying out the mission of advance-guard cavalry. The radio pack set with which the cavalry squadron is to be equipped has the necessary qualifications of range and portability for this work. The radio set of the squadron would necessarily be in adjustment with the forward set of the advance-guard commander, since communication would be from the squadron command post to the advance-guard command post.

On account of the irregularity of movement of the two command posts, their frequent shifting, and their varying distances and directions with respect to each other, wire communication for this purpose is impracticable.

Visual signaling would be practicable only under the particular circumstances when the intervening terrain afforded visibility. It is evident that cases might arise where the squadron would be able to establish a flag or projector station during the day and a projector station at night for communications to the advance-guard or outpost commander, depending upon the general type of terrain over which the operation took place.

In looking over the list of auxiliary means, we find pyrotechnics. It must be borne in mind that great care must be observed in the adoption of pyrotechnic signals, in order to avoid confusion and false information. For this reason pyrotechnic signals should be few and only the necessary signals should be adopted. All signals should be common for the whole command and should be understood by all. In other words, the signals used by the cavalry squadron should be the same signals, with the same significance, as used by the rest of the infantry division. It would seem, then, that the only signal adopted for use by the cavalry should convey the most important information desired by the advance-guard commander, which is "Enemy contact gained here." It is evident that this signal could be used by any advanced unit, and could thus be adopted as a signal common to the whole division. The adoption of different signals, expressing the degree of strength of the enemy force, their movements, disposition, condition, etc., should not be attempted, since this would violate the principle that a multitude of signals leads to confusion.

The use of identification panels at the squadron command post to designate to the observation airplane the squadron's location should be employed. In conjunction with the identification panels, the signaling panels could be used to advantage to notify the airplane that the squadron was "unable to advance" or was "pushing on."

A dropped message on the squadron panels from the airplane would be used only in very rare cases, if at all, for communication from the advance-guard commander to advance-guard cavalry. The dropped message to forward units would in most cases be carried by an airplane acting in the capacity of a courier airplane. The courier airplane would operate from the division command post, and normally the advance-guard commander would not be in a position to get a message to the airplane for transmission to the cavalry squad-

ron. If, however, in some special case the division, or the advance-guard commander through the division, desired to send a message to the advance-guard squadron, the message could be dropped on the squadron panels from a courier airplane.

Pigeon service from advance-guard cavalry would answer no purpose, since no loft would be accessible to the advance-guard commander. The lofts would be in back areas or attached to a higher headquarters, such as the army, which would remain in place for a period of several weeks at a time and would thus permit the establishment of a pigeon loft.

Communication most suitable for use *within* the cavalry squadron would be by means of couriers and visual signaling. Mounted couriers would naturally be the most logical and most-employed means. Visual signaling by lamp or flags could well be employed when conditions were favorable. Each member of a cavalry troop should be habituated to the use of the two-arm semaphore method of signaling. It is a very easy matter for a man of average intelligence to become thoroughly familiar with this method of signaling in a comparatively short space of time. Pyrotechnics could be used from front to rear within the squadron in the same manner as indicated.

To summarize, the following means of communication are suitable for use by a cavalry squadron acting as advance-guard cavalry:

From squadron command post to advance-guard command post:

- Mounted couriers,
- Radio,
- Visual signaling (exceptional),
- Rockets or rifle bomb, and
- Panels to airplane.

Within the cavalry squadron:

- Mounted couriers,
- Visual signaling,
- Rifle bomb or Very pistol.

ADVANCE CAVALRY

A cavalry regiment acting as advance cavalry for a corps or for an infantry division may be taken as a typical example of advance cavalry. In the case of a cavalry regiment acting as advance cavalry of a division, the regiment is a subordinate unit of the division.

The channels of communication necessary for the regiment are from the regimental command post to the division command post, and from the regimental command post to the command posts of the cavalry squadrons.

What means of communication will prove most suitable for employment from the command post of the cavalry regiment to the command post of the division? As in the case of the cavalry squadron acting as advance-guard cavalry, the most important means of communication would be couriers. The

preference would in most cases be for motorcycle couriers rather than mounted couriers. The distance between the two command posts would usually be several miles, and the use of motorcycles would give quicker service and would conserve horse flesh. The cavalry regiment is equipped with a sufficient number of motorcycles for the purpose.

Again, next in importance comes radio. The same remarks as in a preceding paragraph under "advance-guard cavalry," would apply in this case. The regimental radio set, however, would necessarily be in adjustment with the division forward radio set, since communication would be from the regimental command post to the division command post. In other words, the cavalry regimental radio set would work in the division-to-the-brigade net.

Wire communication would be impracticable, as a rule, for the same reasons as given in another paragraph. However, the use of commercial wire lines running from advanced cavalry positions back to the division command post is a possibility. This would, of course, be a matter of chance, both as to the existence of the wires and their connection to the division system.

In considering wire systems and advance cavalry it may be stated in passing that one of the duties of advance cavalry proceeding through hostile territory is the seizure of enemy telephone and telegraph offices and the interruption of wire lines running into hostile territory unoccupied by friendly forces. These offices should be operated by the cavalry signal personnel whenever such action is expedient, and should be turned over to advancing troops for whatever benefit that may be derived from their use. Since the enemy will utilize all means of communication until the last moment, advance cavalry may be able frequently to seize wire lines and offices that are in good working condition.

Visual signaling from the cavalry regimental command post to the division command post is impracticable, except in extremely rare cases. A case might arise when such signaling by means of a powerful lamp or a heliograph would prove very valuable in an emergency. But should the cavalry regiment be equipped with apparatus for the use of which the chances are so remote? It may further be stated that a military lamp for long-distance signaling which is really suitable with respect to range, compactness, and portability has not yet been developed. It is understood that experiments along this line are being conducted.

A pyrotechnic signal, as before mentioned, might be used from the regimental to the division command post. The remarks in that paragraph are applicable here.

The regimental command post should be equipped with identification and signaling panels for use to the observation airplane.

Communication by means of dropped messages from the division airplane upon the identification panels at the cavalry regimental command post should be employed whenever the division may so desire and assigns a courier airplane for this service.

Pigeon communication would be impracticable for use by advance cavalry during an advance. Pigeon lofts would be too far in rear of division or corps command posts to serve the purpose. If the advance cavalry continued its rôle during stabilization, pigeon communication to the rear would prove valuable. The necessary arrangements for this means of communication would be made after stabilization occurred.

The most suitable means of communication for employment between the cavalry regimental command post and the command posts of the different squadrons would be couriers (mounted or motorcycle, according to conditions), radio, visual signaling under the special conditions which permit its use, the one pyrotechnic signal previously mentioned, and identification panels at squadron headquarters for airplane observation.

Communications within the cavalry squadron should be as stated in paragraph 20—that is, the same as those mentioned for use by the cavalry squadron acting as advance-guard cavalry.

To summarize, the following means of communication are suitable for employment by a cavalry regiment acting as the advance cavalry force of an infantry division:

From cavalry regimental command post to division command post:
- Couriers, motorcycle (or mounted),
- Radio,
- Rocket, and
- Panels to the airplane;
- Also courier airplane from division command post.

From cavalry regimental command post to squadron command posts:
- Couriers, motorcycle or mounted,
- Radio,
- Rocket or rifle bomb from squadron to rear,
- Visual signaling in rare cases, and
- Panels to the airplane.

Within the cavalry squadron:
- Couriers, mounted,
- Visual signaling,
- Rifle bomb or Very pistol.

(To be continued)

The Naval War College

BY

Colonel EDWARD L. KING, Cavalry

OF THE MANY lessons that should be taken to heart as a result of experiences in the World War, that of the value of and necessity for close co-operation between our land and sea forces is not the least. While there was no occasion for such combined action as is necessitated by a landing on a hostile shore, so far as the United States forces were concerned, the less spectacular, but equally important, duty carried out by the Navy, of transporting in safety and comfort millions of troops, to say nothing of the enormous amount of supplies, over a distance of 3,000 miles, has of necessity brought to the front as never before a realization of what each, the Army and Navy, means to the other.

Those who were so fortunate as to cross the Atlantic under the care and protection of our Navy will never forget the sense of appreciation and security that was felt when, upon coming on deck, the escort of destroyers was seen around the convoy. As they darted hither and yon, investigating in all directions, moving rapidly and all the time with regular irregularity, in all sorts and conditions of weather, one felt that, so far as was humanly possible, the safety of the convoy was assured. And when it is realized that some of the convoys carried from 25,000 to 30,000 men, the responsibility resting on those in charge, whether in supreme command, in command of a transport steaming at night without lights and constantly subject to the dangers of collision in mid-ocean, or on a destroyer charged with preventing the approach of a hostile submarine, this responsibility was admittedly tremendous.

Prior to the World War that close connection between the Army and Navy which is so essential for successful combined operations was more or less academic. When a combined action did take place, it was carried out as was at the time possible. Some few had given more or less thought to the question of co-operation between the two services. Some valuable exercise had been undertaken in a small way, but on the whole the two services had each gone its own way.

At a time when we of the Army hope that many of our petty, harmful jealousies are about to disappear and to be replaced by concerted action along proper lines, regardless of individual arms, it seems proper that a similar effort should be made toward still better co-operation between the Army and Navy, with a view to the establishment of as complete an understanding as possible.

While each arm is perfecting itself and its organization along its own special lines, study must of necessity be extended to include situations wherein each, Army and Navy, are essential for the successful accomplishment of the mission of the other. With this end in view, it would seem that a brief statement of the history and the aims of the Naval War College might be pertinent.

The Naval War College is situated on Coaster Harbor Island, near the city of Newport, R. I., overlooking the wonderful harbor of Narragansett Bay.

According to the History of the Naval War College, by Admiral Knight, the establishment, in 1884, of a War College for the education of officers of the United States Navy in the higher branches of their profession was the direct result of the personal efforts of Rear Admiral (then Commodore) Stephen B. Luce, U. S. Navy, and he is recognized as the founder of the college. It is stated that the idea first came to Admiral Luce in a conversation with General W. T. Sherman during the Civil War.

While the project was favorably considered in certain quarters, there was from the first violent opposition on the part of some officers, who honestly believed that the Navy was all right as it was and that the Naval Academy and shipboard experience furnished all necessary education.

Another source of hostility was the fact that the college was located on the same island as the training station, thus developing inter-departmental friction. While this friction is happily a thing of the past, there is still a friendly difference of opinion as to the proper location of the college. Some hold that the college should be nearer Washington, so as to be able to secure the benefits of the Congressional Library, be in close liaison with the Army General Staff College and in closer touch with the Navy Department. Others maintain that absence of official and social distractions is highly beneficial; but, more important, that Narragansett Bay offers a splendid rendezvous, where, as the college and fleet expand, the benefits of close co-operation with the fleet may be more fully realized, to the mutual benefit of both.

The home of the War College was changed in 1889 from Coaster Harbor Island to Goat Island, where the college was combined with the torpedo station, located on the latter island. In 1892, with the completion of the present War College building on Coaster Harbor Island, the college, after many vicissitudes, established itself in its present location.

While the college has had to run the gauntlet of hostile Secretaries of the Navy and bureau chiefs, it has always had enough friends at court to maintain its existence, and today it has the hearty support of the Department and of the vast majority of officers of the service.

Under orders from Mr. Chandler, Secretary of the Navy, a board was appointed in 1884 to report upon "a school of application . . . for officers of the Navy, . . . the reason for the school, . . . the proposed course of instruction, . . . and location thereof." This board consisted of Commodore Luce, Commander W. T. Sampson, and Lieutenant Commander Casper F. Goodrich.

In discussing the reasons for establishing the school, the board expatiated upon the value of the study of operations of war, the necessity for the acquisition of professional knowledge in order to make up for the absence of an adequate naval force, and stated that there was not merely a "reason," but a "necessity," for the school. The board, in acknowledging the value to the

Navy of specialists, emphasized the necessity for developing specialists in the "one subject *par excellence* of the naval profession," so far as that can be developed "outside the stern school of the field of battle." The board believed that the college, while preventing erratic flights into fields of research unrelated to the naval officer's calling, would tend to qualify him for his highest and most responsible duties. The board assumed that six months would be needed for the course.

The teachings of the school were to be divided under two heads:

A. The Science and Art of War.
B. Law and History.

The course under "A" was subdivided into several subheads—naval, military, and joint operations from several standpoints. The board stated that, "as the principles underlying all hostile movements are at the bottom the same, whatever the nature of the field of action, . . . an intimate knowledge of military operations is essential to the naval strategist," and suggested that certain of the subjects would be best taught by "one learned in the military science." Lieutenant (now General) Tasker A. Bliss, U. S. Army, was later detailed as an instructor at the college, pursuant to this recommendation. Thus, from the first was shown a strong desire for co-operation with the Army.

The course "B" was to be arranged so as to bring out clearly the nature and extent of our treaty obligations, prepare naval officers for handling situations arising abroad, and instruct in the administration of justice and court-martial law.

In addition, the board contemplated practical exercises with the fleet and made certain recommendations having in view a reward for those who, by extra work, prepared themselves for special service.

After a discussion of various places for the location of the college, the board determined upon Coaster Harbor Island, the present location. The personnel of the board gave assurances of careful thought, and the report fully justified these hopes.

In September, 1885, the college was in being, with Commodore Luce as president, Professor Soley, U. S. N. (later Assistant Secretary of the Navy), as a lecturer on international law, and Lieutenant Bliss, U. S. A., as a lecturer on military science. Lectures on varied subjects were delivered by other well-known persons. Nine officers composed the class.

In 1886 Captain Mahan joined and became president. He handled naval history, and at this time began the work which later developed into "The Influence of Sea Power on History." The course this year extended from September 6 to November 20 and was attended by twenty-one officers.

During the next few years the college passed through stormy seas and had a hard fight for its existence; but its friends were steadfast and energetic fighters and the storms were weathered. The course consisted entirely of lectures.

the subjects showing a desire for knowledge of and co-operation with the sister service.

In 1892 the present building was accepted and Captain Mahan was directed by the Secretary of the Navy to again assume the duties of president of the college, only to be relieved in May, 1893, very shortly after a new administration came into office. No session was held in 1893, but in 1894, in spite of certain hostilities, a 3½-month course was put through, due largely to the tact of the new president, Captain H. C. Taylor.

The year 1894 seems to mark the beginning of problem-solving and of the general use of the game-board. The tactical games played on the game-board represent fleet actions. The forces used are of varied kinds and sizes; everything is to scale, and the courses and positions of the contending forces are accurately plotted. Decisions are governed by rules which at first seem rather complicated, but which are all based upon the closest possible approximation to actual conditions at sea and to the latest developments of weapons and armor. Similarly, strategic questions are worked out on charts approximating as closely as possible to actual conditions of material, personnel, and terrain.

In this year was also formally established a reading course, still a feature of the college, having as its object the improvement of the general knowledge of the student on matters pertaining to his profession. The course followed the same general lines until interrupted by the Spanish War. With the end of the Spanish War, opposition to the War College seems to have ended, as it was unnecessary to prove war as an ever-present possibility, or that the study of war was essential to a naval officer's education. But it was not till 1900 that the college resumed its full functions. Among the subjects given greater importance were systematic scouting, minor military operations on land, combined Army and Navy maneuvers, analyzing situations, and the writing of orders. The newly established General Board of the Navy established relations with the college, the staff of the college formulating memoranda on referred subjects.

The main feature of the year 1902 was the increased importance given to international law under Professor Wilson. The results of the International Law course at the college are authoritative, both at home and abroad.

The year 1912 marks a rather radical change, in that the long course was inaugurated. Until this year, "the college work had been somewhat casual and intermittent in nature, problem-solving being done primarily with a view to development of principles. . . . With the advent of the long course came a recognition that the primary mission of the college was the education and training of officers as individuals in the art of conducting war. . . . Problem-solving was no longer done by committees, but by each student individually." At the same time, the summer conferences were continued from June 1 to September 30.

On January 1, 1914, a class in the long course was started, thus inaugurating the present system of two long courses running simultaneously. By an

order of January 17, 1914, the course was established at twelve months, two classes of 15 officers each reporting July 1 and January 1.

An innovation was instituted by Admiral Knight when, in March, 1914, he recommended the inauguration of a correspondence course. This was a big move in the direction of carrying the work of the college to the fleet.

About the time this course was authorized by the Secretary of the Navy, other changes were made. The short summer course was abolished, the standard year's course with two classes entering, one in January and one in July, was fully established and a course in thesis-writing in connection with the reading course was introduced.

During our participation in the World War the Naval War College courses were discontinued, to be resumed in June, 1919. The new president was Admiral William S. Sims, who had been president prior to his departure for service in command of the United States naval forces abroad. An order issued in May, 1919, detached the Naval War College from the control of the local naval district commander and placed it directly under the Navy Department, a status similar to the status of the units of the Army educational system.

With the experiences and lessons of the World War fresh in mind, with the earnest backing of the Department, and with the prestige of the college president, the college took up its work in 1919 with renewed vigor. In his opening address the college president brought out clearly the nature of the War College course and its functions. He stated that it was not a "college" in the ordinary sense of the word, but more a board of practical fleet officers brought together to discuss and decide how to best conduct naval war under various conditions. He further brought out the necessity for close co-operation between the college and the fleet and emphasized the fact that the college is in effect part of the fleet and exists solely for the fleet, thus reiterating and confining the basic principle underlying the work of the college from the very beginning. He further stated that the aim of the War College is to supply principles and to train officers to develop the habit of applying these principles logically, correctly, and rapidly. By numerous problems in strategy and tactics, the student is shown the necessity for and given practice in securing—

(1) A clear conception of the mission;
(2) An accurate and logical estimate of the situation;
(3) A decision that is the logical result of the mission and estimate.

The college is not a plan-making branch of the Navy, but a place where plan-making is taught.

As at present constituted, the course is for one year. Two classes are always in attendance, one reporting in June and the other in December of each year. The two classes total sixty officers and include, beside naval line officers, representatives from the several bureaus of the Navy, the Marine Corps, and the Army. Each officer is required to solve problems in tactics, strategy, and scouting and screening, certain solutions being then "played" on the game-board

and with charts. In preparing problems, the conditions confronting the United States are given careful consideration.

In addition, students are required to prepare theses on policy and its relation to war and preparation for war, strategy and logistics, tactics, and command, these in connection with a recommended reading course. International law, particularly as applied to maritime practices, is also a part of the course, and in addition there are lectures on various pertinent subjects. Besides the regular course, the college offers a correspondence course to the officers of the Navy. At present, there are about 650 officers taking this course.

That the Naval War College, after its many years of vicissitudes, is now on a permanent basis and has the full backing of the Navy Department is indicated in the following extract from the report of the Secretary of the Navy for the year 1919: "Other things being equal, the man who masters what is taught at the War College is more fit for high command than he who fails to add that preparation to active experience and practical operation of ships and fleets. The day will come . . . when one of the requisites to command battleships, divisions, squadrons, and fleets will be a diploma of graduation at the War College."

Like the school system of the Army, the Naval War College has had its dark days. Its friends and backers have had to overcome many and varied obstacles. These friends never gave back, but always kept their mission clearly before them.

With the rapidly increasing number of admittedly capable graduates, the progressive, practical atmosphere of the college, the growing co-operation with the educational system of the Army, the growing widespread appreciation of the value of and necessity for education in the arts and science of war, the future of the Naval War College is assured.

The Browning Machine Rifle

BY

Lieutenant-Colonel ALBERT E. PHILLIPS, Cavalry

(Colonel, Chief of Ordnance, Machine-Gun, and Small-Arms Field Service, Fourth Section, General Staff, A. E. F.)

SOMETIMES A WEAPON is invented to fill a need and its tactics are thus decided before its birth.

We can truly say that during the greater part of the World War neither the French Army nor the American Army had a satisfactory light automatic arm. Both the Americans and the French frequently used the Hotchkiss machine-gun (heavy machine rifle weighing 54 pounds) for machine-gun employment, as well as for automatic fire from the infantry front lines.

The Browning automatic rifle was developed during the emergency, to meet the demand for a light automatic arm for use within the infantry company. This rifle weighs 15.5 pounds and may be employed for either single-shot or automatic action. As a single-shot weapon, an expert shot can, for a brief period, fire 50 to 60 aimed shots a minute; and this rate of fire is supposed to about double the fire-power of the infantry squad. Due to overheating, the limit of continuous automatic fire is reached at about 160 to 180 rounds.

As a single-shot weapon, the rifle is unnecessarily heavy, and for automatic fire the rifle fails to meet the requirements imposed by modern warfare.

In addition to the overheating limit of automatic fire, it is difficult when firing automatically to maintain even a fair degree of accuracy at minimum ranges—200 to 300 yards. Impaired accuracy requires that a greater amount of ammunition be carried; and the fewer enemy troops made casualties means additional casualties on our own side.

Weapons should at least be equal to those of our possible enemies. The Browning automatic rifle cannot compare favorably in fire efficiency either with the Lewis machine-gun or machine rifle of the British Army or with the light machine-gun of the Germans. (The latter weapon is really the Maxim machine-gun of reduced weight. As such, it is not sufficiently portable for an infantry company weapon, although it is capable of sustained fire power.)

The proper development of the rifle company, light automatic and self-loading rifles, seems to lay along the following lines:

(*a*) The development of a self-loading rifle for each soldier armed with a rifle. The mechanism of this rifle must be simple and positive. It should be clip-fed, thus eliminating magazines. It should be capable of being fired either as a single-shot rifle or semi-automatically; and should there be any interruption in the semi-automatic mechanism, the rifle should be capable of being

operated as a single-shot, bolt-action rifle. The weight should not be appreciably greater than the weight of the present service rifle.

Several rifles of the above-described type are being developed and at least two of them give promise of a satisfactory solution.

(*b*) The next step in rifle armament should be to provide a "light machine rifle," sufficiently portable to accompany the infantry lines and to provide the required automatic fire to advance the front-line units, in co-operation with the covering fire of the machine-guns; to supplement the fire of the machine-guns in the rush forward to capture the position, or to ward off threatened or actual counter-attacks during the consolidation.

The "machine rifle," to fill this need, should be capable of maintaining a sustained fire of between 600 and 800 rounds; it should be accurate, especially up to 600 yards, for infantry, and to greater ranges for cavalry; it should be very portable and its weight should, if possible, not exceed 20 to 22 pounds.

The Browning automatic rifle, in its present form, does not satisfactorily meet the requirements of a light self-loading rifle for the infantry soldier, or the requirements of the "rifle company" automatic arm for sustained fire.

With the development of the self-loading rifle progressing satisfactorily, the machine rifle will fill the gap between the machine-gun and the rifle of the infantry soldier.

Happily for our Army, the solution of this problem is comparatively easy. The Browning rifle has a very simple mechanism, and to convert this rifle into a machine rifle requires only a few modifications, such as heavier barrel, new hand guard, gas cylinder tube bracket, front sight fixed stud, and bipod hinged pins or a detachable bipod.

These changes will increase the weight of the automatic rifle by about five pounds, or an increase in total weight from 15.5 pounds to 20 or 21 pounds, depending on the type of bipod. The resultant efficiency in fire-power will be an increase amounting to three times that of the Browning automatic rifle, with twice the accuracy at short ranges and over three times the accuracy at mid and long ranges, when employing automatic fire.

"The limit of 'effective' rifle fire is 10 shots a minute for about three minutes." Assuming that an expert Browning automatic rifleman can fire 60 aimed shots a minute for three minutes, then his rate of fire is equal to the rate of fire of six riflemen firing 10 shots each a minute for three minutes. Sixty shots a minute for three minutes approaches the *overheating point of the automatic rifle,* while the machine rifle can maintain this rate of fire for about 15 minutes, or 5 times as long as the automatic rifle. With only double the accuracy of the automatic rifle, the machine rifle is, then, as a single-shot weapon, 10 times as efficient as the automatic rifle.

The ratio of efficiency of the machine rifle to the automatic rifle, in automatic fire, especially at mid ranges, will greatly exceed the ratio for single-shot action.

The heavier barrel of the machine rifle reduces vibration and practically eliminates the "climbing and traveling toward the right," the rifle having a tendency to settle and shoot lower.

The first comparative test for accuracy of the Browning machine rifle and the Browning automatic rifle, fired at Springfield Armory, gave the following results:

Accuracy.—Bursts of fire from prone positions by an expert shot, in order to determine the relative steadiness of the two weapons.

Targets were at 200-yard ranges.

Target.	Gun.	Fired.	Shots.	Hits.
No. 1.	Browning automatic rifle	Short bursts	20	8
2.	Do.	Do.	20	11
3.	Do.	Full automatic	20	3
4.	Do.	Do.	20	17
5.	Browning machine rifle	Short bursts	20	18
6.	Do.	Do.	20	20
7.	Do.	Full automatic	20	18
8.	Do.	Do.	20	20

"In this test the rifle with heavy barrel showed up greatly superior to the service type of Browning automatic. The firing was done by two expert shots, who had no trouble making excellent groups with the modified rifle with heavy barrel, but could not keep the standard Browning on the target consistently."

As an indication of what may be expected from the machine rifle, the following brief description of a field firing exercise held at Colonia Dublan, Mexico, by troops of the 10th Cavalry, during the Pershing Expedition, may be of interest:

The Machine-gun Troop was then armed with the Benet-Mercie machine rifle.

The exercise consisted of an advance, dismounted, in turn, by each squadron and the Machine-gun Troop, against groups of prone skirmishers and 20 prone skirmishers with intervals of about two yards.

The first squadron consisted of three troops of about 40 men each; the second squadron of four troops of about the same number of men in each troop.

The advance was from 600 yards to 100 yards.

The results by the first squadron were as follows:

Rounds fired.	Hits.	Percentage of hits.	Targets exposed.	Targets hit.	Per cent of targets hit.
800	55	6.57	100	26	26
		Second Squadron			
1,370	236	17.24	100	51	51
		Total for the Two Squadrons			
2,170	291	13.41	100	77	77

Seventy-four targets were not hit by the first squadron and 49 targets were not hit by the second squadron.

The Machine-gun Troop used only three of its five machine rifles and obtained the following results:

Rounds fired.	Hits.	Percentage of hits.	Targets exposed.	Targets hit.	Per cent of targets hit.
1,549	340	21.00	100	80	80

The Browning machine rifle is superior in every respect to either the Benet-Mercie or the Lewis; it fills a distinct need in the armament of our Army—a need that is not filled by the Browning automatic rifle.

THE GENIUS OF THE CAVALRY

"MORE THAN EVER the essential qualities of vigor, energy, audacity, and devotion, so traditional of the Cavalry, must be retained and developed. During the course of the war these qualities have enabled the Cavalry to face the most unexpected situations and to constitute an inexhaustible reservoir of non-commissioned officers of the highest quality for employment in the other arms."—*Marshal Pétain.*

The Cavalry Board

(FORT RILEY, KANSAS)

BY

Major J. B. JOHNSON, Cavalry

DURING THE LAST few months the Experimental Section of the Cavalry Board has conducted tests of several articles of equipment, a short description of which may be of interest to the Cavalry Service at large.

Leather Leggins.—With the purpose of developing a leggin for enlisted men which will be more satisfactory than the present issue, several types have been made up and tested. The one which seems to most completely fill all requirements is a pliable all-leather leggin of model similar to the present issue canvas leggin. It is, however, somewhat longer in the leg and a little more snug in the calf. Half sizes have been made in order to accurately fit all men, and the hooks have been spaced closer to avoid gaping.

Aluminum Tent Pins.—A very satisfactory tent pin has been tested. Although made of aluminum, it has been given a composition which has hardened it to such an extent that it will not bend or curl up as the present issue pin does when in use. It has been given a modified triangular cross-section to strengthen it and provide a greater friction surface. It weighs but a trifle more than the issue pin, although it is nearly two inches longer.

Gallery Practice Pistol.—Extended tests have been made of a .22 caliber gallery-practice pistol. In appearance, weight, and balance it closely follows the service pistol. Some difficulty has been encountered in the functioning of this pistol and it has been returned to the Ordnance Department for modification. A gallery-practice pistol of this general type will be recommended.

Gas Masks.—A new model gas mask has been submitted by the Chemical Warfare Service which is a vast improvement on older types. The following points have been noted in its favor:

(*a*) It can be put on faster than the old model, due to the fact that the fabric is stiffer and opens more easily and that there is no nose clamp or mouthpiece to adjust.

(*b*) The air flows through the canister more easily, probably because the canister inlet is on top instead of on the bottom. It is very much easier to breathe in. This is particularly noticeable during violent exercise, when deep and rapid breathing is necessary.

(*c*) It can be worn for a long period of time with comparative comfort. This is considered extremely important, as experience has shown that the old mask was so uncomfortable, when its use was prolonged, that men would re-

move it in spite of the presence of light concentrations of gas, with resulting casualties. The added comfort is due to the following improvements: (1) the easier flow of air; (2) the ability to breathe through the nose, as a result of the elimination of the nose-clamp; (3) the elimination of the mouthpiece, which prevents slobbering and the collection of saliva inside the mask; (4) the movement of air within the mask, which cools the face and prevents undue perspiration; (5) the adjustability of the elastic head-bands, the pad at their junction, and the arranging of bands so that none pass over the ears.

(*d*) The elimination of the mouthpiece makes it possible for the mask to be worn by a second person without prior salvage and disinfection.

(*e*) Vision is greatly improved. The eyepieces do not fog easily and are quickly cleared, due to the partition, which causes fresh air to flow across the face of the glass and prevents exhaled air from doing so. There seems to be no necessity for a wiping flap, such as existed in the old model. The eyepieces stand away from the eyes, due to the stiffer fabric of the facepiece. The angle of vision is greater.

(*f*) Due to the elimination of the mouthpiece, it is comparatively easy to converse and to give loud commands, that can be heard and understood from about fifty yards without difficulty.

(*g*) The method of carrying does not interfere with the carrying of other equipment nor with the use of arms. The alert position would be the most comfortable for mounted troops, as it would eliminate the flapping which occurs when slung at the side.

(*h*) It is neater in appearance and of more durable material than the old mask. The metal-work of the inlet and outlet is simplified and elbows have been eliminated. The flutter-valve guard is improved, and the angle at which it is set on prevents accidental closing of the flutter-valve when the wearer is lying prone.

Pack Cooking Outfit.—A compact field cooking outfit, designed by Lieutenant-Colonel Charles O. Thomas, is now under consideration. It is intended that this be carried on a pack-horse, slung as two side loads. In weight it approximates one hundred and fifty pounds and includes two grates, a coffee-boiler, pots, bake-pans, and other cooking and butchering utensils.

Machine Rifles.—A machine rifle is being tested with the view of substituting it in the Cavalry Service for the automatic rifle. It is in effect a modified Browning automatic rifle, provided with a heavier barrel which has a large heat-radiating surface. A bipod mount has been added for stability. Although it weighs but five pounds more than the automatic rifle, it is far more accurate and can keep up sustained automatic fire for a much longer period of time. The additional weight should not prove a disadvantage, as it, together with its ammunition, will be carried on a pack-horse.

At the Cavalry School

BY

Major C. B. STEARNS, Cavalry

THE COURSES OF INSTRUCTION at the Cavalry School are now well under way, and in spite of the large expansion which the school has undergone during the past few months, the instruction is being carried on quietly and effectively.

The Troop Officers' Class consists of 30 officers, the first Basic Class of 54 officers, the second Basic Class of 85 officers, and the National Guard Class consists of 8 officers, making a total of 177 student officers at the school. The National Guard Class will have completed their course when this goes to press, but preparations are already being made for the Field Officers' Course, which will start in the early spring.

The Troop officers and National Guard officers are living in Carr Hall and Arnold Hall, which have been the customary quarters for student officers heretofore. The bachelor officers of the Basic Class are living in a set of barracks specially fitted up for their occupancy. The married officers of the Basic Class, forty in number, have been taken care of in apartments made by partitioning the temporary cantonment buildings, which lie close to and just east of the permanent post buildings.

Many suggestions are received concerning the course, and they are thoroughly appreciated and given careful consideration. There also have been brought to the attention of the school authorities many conjectures concerning the advisability of certain policies and features in force at the school. In order that the whole Cavalry Service may be thoroughly in sympathy with the school and its efforts, it is thought advisable to discuss certain of these policies and features from time to time through this medium.

One point concerning which there has been a good deal of discussion is whether the Basic Course should be given to officers immediately after they have received their commission, as is done at present, or whether the course should be given after the officer has served a few years with troops. Many officers state their belief in the latter, feeling that a young officer would get much more out of the course if he had a background of experience in which to fit his new knowledge. There is no doubt but this last fact is true, and that any man must necessarily gain more from real instruction, if he has had several years' actual experience. This truth would apply to any profession and any walk of life, for no man doubts but that he would make better use of his college days and profit more from them if he could but live them over after 10 years of working at his chosen occupation.

But who would care to employ a doctor or lawyer on his promise that he would receive instruction in the future?

From all reports available at the Cavalry School, the present arrangement is the better, for under this plan the new officer upon joining his regiment can assume his new duties more promptly and efficiently than if his course of instruction were delayed. Moreover, he starts his career with the odds in his favor; for although the basic course is the beginning of his training (and perhaps not entirely digested), it is far from being the end of his training. The question is not what is the best method to pursue for a young officer to get the most from a certain course of instruction which lasts but 10 months, but what is the best method to adopt to start a young officer on his career.

By sending an officer to his regiment thoroughly grounded in the fundamental principles of his arm, a foundation is secured for the structure of his training. The experiences that await him in his new life, some of them conflicting and confusing, will be accorded a proper place in his life and bear only the proportion to the whole that their real value entities them to have.

After a few years with troops, no matter what his earlier training may have been, every officer feels his lack of knowledge along many lines. It is for this great need that the Troop Officers' Course and Field Officers' Course now exist.

The Basic Course should be considered as in no way taking the place of the other courses. It has for its chief purposes the teaching of the fundamental principles of the Cavalry Service to the newly commissioned officer, and while this is being done effort is made to instil in each officer an understanding of the possibilities and ideals of his branch of the service, and to develop his enthusiasm for it with the hope that, in addition to the basic facts learned, he may carry with him the beginnings of a great love for his glorious profession.

Notes on the National Guard Cavalry

BY

Colonel KIRBY WALKER, Cavalry

On June 30, 1919, the following Cavalry units of the National Guard were in existence:

Colorado, 1 troop; New York, 2 troops; Texas, 1st Cavalry Brigade, consisting of Brigade Headquarters and the 2d Cavalry (less one troop), 3d Cavalry (less one troop), 7th Cavalry (less one troop); 2d Cavalry Brigade, consisting of Brigade Headquarters and 4th Cavalry, 5th Cavalry, and 6th Cavalry; Utah, 2 troops.

During the period between July 1, 1919, and June 30, 1920, the following Cavalry units were federally recognized as National Guard:

Arizona, 1 troop; Connecticut, 2 troops; Idaho, 2 troops; Iowa, 3 troops; Kansas, 4 troops; Kentucky, 2 troops; Massachusetts, 4 troops; Missouri, 1 troop; New Jersey, 5 troops; New York, 6 troops; North Carolina, 1 troop; Ohio, 5 troops; Pennsylvania, 6 troops; Rhode Island, 2 troops; Tennessee, 1 troop; Texas, 3 troops; Utah, 2 troops; Wisconsin, 10 troops, 3 companies ammunition train, Cavalry Division, 2 companies supply train, Cavalry Division; Wyoming, 8 troops.

It is thus seen that a total of 73 new Cavalry units were recognized as National Guard during the period mentioned.

Between July 1, 1919, and June 30, 1920, federal recognition as National Guard was withdrawn from the following Cavalry units:

Colorado, 1 troop; Texas, 14 troops.

Since July 30, 1920, the following Cavalry units have been recognized as National Guard:

Wisconsin, 5 troops; Pennsylvania, 4 troops; Texas, 1 troop; Washington, 1 troop; New York, 1 troop; North Carolina, 2 troops; Ohio, 3 troops; Michigan, 2 troops; New Jersey, 3 troops; New Mexico, 2 troops; Iowa, 4 troops; Kentucky, 2 troops; Massachusetts, 1 troop; Colorado, 1 troop; Georgia, 2 troops; Idaho, 1 troop; Illinois, 1 troop; Arizona, 1 troop.

In several instances during the fiscal year 1920 National Guard Cavalry was called out by the governors of States for the protection of property and in order to suppress disorders.

During July, 1919, about 300 officers and enlisted men of the 5th, 6th, and 7th Cavalry, Texas National Guard, were called for duty at Long View, Texas, on account of a race riot. Martial law was in effect in the town and county and the troops were on duty for about one week. During the latter part of September, 1909, about 150 officers and men of the 3d and 7th Cavalry,

Texas National Guard, were called to Corpus Christi, Texas, to assist storm sufferers, protect property, and suppress disorders. These troops were on duty about three weeks. On June 7, 1920, a considerable portion of the First Brigade of Cavalry, Texas National Guard, were ordered to Galveston, Texas, to protect property and suppress disorders arising from a strike of longshoremen. About 85 officers and 820 enlisted men were called for this duty. Martial law was declared in the city of Galveston. These troops were on duty at Galveston until October 7, 1920.

Two troops of Rhode Island Cavalry were ordered to Bristol, Rhode Island, May 29, 1920, on account of industrial disorders at that place, and were on duty until June 9, 1920.

In all these cases the services of the troops are reported to have been efficient, and the experience and instruction derived was of marked benefit to the officers and men participating.

Camps of instruction of fifteen days' duration were held by all Cavalry units of the National Guard during the summer of 1920.

The Militia Bureau has made plans for initiating and carrying into effect a course of instruction for National Guard Cavalry officers at the Cavalry School, Fort Riley, Kansas. The object of this course is to train and develop a limited number of National Guard Cavalry officers, in order that they may become instructors in their regiments or other units and to disseminate in a uniform manner the information acquired by them.

Under the provisions of present laws and regulations, horses are being issued to troops of Cavalry federally recognized as National Guard, and the Militia Bureau feels that the training and knowledge acquired through the proposed course of instruction will be of tremendous benefit financially to the Government, in the care of animals alone, both in peace and war. Length of course, three months; number of courses, two per school year; dates, September 1 to November 30 and March 1 to May 31; rank of officers, not above the grade of captain; selection of officers: Officers to be specially selected by the governors of States and Territories, the allotment to each State and Territory being based on the strength of federally recognized Cavalry units on June 30 and December 31 each year. Officers detailed must be federally recognized National Guard Cavalry officers on the active list, and their selection should be based upon their merit and ability and their probable future value to the National Guard of their States and Territories.

The subjects covered during the course of instruction are physical training, administration, drill and command, military courtesy and customs of the service, military law, military hygiene, sanitation and first aid, sketching and map-reading, care of weapons, marksmanship and musketry, field fortifications, minor tactics, interior guard duty, and horsemanship (including the subjects of equitation and horse training, hippology, horseshoeing, stable management, forage, harness, and wagons). Approximately 50 per cent of the time available

will be allotted to horsemanship. There are 11 National Guard Cavalry officers now on duty at the Cavalry School, Fort Riley, Kansas. The next course will begin on March 1, 1920.

At the present time horses at the rate of 32 per troop have been issued to approximately 95 Cavalry troops of the National Guard. As the proper shoeing of these horses is a most difficult problem, the Militia Bureau plans to send a sufficient number of enlisted men of the National Guard to schools for horseshoers in order that this problem may be solved. The length of the course will be four months. The schools are located at Camp Travis, Texas; Fort Bliss, Texas; Camp Pike, Arkansas, and Camp Dix, New Jersey.

Editorial Comment

"LE ROI EST MORT! VIVE LE ROI!"

It is well for the world that at least one day annually should be made the epoch of good feeling and the occasion for an interchange of greetings and good wishes. The mere expression of a wish helps to its fulfillment; it stirs the better feelings of the heart and quickens pleasurably the general pulse of good neighborhood.

In a time when so many of our customs are vanishing, giving way to new methods induced by the change of the world's mental attitude, the custom of New Year's greetings is one of the pleasantest things that link us to old times. It should be preserved with all of the reverence due to tradition and made the occasion for rejoicing. The death of the old year, with its melancholy sadness of "Never again," is completely forgotten in the birth of the new. "Le Roi est mort! Vive le Roi!"

The custom of celebrating New Year's Day was observed with great festivity by our Saxon fathers. The Druids, with slow and stately movements, knife in hand, cut branches of the sacred mistletoe and distributed them as gifts to the people. The Romans, equally ceremonial, sacrificed to Janus, the patron of husbandry and peace and the deity for whom January is named. Today, more restrained, we confine our observance of the day outwardly to the exchange of sentiments and inwardly to a communion with our old and faithful friends—Good Resolutions.

Looking backward for a moment, we can more clearly appreciate the trying times through which we have passed. A great war came upon us, throwing our nation out of its customary stride and bringing about undreamed-of changes in our own environment in the Army. It stirred us all to the greatest physical and mental activity. It separated us from our families; it threw us into a situation where we came to know and appreciate the fine qualities of our fellow-men, such as no other generation was privileged to experience. It confirmed us in the might of our country and enhanced our admiration for its institutions. It made us devote ourselves to an ideal, a devotion which is always uplifting. It taught a really great love for our country which sprang from a more intimate knowledge of the beloved object.

It was not to be supposed that such a revolution could take place in the routine of our daily lives without arousing great mental struggles in all of us. During the war, urged on by the feverish atmosphere of the entire world, the

ambition of every one was stimulated and each individual sought to gain the widest latitude for his own activity, which, of course, could not take place without the development of the most energetic aggression toward others. There resulted many heartburnings, which, although they were smothered by the noble feelings of duty, nevertheless left their scar.

The receding of the tide of war and the stilling of the war machine did not obliterate these feelings, and for a long time every one was dissatisfied. It was felt that the world had changed, and that it was dominated by a different mentality from that to which we had been so long accustomed. The new order was either not accepted or yielded to with reluctance. In the Army, there was great and profound discouragement, and, smarting under the material hardships imposed by inadequate pay and under the even keener mental distress induced by the hostility of the public, to whom the Army had every right to look for reward and appreciation, many of our officers and men resigned their commissions. They felt that they were in a profession that was misunderstood and whose welfare was disregarded by those to whom it should be a matter of vital concern. A few felt that the fortunes of war had injured their reputations, but they should have consoled themselves with the thought that reputation is a most idle and false imposition, often got without merit and lost without deserving.

Meanwhile every counteracting influence was being exerted by the War Department to do justice to the service and to readjust the conditions that were unhappily existing through no fault of its own. A pay bill was immediately introduced into Congress and no effort spared to obtain its passage, and the reorganization of the Army was commenced. The Congress was sympathetic to our demands, very sympathetic; but our situation had to be considered in relation to the whole, and for that reason there was a necessary delay in legislative relief. Some, who were not in touch with the legislation, thought that Congress was hostile and unnecessarily slow in making laws, but it is to be remembered that all legislation is compromise, and that laws, like sauces, should not be seen in the making. On the contrary, the gentlemen who were charged with Army affairs were keenly interested in doing justice to our personnel and labored untiringly to give us a sound military policy.

But what has happened and how do we start our New Year? Congress has given us the best reorganization bill that we have ever had, embodied in which is a real constructive program upon which to build an efficient national defense. The officers have nearly all received an advancement of one grade, and the pay of the Army has been increased temporarily to meet the cost of living. There has been a reaction toward the Army on the part of the public, and the hostility that existed after the Armistice had almost completely disappeared.

The Army, although traditionally the most conservative of all institutions, has quickly adapted itself to the new order, and has taken the lead in observing

the new relationships among men that were brought about by the war. Call it whatever name you please, the war set a new standard for our dealings with one another, and there is no institution in this wonderful country of ours where the comprehension and sympathetic understanding of this new relation is so complete as in our Army.

The metamorphosis is all the more remarkable when we recall the rigidity of the old Army system, its stonelike impassivity, the extraordinary conception of the privileges of rank, and the traditional, if unwilling, aloofness and seclusion. It seemed impossible for any one to know how to grant a reward. Each strata of the hierarchy seemed inarticulate in the presence of admirable performance by its subordinates. But since the war a healthier attitude prevails—less repression and more response.

We therefore take up the thread of life in 1921 under the most auspicious circumstances and can look forward to the future with hope and confidence. Whatever grievances we have should be forgotten; they should be taken out of our mental closets, throttled, and thrown into the discard. It is useless to strive to be the architect of the irrevocable past. Such efforts and reflections only prevent us from going forward and keep us from cultivating the glance and smile which immediately place one on a footing of innocent familiarity with his fellow-man, thus smoothing the way for the most efficient performance of duty.

VALUE OF CAVALRY TRAINING FOR HIGH COMMAND

It is a remarkable feature of the history of war that the number of cavalry officers who rise to high command is relatively very large. Even a superficial examination of the records of the war of any nation reveals the truth of this statement. We have only to turn to the recent war in which we were engaged to find the lessons of history repeated not only in our own armies, but in foreign armies as well.

Considering for a moment the A. E. F., there stands out first and foremost our own Commander-in-Chief, General Pershing, whose entire training was in the cavalry. Associated with him, among others who held high positions in our forces, were Generals Dickman, Read, Cameron, Harbord, and Allen. In addition, many brigades and regiments were commanded most brilliantly by cavalrymen, both in the infantry and in the artillery. In fact, the cavalry regiments which were converted into light artillery regiments gave a magnificent account of themselves and were acknowledged to be the equal of any artillery regiments abroad.

The cavalrymen for whom there were no positions of command filled many of the most important staff positions, among which we recall the first Chief of Staff of the A. E. F., the Deputy Chief of Staff, the G-4, G. H. Q., the Chief of the Tank Corps, the Provost Marshal General, the Chief of Staff of the Second and Third Armies, of the First Corps, all of the G's of the Third Army

except G-2, and in the S. O. S. the Commanding General and his G-4. In the services we were equally strongly represented.

In the British armies the cavalry was notably represented by Field Marshal Sir Douglas Haig, the Commander-in-Chief and formerly of the 17th Lancers; Lord French, Sir Julian Byng, of the 10th Hussars, and the great leader of the Egyptian Expeditionary Forces, Field Marshal Allenby. The French can well be proud of General Lyautey, one of the Immortals; of General Weygand, the savior of Poland; of Generals des Vallieres, de Mitry, and Rampont. The Russian armies produced first and foremost the Grand Duke Nicholas, as well as General Brussiloff, General Rennenkamp, and others.

It is the character of his training which develops the cavalry officer and fits him for the duties of high command. Immediately upon joining his organization, he feels that he must assume responsibility. He is given the command of a platoon, as in the other branches; but, due to the peculiar functions of the cavalry, he is frequently dispatched on independent missions, which necessitate good judgment and which develop initiative. He starts his career as a miniature high commander, making his own decisions and taking the consequences.

Then, too, the rapidity of the drill and maneuver demands quick thinking and accurate decision. He must seize the situation at a glance, make his decision and act; otherwise he is lost. Little by little he develops under these circumstances until he instinctively *feels* the situation and, leaving aside the details, ordinarily makes his decision on the essentials. In all of this he is aided by a good physique and a clear mind, for the physical exercise of daily riding stirs the blood and clears the cobwebs from the brain. His mental machinery is in good working order.

Accustomed as he is to cover the ground rapidly and influenced unconsciously by the strength that comes from the control of the horse, he develops a broad viewpoint, he sees things more or less *en grand,* and he feels confidence in his ability to control the situation. He does not allow the details to weigh unnecessarily upon him. All of these qualities are excellent in a high commander, provided that they are not carried to an extreme. There are times, however, when a commander must keep in mind certain details, and a cavalry commander should guard against his impulse to have things done as quickly as he has been accustomed to in his own arm. In dealing with the infantry, for example, he must remember that they have but two legs to travel on instead of four, and that besides they are burdened with a heavy pack that drains the stamina of even the strongest. The time element, therefore, changes in making one's plans, and a disregard of the standard of training of each arm will lead the commander into many pitfalls.

If heretofore our cavalry officers have shown unusual aptitude for command, there is every reason to believe that in the future they will be increasingly numbered among the great leaders. Never before in our history have

such opportunities been given our young cavalry officers for perfecting themselves in the technique of their profession, for developing themselves in horsemanship, and for living up to the precept which has made their predecessors so successful—*mens sana in corpore sano.*

CAVALRY REORGANIZATION

IN THE ALLOCATION of the total personnel determined upon by Congress for the Army, the cavalry was given 950 officers and 20,000 enlisted men with which to effect its reorganization. These figures are just about sufficient to constitute seventeen of our regiments as organized under the former tables of organization; but, if from this reservoir is drawn the necessary personnel for divisions, brigades, machine-gun squadrons, the Cavalry School, Corps Area troops, it follows that the strength of the regiments had to be reduced if the total number was to be preserved.

In effecting the reorganization the needs of the regiments were naturally paramount, but there were other complex problems upon which it might be interesting and desirable to comment.

The consensus of opinion has been that the former organization of the cavalry division was an absurdity. It was too large and cumbersome, taking up a preposterous amount of road space and incapable of maneuver. Nearly all opinion was in agreement that the division should be between five and six thousand men, so that it might be capable of easy transport by rail or water, without any undue strain on transportation, and that it would not need an excessive amount of road space. In the reorganization, therefore, the strength of the division has been fixed at approximately six thousand men—a number that permits the organization of two cavalry divisions.

These two divisions will afford the cavalry a real practical school for the officers and men, and with their institution the training should reach a very advanced degree. They will give opportunity for high command and for advanced staff work, so that never again can the Army be reproached with the criticism that our senior officers have never commanded any unit higher than a regiment. As a matter of fact, a great deal too much emphasis was placed upon this alleged deficiency during the war, and some of it always appeared to be propaganda spread by a certain element for the purpose of discrediting the knowledge of excellent officers in order to enhance their own fitness for the higher positions.

The reorganization provides, briefly, that each division shall be composed of two brigades of two regiments each. Each regiment will have two squadrons of three combat troops each, one headquarters troop and one service troop. The machine-guns have been organized into squadrons and one assigned to each brigade. It will be observed that the three-unit organization has been limited to the squadron, due to the necessity of keeping within the figure 6,000 for the division. The assignment, however, of a machine-gun squadron to

each brigade, or of a troop to each regiment, if the latter is detached, preserves to a certain extent the three-unit organization of the higher units.

The divisions will absorb four machine-gun squadrons, but, in addition, two others, making six, have been organized, and three additional machine-gun troops, to be assigned respectively to the Philippine Department, the Hawaiian Department, and to the Cavalry School.

For each corps area there will be one squadron, composed of a Corps Area Troop of the same strength as the combat troop, one recruit training troop, and one remount training troop. Underlying the organization of each unit is the one blessed principle that it shall be self-sustaining. Commencing with the troop, it will be so staffed that its combatant strength will not be robbed to maintain an efficient interior economy.

Again, in the squadron the commander will have his staff, and when he takes the field it will go with him, obviating the necessity of begging regimental headquarters to let him have his squadron major. Similarly, in the regiment each unit has grown up, so to speak, so as to be independent of the personnel of the other, and the old vicious system of robbing Peter to pay Paul has gone forever, we hope.

The organization is flexible and capable of easy expansion into war strength. For example, in a troop it will only be necessary in war to add a cook, a horseshoer, and a messenger to troop headquarters and a squad to each rifle platoon.

In a very short time the reorganization will be placed into effect, and the officers will appreciate, it is believed, that we have the best organization that we have ever had. Of course, no one claims that it is without its defects; but, if consideration is given to the many demands made upon the limited personnel of 20,000 men, it will be seen that the results are excellent. In any event, every cavalry officer and man should enter into the reorganization with the greatest good-will and enthusiasm, try it out most conscientiously, and withhold all comment and criticism until it has been tested thoroughly for a year, at least. Then only can helpful criticism be made.

Topics of the Day

GENERAL HOLBROOK'S CHRISTMAS GREETINGS TO THE CAVALRY

To the Officers and Men of the Cavalry:

THE VERY NATURE of the Christmas season inspires me to send holiday greetings to the officers and men of the Cavalry, wherever they may be serving. It fills me with pride to have come into contact with men who, under the most trying circumstances during the war and in the reaction which followed its close, have exhibited the highest qualities of soldiers.

Although the meaning of "Peace on earth, good will to men" takes on a deeper significance at this season of the year, yet this same Christmas spirit has ever characterized the attitude of the Cavalry.

With the advent of the New Year a reorganization of our arm will be effected which will give to the officers and men an opportunity to develop the rôle which we are to play in the peace and war team. The Recruiting Service, by its magnificent efforts, has sent us the best men that it can find to fill our ranks, and I am confident that the same characteristic courage and efficiency which has marked the bearing of our men in the past will be employed undiminished to make of this raw material soldiers worthy of the name, and return them to civil life spiritually better by the consciousness of duty nobly done.

WILLARD A. HOLBROOK,
Major General, Chief of Cavalry.

IN MEMORIAM

THE CAVALRY SERVICE was greatly distressed to learn of the recent tragic death of one of its splendid officers, Captain John Newton Steele, 6th Cavalry, who died as the result of an accident on the polo field at Fort Oglethorpe, Georgia. In the Order which follows, Colonel Foltz expresses the sympathy of the regiment, to which we here desire to add that of the entire Cavalry Arm:

General Orders Number 9. } HEADQUARTERS SIXTH CAVALRY, FORT OGLETHORPE, GEORGIA, *November 15, 1920.*

It is with profound sorrow that the Regimental Commander announces the death of Captain John Newton Steele, of "Ours." The Sixth Cavalry will deeply feel the loss of a fine officer and valued comrade.

Captain Steele, in the short time that he has been with us, has established a high standing as an officer, a soldier, and a cavalryman, and by his gentlemanly character and his sunny and enthusiastic disposition has endeared himself to us all.

His tragic death, in a polo game on the parade ground, has deeply touched the regiment, and our heartfelt sympathy is extended to his dear wife in the bitter sorrow that has so suddenly stricken her.

FREDERICK S. FOLTZ,
Colonel, Sixth Cavalry, Commanding.

THE MEDAILLE MILITAIRE FOR GENERAL PERSHING

ON OCTOBER 1 the French Government, through its distinguished representative, General Fayolle, conferred upon General Pershing the Medaille Militaire, the highest French military distinction which can be conferred upon any one. The medal was instituted by Napoleon III, in 1852, as a reward for the enlisted men. Subsequently it was extended by presidential decree to marshals of France, to generals who were former ministers of war, and to generals who had command in chief in action, and later on to include certain corps commanders and other general officers. No one of these classes of French officers, however, is eligible until after having been decorated with the Grand Cross of the Legion of Honor.

This distinction, however, has rarely been conferred upon officers of the French Army, and still more rarely upon a foreign officer. At the present time the following French officers have been awarded the Medaille Militaire: Marshals Joffre, Foch, Pétain (commanders-in-chief in the World War), General Fayolle, and thirteen other generals.

Among the extremely rare foreign titulars of the Medaille Militaire are Prince Alexandre of Servia and Field Marshal Sir Douglas Haig. To this list is now added our own distinguished Commander-in-Chief, General Pershing. This latest act of courtesy on the part of the French is not only a recognition of his eminent services, but it is an acknowledgment by the French Government, through the person of General Pershing, of the valor of the American troops in the World War.

THE CARE AND PRESERVATION OF LEATHER

THE CLIMATIC CONDITIONS under which the British serve in India closely resemble those under which our own Cavalry serves along the border and in the Philippines. The experience, therefore, of an officer in India in the care and preservation of leather will prove of interest to our own troop officers:

One of the tasks in which the personal element is most prominent is the cleaning, preserving, and polishing of leather-work.

This consists of two kinds: there is the "blocked" article, like the gaiter or bayonet scabbard, which is required to remain stiff, and there is the strap, which should be supple.

Some divergence of views exists regarding the suitability of the materials issued officially for the care and preservation of leather-work, and these are not universally popular. At the same time, their suitability for the purpose can be established on rational grounds, provided that the standard for the appearance of the leather-work is similarly fixed.

While it is known that leather is an animal product, this fact is not always appreciated. In the preparation of leather for the market an important operation is stuffing it with grease. It has been found by experiment that the fibers of leather gain in strength from the absorption of grease, and even when the added grease is removed by artificial means the fiber is still stronger than it was before it was greased. Many of us have cut a stick in the forest and taken it home to season, and have carried out this operation with zeal, but without discretion, with the result that all the "virtue" is dried out of the wood, which becomes brittle.

The first thing, therefore, to remember is that hot winds, dust, and certain cleaning processes take the "virtue" out of leather, and, if it is to retain its life, it must be fed—*i. e.*, the wastage of grease must be replaced.

A second point is that leather can be cleaned with warm water, but that hot water will destroy it.

The descriptions of oil or grease which are used to soften and preserve leather are numerous. Mineral oils soften the leather, but have a bad after-effect, inasmuch as they appear to burn the fibers.

Vegetable oils are of two descriptions—drying and non-drying (between these there are semi-drying oils). The use of the drying oil is equivalent to painting the leather, while some of the non-drying oils darken and stain it. Castor oil is said by some to be deleterious, but is largely used in the trade in preparing leather for black boots.

Animal and fish oils are *par excellence* suitable for the treatment of leather. Cod oil, which is merely a "grade" of cod-liver oil, is the principal one used in the trade; this is made into an "emulsion" and worked into leather from the flesh side.

A very good oil for softening and preserving leather is "Mars oil." This is believed to be a German preparation and to be the oil obtained when degreasing (removing surplus oil from) skins in the manufacture of chamois leathers.

Thus it is similar to lanoline, or wool fat, which consists of the fat deposited in perspiration on the fleece of sheep. This is extracted either by washing the fleece with soap or by means of a solvent which is subsequently evaporated. The grease thus separated, when purified and formed into an emulsion, becomes "lanoline."

Wool fat has a complex chemical composition and is akin to the waxes.

An "official" preparation for the preservation of leather is tallow, 160 parts; beeswax, 96 parts; camphor, 3 parts. This is "dubbing" in a wide sense, being actually a combined dubbing and polish.

This mixture is not to be used for scabbards, buckets, and such like, which are of uncurried "blocked" leather which it is not desired to soften. It is laid down that these should be "cleaned" with beeswax. The use of the word "cleaned" is hardly correct. The beeswax is a polish which forms a protective coat on the leather.

Occasional soap sponging is necessary to preserve the grain, and they should be very lightly dubbed about half as frequently as straps and such like. The "cleaning" with beeswax is merely incidental to getting a good polish.

Apropos of this, the question may be asked why "beeswax" is used in preference to mineral (paraffin) wax, which is so much cheaper. The reason is that the difference between the two is analogous to that between household bread and short bread. The beeswax draws out in a fibrous manner and is more adhesive, while the paraffin is crystalline and "short." A good dubbing for

preserving and softening leather in store consists of tallow, 5 parts; cod oil, 1 part.

The "Home" regulations prescribe that saddlery and harness in possession is to be laid by in dubbing once in every six months for two or three days. From Friday afternoon to Monday afternoon is suggested as a suitable time, with inspection on Saturday to see that the work has been properly done. Whether once in six months is sufficient in India depends upon the locality. There are certainly some places where the desiccating effect of the climate calls for the more frequent treatment of the leather. The excessive use of dubbing discolors harness and saddlery and gives it a "second-hand" appearance.

Dubbing spreads more uniformly and penetrates the fibers of the leather, if applied when the leather is damp.

To dub harness or saddlery, the whole of the strapping of which they are comprised is taken to pieces and cleaned. While they are still damp, the dubbing is applied with a rag, sponge, or brush, and is then lightly rubbed in. A good way to apply dubbing to such articles as stirrup leathers, reins, and straps is to hook them on a nail in a wall and pass them through the hand, which holds a small quantity of dubbing. The natural warmth of the hand and the friction melts and forces the dubbing into leather and leaves no uneven caking on the surface. This process also sleeks out creases, kinks, etc., and assists in making the article supple. The leather-work is then put aside, and after two or three days, when the dubbing has penetrated, the residue is rubbed off and the article polished with a cloth or brush. If this job has been well done, there is no danger of grease coming off on the hands or clothes.

Soap used daily on articles in constant use produces mellowness in the leather rather than an outward gloss.

So long as leather remains dry and clean, it needs but little attention beyond periodical dubbing, but when wetted by rain, by the water used to clean it, or by immersion, it becomes hard and stiff, if not softened with some oily or fatty substance—*e. g.*, dubbing or soap.

To sum up, the essential point in the preservation of leather is to remember that it is a skin which no longer has powers of self-recuperation. It should be fed at reasonable intervals with suitable nourishment; it should not be subjected to violent treatment, such as washing with acids or caustic alkalis or with water, which is uncomfortably hot to the elbow. Water should be used sparingly; the article should not be soaked in it. It should not be left in a hot, dry wind, put out in the sun or in front of a fire, or exposed to the ammonia fumes which are continually given off in stables. It should, however, have air, so that it should not become mildewed. In the rains it may be considered advisable to use a fire to dry the air of the harness-room, but the leather should not be put where it will get hot.—*By Sumach, in the "Journal of the United Service Institution of India."*

RENDER UNTO CÆSAR

MAJOR GENERAL CHARLES F. ROE, of New York, has called the attention of the Editor to an error which appeared on page 306 of the October number of the CAVALRY JOURNAL, in an article entitled "Famous Endurance Rides." The article read: "Four men of Company H, 1st Cavalry, in 1880 carried dispatches from Fort Harney to Fort Warner, one hundred and forty miles in twenty-two hours, over a bad road, or at the rate of 6.4 miles. The horses were in good condition at the end of the ride, and after one day's rest made the

return trip at sixty miles per day." General Roe writes that the real facts are as follows:

"The ride was made in the fall of 1869, by Lieutenant Charles F. Roe, a sergeant of Troop H, 1st Cavalry, and a private of Troop F, 1st Cavalry. The distance was called 150 miles; actual time, just 24 hours; traveling time, 22½ hours. Almost the entire distance was made at a trot. Started at 8 p. m., arrived at 8 p. m. Rode back in 36 hours, on the same horses."

ARMISTICE DAY MESSAGES

Upon the second anniversary of the signing of the Armistice, fine and noble tributes were paid our fallen heroes by the Secretary of War, the General of the Army, and the Chief of Staff.

Mr. Baker's message was as follows:

"Today, on the second anniversary of the Armistice, our eyes should be turned toward France, toward that hallowed ground which covers the bodies of America's dead.

"Upon those of us who are living peacefully because these men had the will to die; upon those of us particularly who are intimately concerned with the Nation's defense, there is placed a solemn obligation to our fallen. Their deeds, their determination, their sacrifice, must not die with them. It is for us to emblazon their glory in imperishable memorials; to engrave their devotion on our hearts and the hearts of our countrymen, and to dedicate ourselves to a perpetuation of the principles for which they fell.

"Today the Army salutes its own—its fallen heroes."

General Pershing published the following:

"The second anniversary of Armistice Day finds undiminished the appreciation of those who comprehend the meaning of the great victory achieved on November 11, 1918. This day will come to represent to the civilized world what Independence Day means to Americans. It struck the death knell of autocratic rule, and reversed the doctrine that 'might makes right.' It marks a new epoch in history and establishes the dividing line between the old order and the new.

"In our own country the guarantee for good government lies in the awakening of the young, patriotic citizens who constituted our military forces and who, since the accomplishment of their sacred war mission, have returned to peacetime pursuits with a determination to keep ever before them and their neighbors and communities the ideals for which they fought. That the interests of the nation will be well directed and fully safeguarded by this great citizen army of veterans is beyond doubt.

"In celebrating this Twentieth Century Independence Day we should pause in prayerful tribute to the memory of those young Americans and those sons of our Allies who gave their lives to perpetuate our liberties. Their sacrifice was for us and our future, and their purpose must remain our purpose."

General March said:

"On the second anniversary of Armistice Day, we turn our thoughts from the strife of politics, from the urge of business, to acclaim again our Army in the World War. I have recently inspected our cemeteries in France, with their

rows on rows of hero-dead, and cannot conceive of any differences of opinion as to the aftermath of the war, making us ever forgetful of the splendid sacrifices of our Army and of the whole people during the war. Their record of achievement and of self-denial will forever be a national inspiration."

CAVALRY vs. RIOTERS AND STRIKERS

Extract from a Speech by John H. Maurer, Labor Leader, Showing the Attitude of Rioters and Strikers to Cavalry Action

"The 'English square' is the only open-field military formation of human beings that has ever been known to repulse cavalry. All other formations go down before the resistless rush of plunging beasts mounted by armed men, mad in the fierce excitement induced by the thundering gallop of charging horses. A charge by cavalry is a storm from hell—for men on foot. A cavalryman's power, courage, and daring are strangely multiplied by the knowledge that he sits astride a swift, strong beast, willing and able to knock down a dozen men in one leap of this terrible rush. Hence the Cossacks, the mounted militiamen (*referring to the Pennsylvania State Constabulary*), for crushing unarmed, unmounted groups of men on strike."

THE SABER

A Reply to General Dickman

It is true, as stated by General Dickman, that, as a general proposition, it may be said that no officer of our Army has ever wielded a saber in battle.

If General Dickman implies by the next statement in his article, that the opponents of the saber have not consulted distinguished officers who have actually used the saber in battle, or able observers in campaigns where mounted troops took a prominent part, that is also, in general, true; and likewise it is true of the *advocates of the saber.*

Most of us, either for or against the saber or pistol, base our reasoning on personal experience, practical use of the one arm or the other, and the writings and reports of others who are familiar with the actual use of the arm in question in battle.

In a book by Frederick Coleman on the work of the British Cavalry in France, one, and only one, instance is given of a saber charge in France when the contestants closed. I regret that I have not the book at hand, but it was a case of saber *vs.* lance, and the saber won. The casualties caused by the saber were, however, practically *nil.* I can find no other record of cavalry shock action against cavalry in this war, though I have searched to the best of my ability. A charge was made at another time by the British in France against artillery. But the guns were a short distance behind wire, and the charge did not get home, the troops having to clear to the flank at short range. Pistols might not have inflicted any damage, but again they might have. I think the troopers would have liked to have had the chance.

In the actions in Palestine no shock action of cavalry *vs.* cavalry is of record that I can find, and in the recorded charges (as reported by our observer, Colonel Davis) it was noted that practically no casualties were inflicted by the saber or bayonet used as saber.

What our Cavalry did at St. Mihiel appears to be hidden, for some unknown reason. Perhaps it is because the small size of the force, one squadron, prevents its consideration in the mass of reports of the great units employed. But of this much I am confident: certain troops of the Second Cavalry were in mounted action at St. Mihiel and perhaps elsewhere. Did they use the saber, or the pistol, or both? And what were the results? We have here a case in our own Army. What happened?

In the charge of the lancers at Omdurman, the charge went home and through. Practically the only casualties inflicted on the dervishes were by the officers who were armed with pistols (see account in "The River Wars," by Winston Churchill).

Cavalry combats took place in 1870, but saber wounds were rare. So with our Civil War. The Confederate irregulars, however, are known to have done great damage with the antiquated revolvers with which they were armed.

In all combats of cavalry *vs.* cavalry, mounted, in modern wars, the horse seems to have been the decisive weapon, riding down the opponent. Mêlées seems to have been absent in most cases, the shock having routed one side or the other.

The one great exception appears to have been the cavalry combat at Mars-la-Tour in 1870. This resulted in a mêlée that was indeterminate in its results, both sides withdrawing and both claiming the victory. The casualties from lance and saber were negligible.

Our mounted forces in Mexico and in the Philippines have used the pistol and inflicted casualties with it. Of course, it was not cavalry against cavalry in shock action, but the *pistol put men out.* Can we say as much for the saber?

Of course, there is always a chance of injuring our own men in a pistol combat. You cannot make an omelet without breaking some eggs. But can we hold back on this account, when we consider that in practically all attacks in the World War our men received some casualties from our own barrages? (I occupied a swivel chair during the war, but I have been told tales.)

Now, as to what can be done with the pistol. We had for years a system of firing which corresponds to mêlée fighting—firing at isolated figures, at ranges of from 10 to 25 yards, nearly all at a gallop and mostly figures of dismounted men. In Mexico, experiments were made simulating cavalry charges against cavalry, firing to the front. (I write what I have been told; again, I was not there.) At swinging overhead targets (Target "E," I believe), poor scores were made. But one test was made, and that, for some reason, was never published. A cloth was suspended with a horizontal strip target on it, representing a close-order line of mounted men. This target was so arranged that it could be dropped and passed over by a charging line. The results on this target showed (firing by a charging, supposedly equal force) that every man or horse would have been hit. Would there have been much trouble in riding down what was left of that line? If you can show such results as that to our Cavalry, they will prefer the pistol to the saber, I believe.

But we need a change in the design of the grip of our pistol. There is something wrong with it, that makes the average man, when excited, throw the muzzle down, so that the bullets go about 30 degrees lower than intended. And I believe that I would personally, for all weather and other conditions, rather use the 45 caliber double-action revolver (Smith & Wessen type) issued during the World War. Double action may come in very handy, and the revolver jams less frequently than the pistol. I believe we are in general too hesitant in the adoption of new ideas. Must we always follow the lead of European cavalry? Was the use made of European cavalry in the World War such as to warrant our accepting it as a model? Was not the French cavalry more or less of a failure because they could get no chance to use the saber or lance? I suggest that two pistols be carried—one in a pommel holster, to be the weapon habitually to be used first when mounted; the other to be carried on the belt, for use when the pommel pistol is emptied, or for use dismounted; and, although for years an advocate of the low butt-to-the-rear holster on the belt, I have found it so unhandy when on dismounted maneuvers I am now in favor of the higher, old-fashioned butt-to-the-front holster.

As a last shot at my very good friend, I quote from the CAVALRY JOURNAL, same issue as that containing his article, page 317: "It has been decided that the new Army Cavalry shall carry lance, carbine, and short side arm. The sword is, provisionally, abolished.—*Militar-Wochenblatt.*"

CHARLES A. ROMEYN,
Lieutenant-Colonel, General Staff Corps.

SEAWEED AS FORAGE FOR HORSES

RECENTLY THE FRENCH have been experimenting with the use of seaweed as forage for horses. Apparently, horses in light work could be kept going on a ration of three parts seaweed to one part oats, the seaweed having been specially washed and dried before use.

THE LIGHT vs. THE HEAVY SABER

GENERAL DICKMAN'S "Plea for the Saber," in the October number of the CAVALRY JOURNAL, seems to bring up again the much-discussed subject of whether or not the saber shall be dropped from the Cavalry armament.

There is no doubt as to the efficiency of our regulation saber as a fencing weapon, either mounted or dismounted; it is probably as nearly perfect a saber as could be devised, save that the steel is too brittle and cases of broken blades

have been (or at least were, when the saber was first issued) quite numerous. The lance, from having a longer "reach," is a still more effective weapon. Then why do we not use it? Simply because of the inconvenience in carrying it, an inconvenience which even to an extent interferes with the effective use of the other two arms—rifle and pistol. The American Cavalry, therefore, has never taken it up, and for some years past it has been gradually discarded by the Cavalry in countries where the use of cavalry in the past has been almost exclusively that of mounted action.

I am in agreement with General Dickman in the retention of a saber on account of the moral effect which this arm produces. He says he would leave it at home in case of field service involving no possibility of its useful employment. I would go a step further and leave it at home when there is no *probability* of its useful employment.

In the punitive expedition my regiment (10th Cavalry) carried sabers, as we were ordered turned out fully armed and equipped for field service. On the march from Fort Huachuca to Santa Cruz (20 miles north of Parral) and return to San Antonio, Mexico, about 650 miles, we lost, roughly, 10 per cent of our animals. Under these circumstances every pound carried which is not needed is just so much of a hindrance, detracting from the marching capacity of the command. If I had it to do over again, I would leave sabers behind. Better still, those ordering a movement and knowing (which we did not) what arms would likely be needed, should in ordering the movement instruct what arms should be carried.

For some forty years past the writer has had a light saber, which is so much more conveniently carried than the regulation one that it has usually been taken in the field. It has a Solingen blade of well-tempered steel and is but three inches shorter than our regulation saber, although the weight is but 1¾ pounds—slightly more than half that of the regulation saber. The cut herewith affords a means of comparison of the two.

If it were a question of its frequent use in actual combat, the best saber is none too good; but when, as General Dickman says, "No American officer or soldier now in the Army has ever wielded a saber in battle," it seems well worth while to consider whether we cannot find a saber which is less of an incumbrance than the one now used. The writer begs to submit this light saber as a possible satisfactory solution, bearing in mind the fact that the *portability* of the arm is a consideration which cannot be ignored.

Comparison of Weight and Length of Sabers

	Weight.	Length.
Regulation saber, including scabbard..	4 lbs. 9½ oz.	43"
Proposed saber, including scabbard....	2 lbs. 3½ oz.	38½"

W. C. Brown,
Colonel of Cavalry, Retired.

"WE'RE DOWN ON THE SHALLOW RIO, AMIDST THE CACTUS AND ALKALI"

TOPICS OF THE DAY

OPERATIONS OF THE SECOND CAVALRY IN FRANCE

THE SECOND CAVALRY is credited with the following battle participation, under paragraph 244 of the Army Regulations:

(1)	Toul Sector, France	14 April– 7 May, 1918.
	1st Squadron	15 April–24 April, 1918.
	Troops F and G	14 April– 7 May, 1918.
	Troop H	14 April– 6 May, 1918.
	Troop I	14 April– 1 May, 1918.
	Troops K and L	14 April–30 April, 1918.
	Troop M	14 April–23 April, 1918.
(2)	Aisne-Marne Offensive, France	18 July–6 August, 1918.
	Troops A and C	18 July–6 August, 1918.
	Troop I	3 August–6 August, 1918.
(3)	Toul Sector, France	7 August–11 Sept., 1918.
	Troops A and C	7 August–11 Sept., 1918.
	Troops B, D, F, and H	24 August–11 Sept., 1918.
	Troop G	12 July–11 Sept., 1918.
(4)	St. Mihiel Offensive, France	12 Sept.–16 Sept., 1918.
	1st Squadron	12 Sept.–16 Sept., 1918.
	Troops F, G, and H	12 Sept.–16 Sept., 1918.
(5)	Toul Sector, France	17 Sept.–25 Sept., 1918.
	Troops B, D, F, and H	17 Sept.–25 Sept., 1918.
	Troop G	17 Sept.–11 Nov., 1918.
(6)	Meuse-Argonne Offensive, France	26 Sept.–11 Nov., 1918.
	1st Squadron	26 Sept.–11 Nov., 1918.
	Troops F, H, I, and M	26 Sept.–11 Nov., 1918.

WANTED—COPIES OF THE JULY NUMBER

So GREAT has been the demand for the July number of the CAVALRY JOURNAL that the edition has been completely exhausted, notwithstanding a large excess that was printed. Many requests are on hand for this issue and others are coming in daily. The CAVALRY JOURNAL will be glad to purchase, at fifty cents per copy, copies of this issue. Any subscriber having a copy of the July number which he does not wish to retain will confer a favor upon the Association by sending it in.

New Books Reviewed

LIFE OF LORD KITCHENER. By Sir George Arthur. In three volumes. Published by the Macmillan Company, New York, 1920. Price, $12.50 per set.

Prior to 1914 the recent wars of Great Britain gave no assurance that she would be a dangerous enemy except at sea. Waged against starving, ill-armed, undisciplined troops, British soldiers surrendered too frequently, were often defeated with small losses, were poorly supported at home, and made a wrong estimate of the lessons to be learned. Few indeed, among military men, were ready to predict the high results of the World War.

It often happens that able men get an education in spite of the school. It seems to have been so with Kitchener. At all events, in 1914 he was head and shoulders above all other British military leaders and the one to whom the nation turned with great unanimity for help and guidance. That the empire emerged in triumph from the war was due to Kitchener more than to any other man. That another could have been found to take his place may be true, but the results would not have been so great.

The life of Lord Kitchener is written by Sir George Arthur, his secretary, devoted friend, and supporter. It contains much valuable and interesting matter that has not before been published, including long quotations from private correspondence, official reports, and the like. The author is not an "experienced biographer," to borrow his own words, which we may well imagine when we see how loosely the facts are put together, how great a familiarity with events must be presupposed, and for an American reader, how hard it is to read a military biography without plenty of good maps.

How little the makers of history get from those who write it is found in this book as well as in many others, and so, upon some subjects about which the readers of every age are curious to be informed, this friendly biography is vague and contradictory. For instance, as to the personal appearance of Kitchener, we find him described (I, 42) with "upright figure and square shoulders," (I, 60) with "a narrow chest and sloping shoulders," and somewhere else with "broad shoulders." Much to our regret, we again find ourselves in confusion as to his temperament. We read (I, 248) of his "stony composure as he rode at the head of his troops through the captured city. Stern, upright, and uninviting he passed through the crowded streets of the town"; "the set features betrayed no unusual feelings"; "tears welled up in Kitchener's eyes and coursed unrestrained down his cheeks"; "too overcome to speak, and merely signaled to General Hunter to give the necessary word of command." On reading the first of these remarks we were ready to say that Kitchener seemed to be curiously like Ulysses S. Grant in temperament; but it is hard to imagine Grant giving up to emotion, just as it is difficult to think that Cæsar wept when the poor cried.

About Kitchener's personality we shall have less difficulty after reading a number of very good pen portraits by some of the prominent men who came into intimate contact with him. General Gordon wrote: "One of the few very superior British officers." Sir Evelyn Baring said: "A very gallant soldier." Lord Minto wrote of his "curious personality," "unattractive manner," "kind heart buried somewhere," "artistic tastes," "straightforwardness," "ability," "broadmindedness," "foresight." Lord Roberts, in his last interview with the Queen at Osborne "spoke of Kitchener's self-suppression, his eagerness to undertake the hardest and most difficult tasks, his scorn of notoriety, and his personal loyalty" (I, 224, note).

Cavalrymen will not forget that Kitchener, although an engineer officer, principally employed on survey work in Palestine and Cyprus during the first twelve years of his service, was made a major of an Egyptian Cavalry regiment in 1883, and thus got his first start in the line, which really made possible his future career.

In time of peace military men are tenacious of existing methods and averse to change, but immediately after a great war they fly to the opposite extreme in a stampede for something new. Perhaps, therefore, it may be proper to suggest that, if the next war is to be fought in America and not in Europe, we may find lessons in the South African conflict that will be as useful as those our soldiers learned in France. The South African War furnished one of the great examples of a mounted force, armed with a firearm able to fight mounted and dismounted, after the manner of Nathan B. Forrest in the Civil War. With never more than 25,000 of this type of cavalry (British estimate), the Boers fought ten times their numbers, backed by all the power of a great empire. When Kitchener became Commander-in-Chief "he persistently pleaded for fresh and further mounted troops, in which he pinned his faith" (II, 4). He succeeded in making a mounted army of 80,000 men. In this way he was able to combine rapidity of movement with superiority of numbers. The Boers were overwhelmed, and the story reads very much like that of P. H. Sheridan and J. H. Wilson, the last year of our Civil War. Let us therefore forget not our traditions.

As in debate, the place to be assigned to Kitchener in history, this biography will furnish good material. We observe that at Middleburg, in February, 1900, he would have made, if unhampered by the civilian members of his government, a peace which would have saved many lives, much treasure, and fifteen months of fighting, yet reaching practically the same result as finally accepted. At the beginning of the World War, on the vital point as to whether the Germans would choose to penetrate Belgium at the north or at the south of the Meuse, he rightly judged the former to be the correct solution, while the French General Staff and the British experts held the opposite view. On August 30, 1914, when the Commander-in-Chief, Sir John French, decided to withdraw from the allied line and to retreat to the south, Kitchener promptly disapproved and set him right. To the Dardanelles campaign and to Townsend's Bagdad expedition he was strongly opposed.

Sir George states (III, 307) that Kitchener made his decision for seventy divisions of infantry on the very day he entered the War Office, August 6, 1914. Kitchener himself was not so specific in his claims (III, 328). In any case, he very promptly scrapped the entire pre-war program, carefully and laboriously worked out as it had been. The plan was, in such an eventuality as did occur, that Great Britain would send six infantry divisions to the continent, while relying on the navy to play its rôle as the principal weapon of the empire. In changing that policy and in correctly estimating the part his country was to fill in the war, his best work was done.

More than two hundred pages are given to Kitchener's seven years in India and his activities in preparing for war. He was a strong advocate of preparedness, and yet for some reason the author makes the following statement (III, 221): "Kitchener alone among soldiers had believed it possible to create in war time, from the manhood of an unmilitary nation, large bodies of new troops fit to beat the finest combatants of the continent. He backed his own opinion with complete faith in

his own judgment, and the armies with which his name will always be identified more than justified his confidence." Yet we permit ourselves to doubt if such armies would have been possible if the trained soldiers of France, Russia, and Italy had not been ready to take the burden of war in the period of formation.

The biography notices Kitchener's denial of charges of cruelty at Suakin and Omdurman (II, 263-4). The author himself defends the devastation of the country and the formation of concentration camps in South Africa as military necessities (II, 11, 12, 108). He attributes the high death rate at these camps to the fact "that the inmates were not once relieved and refused medical advice" (II, 127). Quotations from letters written by Kitchener himself give an impression that he thought lightly of it (II, 13, note, 14). The author does not give space to the numerous charges of the arming of the negroes against the Boers, unjust military trials and executions, deportations, boy prisoners.

EBEN SWIFT,
Brigadier General.

THE GREEN GOD'S PAVILION, A NOVEL OF THE PHILIPPINES. By Mabel Wood Martin. Frederick A. Stokes Company, New York, 1920.

Do you remember the Philippines as the land of songless birds and scentless flowers? Or do you remember it for its gorgeous sunsets? In either case you should read Mrs. Martin's book. In the one case you will find expressed in it the romance that you felt was there. If, on the other hand, you looked on your tour there as just two years to be gotten through with somehow, you will regret, perhaps, your lack of vision, but you will realize many of the realities that were patent, even to your matter-of-fact gaze.

Julie Dreschell, a young American girl, goes to the Philippines as a school teacher. In Manila she meets many interesting people, but most entertaining of all is Barry McChord, "an Irish-American Haroun-al-Raschid, naïvely engaged in the recrudescence of the East. We call him the mayor of Manila." A young man with a purpose, withal, and with some points of difference from him who bore the nickname in real life. But this is romance, and I find the adaptation first rate.

Julie also meets a mestiza of rather more regal presence than any I ever saw, but a most interesting character in the book and one admirably suited to mark the contrast between East and West. It is in the house of Isabel that Julie sees the little green god and feels the uneasy spell of his aloofness.

We follow the teaching experiences of the young girl in a distant island of the archipelago, from the time she first faces rows of eager children till she finds the school deserted as a result of the machinations of the priest—deserted except for the faithful Delphine, who insists on being taken to Manila. We get a glimpse of the insurrection and of many familiar Filipino types, faithfully represented. There are also contrasting types of officers, admirably portrayed: Adams, a good scout, who loses his life after a long ride undertaken to feel the touch of a friendly hand; Calmiden, self-centered, uncompromising, "doing time" in the Philippines, who nearly qualifies as the successful suitor.

That part of the book dealing with the island of Nahal is the soundest, from the point of view of the realist. Julie's experiences after her return to Manila are fantastic, though entertaining reading, for all that. It is very well written romance and will hold your attention.

Mrs. Martin, who is the wife of Lieutenant-Colonel Charles F. Martin, Cavalry, already enjoys a literary reputation that cannot but be enhanced by her latest work.

GEORGE M. RUSSELL,
Major, General Staff.

THAT DAMN Y. By Katherine Mayo. Houghton Mifflin Co., Boston. Price, $3.50.

The story purports to be an unbiased account of the operations of the Y. M. C. A. with the A. E. F.

The author had exceptionally good opportunities to write such a story, for she states that she went to France on the invitation of the Y, but on the condition that she go as a free agent, paying her own expenses; also, "Nothing should be glossed for my eyes. I would write what and when I liked, . . . specifically emphasized my intention to state the facts as I found them, to the best of my judgment, without regard to whose feelings they might hurt."

There is no reason to believe the author has failed to write to the best of her judgment, yet it is difficult to see wherein the story would have differed had it been written by the most pronounced partisan of the Y. The story is written for civilians, and it is hoped that it is convincing to them. For those who served in the Army it will be less convincing, for it is overdone.

To make the theme of the story the work of the Y with probably its best-equipped division in France is no more accurate than to say that the amount of transportation furnished that division represented the level of the transportation furnished all the divisions in France, when some had practically no transportation.

The writer of this article yields to no one in thankfulness for the good work done by the Y, nor in admiration of those who did it, but it is believed that those gallant men and noble women would be the last to desire to see their work paraded across the pages of a book in somewhat the guise of movie-picture heroes and heroines performing constantly superman and superwoman exploits. The work of the actual fighting man pales into insignificance when compared to the author's brilliant account of the achievements of the Y.

The villains of the story are, first, the Y Directorate in America, who were apparently always stupid, always behind in sustaining the Y in France, and possessed of no vision; second, the Army Administration in France, who were always failing to live up to their agreements.

The author does not record that any strategical or tactical mistakes were made by the Y management in France, which certainly places them above the level of *any* army staff operating in Europe and probably above the level ever before reached by any human agency.

It reminds one of the remark, made with reference to the writings of a certain major of the Civil War, who gave wonderful accounts of what he and his command did, and that was, "Why didn't he let Grant help him when he was putting down the rebellion"?

The author tells us, on page 220, that "early in 1919 the Army began its general investigation of the A. E. F. Y. M. C. A.," but she does not tell us what the report of that investigation was. The author's defense of the pyramiding of selected personnel and materials by the Y in large cities and beautiful leave areas rather than shoving them to the front is hardly convincing.

A casual reader of the Y appeals for funds, being made in America at that time, would get the impression that the money was primarily for service to the men at the front.

The author falls into the prevalent error of civilians in America that there is a natural enmity between the officer and man in the United States Army not existing in other armies, with the possible exception of the Prussian, and fails to see how too-much-misguided sentiment tends to accentuate the point. After all, what is the cure for Bolshevism?

The author's conclusions leave one rather puzzled. After some four hundred and seven pages of glowing descriptions, she makes this statement: "Taking all together, the fit with the unfit, throughout the combat period, Carter had never more than 40 per cent of the man-power that his job required. Of that 40 per cent, as has just been stated, scarcely over 50 per cent ran fairly good."

What would be the value of a chain with scarcely over 50 per cent of its links running fairly good?

JAMES H. REEVES,
Colonel of Cavalry.

INTO MEXICO WITH GENERAL SCOTT. By Edwin L. Sabin. J. B. Lippincott Company, Philadelphia.

This volume is one of the Trail Blazers series, comprising a number of historical stories by the same author. While intended for boys, it may be read with interest by their elders. It is the story of General Scott's campaign from Vera Cruz to the City of Mexico, as witnessed by a young American boy stranded in Vera Cruz when his father died of yellow fever, and who joined the American Army as a camp-follower until taken in as a drummer.

There are no dark-eyed señoritas wandering through the pages, which are given over entirely to the recital of the deeds of valor performed by the gallant little army, which numbered only 6,000 men when Santa Anna and his army were driven from every position occupied by them and the City of Mexico fell into the hands of the American Army.

The story of Jerry Cameron, drummer boy, climbing to the belfry of the church of Amozoc, with his drum on his back, because dared to do so by a companion; his discovery from his point of vantage of the approach of a Mexican force about to surprise the Americans; his sounding the long roll and alarming the troops just in time to beat off the enemy, will make the young pulse quicken. Some of the stranded boy's experiences interested the reviewer particularly. When he slipped out of Vera Cruz to join the Americans, he encountered a drummer boy, Hannibal Moss, Company A, 8th Infantry. When the reviewer reported at his first post, nearly half a century ago, he was attached to that identical company. There were officers and men still in the regiment who had gone through the Mexican and Civil Wars with it, and stories of Scott's campaign were still recited at the camp-fires of the frontier. That interest still adheres to that war is evidenced by the fact that several histories have been published in recent years. The Trail Blazers series gives the young the opportunity to become familiar with Scott's campaign without studying the ponderous histories.

WILLIAM H. CARTER,
Major-General.

Polo

Polo is the most ancient of our present-day games. Cricket, golf, hockey, and perhaps baseball are all descendants of polo. The cradle of polo was Persia, and from that country the game spread all over the East, taking root most firmly in India, and at Constantinople under the Byzantine emperors. Every Persian king either took part in the game or looked on while his courtiers played. In the historical poems of Persian literature the heroes are often celebrated for their skill at polo. It is probable that the game never became popular with the Greeks or Romans, because they were such poor horsemen.

The people of Great Britain, Belgium, and Spain are national polo enthusiasts, while the sport is obtaining great favor with the French. There is now a movement to establish polo as a requirement for officers and men in the French Army, and it is expected to have its beginning this winter. Such has long been the case in the British Army.

In America polo has been mainly a luxury for members of expensive civilian clubs, with now and then a team from some particular organization of the Army. Now, however, there seems to have been an awakening to its value to our service.

Under its present policy, the War Department assists and encourages all forms of athletics as both a means of amusement and recreation for its personnel, as well as a stimulus to efficiency and organization spirit.

Most army polo players cannot afford to own their own mounts, although some officers have one or two ponies as a nucleus around which to build their string. Therefore it is necessary that such mounts as may be available in the unit be trained and developed for polo in addition to their usual duties.

The development and training of these mounts necessitates much work during time off duty. It gives the officer and the soldier excellent opportunities to practically apply the teaching of instructors. The more intense the training, the quicker the mount will play; and the better the training, the more pleasure is derived by the player during the game. This application also serves to make both better riders and trainers of the individuals and firmly impresses upon them the teachings of their instructors by actual experience.

A well-trained mount is the envy of every soldier, and the example of what can be done by a polo squad is an inspiration to other members of a command to better their mounts, whether they are used for polo or not.

The War Department now encourages this training of the regular mounts for purposes of polo in addition to their usual duties. It endeavors to furnish a type of equipment which can be used for both purposes. It intends to combine business and pleasure to reach the goal of professional efficiency.

This year similar tournaments have been held at Camp Travis, Texas, Fort Riley, Kansas, and Camp Knox, Kentucky, open to Army teams in their vicinity. The winning team at Camp Knox was composed of one lieutenant-colonel, one captain, one lieutenant, and one sergeant.

Next year it is hoped the same procedure will follow, after which the winning teams may be gathered together for an Army Championship, and the best players and mounts selected for teams to represent the Army in the national tournaments.

AT THE CAVALRY SCHOOL

The Cavalry School Polo Tournament, which commenced on October 16 and ended October 25, was an unqualified success from start to finish. Ten teams, from Kansas, Missouri, Oklahoma, Arkansas, Colorado, and Wyoming, were assembled to compete for

the Army and Civilian championships of the Central Department. The forty-odd players, with their friends and adherents, captured the post, which devoted itself unreservedly to polo throughout the fortnight. In addition to the games themselves, polo teas were of daily occurrence, and each night a polo hop or dinner dance was held at the Hostess House. The arrangements for the game were most carefully planned and the entire series was played without a hitch. Two magnificent tournament fields, together with a practice field, accompanied the teams for match play and work-outs. The many minor points of scoreboards, guides, ushers, parking space, paddocks, etc., had all been attended to with a marvelous exactitude of detail.

Among the distinguished officers who witnessed the games were Major-General Willard A. Holbrook, Chief of Cavalry, and Colonel George H. Cameron, Commandant of the Cavalry School. Many officers from the General Service Schools at Fort Leavenworth also motored over for the final games and helped to swell the large and enthusiastic crowd of spectators.

The competing teams and players were as follows:

Cavalry School "Sunflowers" Team: Major G. Cullom, Major C. Lininger, Major I. P. Swift, and Major W. W. Erwin.

Field Artillery School Team: Major R. McT. Pennell, Major C. Parker, Major J. T. Kennedy, and Major F. W. Bowley.

Cheyenne Mountain Country Club: W. Barrie Huston, Jim Minnick, Lafayette Hughes, and Deering Marshall.

The Third Division Team: Captain A. D. Newman, Lieutenant H. G. Guernsey, Major T. J. Johnson, Major C. R. Norton, and Lieutenant G. C. Benson.

The Junction City Team: Hal. Pierce, Harold Copeland, Jack Vickers, and F. W. O'Donnell.

The Second Cavalry Team: Captain J. B. Thompson, Major A. W. Holderness, Lieutenant C. A. Horger, and Captain V. V. Taylor.

The Fifteenth Cavalry Team: Lieutenant N. E. Waldron, Major H. A. Meyer, Lieutenant R. S. Ramey, Captain G. S. Andrew, and Lieutenant W. A. Falck.

The Cavalry School "Jaybirds" Team: Major J. Aleshire, Major A. E. Wilbourne, Major G. W. Chipman, and Major E. W. Taulbee.

The Missouri Hunt and Polo Club Team: Colonel Gray, Fred Harvey, Joe Daly, Marvin Gates, Frank B. Dragg, Harold D. Bell, and Frank Crowe.

The Seventh Division Team: Lieutenant G. R. Smith, Lieutenant R. G. Canine, Lieutenant R. V. Maraist, Lieutenant E. R. Rennier, Captain J. B. Wise, and Captain F. Bloom.

The Awards.—To the Cavalry School "Sunflowers" Team, winner of the tournament and of the Army Championship of the Central Department, was awarded the Cavalry School Cups. The Field Artillery School Team, as runner-up, was awarded the trophy donated by the First National Bank of Junction City, Kansas. To the Cheyenne Mountain Country Club Team was awarded the Remount Association Trophy, open to all teams except the winner and runner-up of the tournament. A trophy donated by Mr. Walter Rockwell, of Junction City, Kansas, was awarded to the Third Division Team for second place in this match.

FOURTH CAVALRY

The 4th Cavalry was one of the teams participating in the Eighth Corps Area Polo Tournament, held at Fort Sam Houston, Texas, during the month of October, 1920. The tournament demonstrated teams from El Paso and Fort Sam Houston were better mounted than other teams participating. This was thought to be the direct result of being situated in close proximity to remount depots where there is good opportunity to select suitable material for polo mounts. Above-mentioned teams showed better teamwork as a result of more practice. Practice at border stations is limited, due to shortage of officers in one

post, the extra duties imposed for this reason resulting in little leisure time and inability to work out prospective mounts for match games. The officers of the 4th Cavalry are endeavoring to practice in the face of this. Schools of equitation and garrison schools, however, take up a large amount of time. It is hoped the situation will improve to permit daily practice.

SIXTH CAVALRY

The present schedule of drills and unit schools permits of polo only on Fridays and Sundays. However, the polo spirit in the 6th Cavalry is excellent. Sixteen officers of the regiment and two officers of the Recruit Depot Post at Fort Oglethorpe play. A team from this post participated in the October tournament at Camp Knox. Major Broadhurst, Cavalry, and Major D. D. Tompkins, Cavalry; Captains Frank D. McGee and Oliver I. Holman and Lieutenants Robert R. Maxwell and Hurley O. Richardson, all of the 6th Cavalry, were the Fort Oglethorpe players. This was the first opportunity the 6th Cavalry has had in a number of years to play against other teams, and the experience gained in the tournament will be of lasting value to our team. There are no civilian polo teams in the vicinity of Fort Oglethorpe.

SEVENTH CAVALRY

Review of the Year.—The year dawned with our polo team champions of the El Paso District, having won the championship in a flat tournament during the Christmas week of 1919. The line up at that time was: No. 1, First Lieutenant Roy E. Craig; No. 2, First Lieutenant Hobart R. Gay; No. 3, Captain J. W. Cunningham; No. 4, Captain D. S. Wood; substitute, First Lieutenant J. C. Short.

None of the above players had ever played polo prior to the summer of 1918, all having entered the Army from civil life during the war, scarcely having learned to ride before entering the service. Polo ponies were *non est*, experienced players were not available for instruction, and each was a troop commander during the days when it was only with a sense of guilt that a few moments were stolen from official duties to practice.

However, with the permission of the War Department, the team was entered in the Del Monte (California) Tournament in February. Funds to defray the expense of transportation of twenty ponies, with their care-takers, and incidental expense had to be raised in three weeks. This was done by means of a theatrical performance which ran for three nights, in El Paso, under the stage direction of Lieutenant-Colonel Ben H. Dorcy, with an advertising souvenir program in charge of Captain D. S. Wood and Lieutenant William H. McCollough.

The scores at Del Monte were as follows: 7th Cavalry, 14½; Del Monte, 14½; 7th Cavalry, 11½; Santa Barbara, 8¼; 7th Cavalry, 18½; San Mateo, 8¼.

On the return trip to Fort Bliss the teams stopped off by invitation to enter the Santa Barbara tournament, with the following resuls: 7th Cavalry, 6½; Colorado Springs, 5½; 7th Cavalry, 7½; Santa Barbara, 11½; 7th Cavalry, 7¼; Santa Barbara (Blues), 4½.

All games in both tournaments were played under handicap rules of the American Polo Association. As the 7th Cavalry total team handicap was but two, the other teams were forced to give them more goals than usually justified by the actual difference of playing strength, which in a measure accounts for the success of the 7th in winning all of the junior events at both tournaments so handily. The team learned more polo in the California tournaments than they had in all their former experience, chiefly from observation of such players as Drury, Boeseke, Tevis, Blackwell, Pedley, and other crack players.

After the team's return to Fort Bliss, polo was more or less desultory through the spring and summer, principally due to weather conditions. When, however, the rumor of an Eighth Corps Area tournament became rife, work began again in August. Captain

Cunningham, ordered to Fort Riley, was replaced by Lieutenant Short as No. 3—an officer who eleven months previously had never seen a polo game, but who, nevertheless, has developed into one of the team's most brilliant players and spectacular riders in the corps area.

The Corps Commander, Major-General Joseph T. Dickman, ordered the tournament at Fort Sam Houston for the championship of the area. In the sub-tournament of the El Paso District, for the selection of the representative team in the corps tournament, the 7th Cavalry eliminated the 8th Cavalry by a score of 12 to 4; the 82d Field Artillery disposed of the Remount Team by a score of 13 to 1, while the 7th Cavalry took the scalp of the 82d Field by 10 to 1.

The 10th Cavalry, having disposed of the 1st Cavalry at Douglas, came to Fort Bliss for the semi-finals, but were taken into camp by the 7th by scores of 30 to 1 and 16 to 2.

At the corps tournament at Fort Sam Houston the 7th lost the first game to the 16th Cavalry. At the end of the eighth period the score stood 7 to 7. In the first thirty seconds of play in the ninth period the 16th scored the winning goal.

The loss of this first game is attributed to a combination of overconfidence, a tendency to overdo the dribble game, and a field markedly slow in comparison to the home field. The next game was won by the 7th over the strong Corps Area Headquarters Team by a score of 8 to 6. Headquarters then soundly drubbed the 16th, 5 to 2, leaving a three-cornered tie to be decided by the team scoring the most goals in the entire tournament. The 7th, having previously beaten the 4th Cavalry 10 to 2 and the 13th Cavalry 16 to 2, needed 12 goals in their final game against the Camp Travis team to win. In a spectacular game the Corps Area Trophy was won by a score of 17 to 2.

The Army handicap of the 7th Cavalry team is now 22. On Army ponies their A. P. A. is about 10; on first-class ponies it should be nearer 20. Hopes are entertained for an All Army tournament at Fort Riley in the spring to settle the championship of the Army.

ELEVENTH CAVALRY

Polo activities are more or less handicapped at present, due to the fact that the Del Monte polo fields are undergoing repairs for the winter tournaments and that there is no ground on the reservation available or suitable for practice. Every effort is being made to get a team in shape for the coming tournaments.

THIRTEENTH CAVALRY

The regimental team made its initial bow at polo in a series of games played here with the 5th Cavalry to decide which team should compete in the Eighth Corps Area Polo Tournament. The results of the games were: October 1—score, 7 to 8 (9 periods); won by the 5th. October 3—score, 7 to 4; won by the 13th. October 5—score, 8 to 3; won by the 13th.

The 13th, having won the series, attended the Eighth Corps Area Polo Tournament at Fort Sam Houston. Although the team lost every game at the tournament, they won the admiration of their opponents for their gameness and sportsmanship as good losers. Instead of discouraging the team, the experience gained has stimulated a live interest in polo at this post. A game is played every Sunday morning, with two practice periods during the week. The team is fast rounding into shape and will soon be able to take on a game in winning form.

SEVENTEENTH CAVALRY

The polo season just finished has been in most respects a satisfactory one for the regiment. A squad of twelve officers, with twenty-two horses, has been out for work throughout the season. These started work with more enthusiasm than polo knowledge

but sufficient polo ability and improvement were shown to warrant the prediction of a very successful season for the team in 1921.

Three outside games were played with teams from the Hawaiian Polo Association; two with Oahu and one with Kauai. In the first Oahu game, on July 3, played during the American Legion Tournament, at Kapiolani Park, in Honolulu, we were defeated 10 goals to 1. In our game with Kauai, during the Hawaiian Championship Tournment, we were overwhelmed 27 to 1. This game showed our loose teamwork and hopelessness of the horses we tried to play. The Kauai ponies were easily handled and ran circles around the Army horses. On several occasions the Cavalry number one got away with the ball from midfield with a twenty-yard lead only to be overtaken just as he got in position to shoot at the goal. The very poor showing of the Army mounts in this game caused a number of the members of the Hawaiian Polo Club to loan mounts to the Army team for their game with Oahu. In this game the team showed a great improvement in teamwork and played their positions well, returning a 7 to 5 score in favor of the Army. This game was the second time that an Army team ever defeated one of the island teams, the other being when the 5th Cavalry team defeated Kauai in 1913. As a result of this game, our team has been invited to visit Kauai for a game with the polo team of the American Legion Post of Kauai on Armistice Day. This will be a fitting ending for the season and a reward for the months of hard practice and many discouragements encountered during the season.

With the arrival of the 35th Infantry, 44th Infantry, and 13th Field Artillery at Schofield Barracks, each with a number of polo enthusiasts, the outlook for a good season next year is very bright. It is hoped that these regiments can form a polo squad, and that a post tournament can be played just before the tournament in Honolulu in August.

Regimental Notes

FIRST CAVALRY—Douglas, Arizona

Colonel Francis Le Jau Parker, Commanding

During the last month many changes have come to the regiment. Over three hundred recruits from the 4th, 7th, and 8th Cavalry have arrived, bringing the strength of the regiment up to its maximum. These men have all been assigned, and the troops reorganized to accommodate them. They are now undergoing training for an extensive course, and the regiment should be back to normal in the near future.

Troop "M" has just returned from Fort Apache, where it has been stationed. This troop was relieved by Troop "F," under command of Captain Herr. Lieutenant Blatt was sent from this station to conduct the return march of Troop "M," Lieutenant Sherril, the former commander, having been transferred to the Finance Service shortly before the departure of Troop "M" from Fort Apache.

The regiment has just completed its general inspection by Major C. P. Mills, I. G. D., 8th Corps Area Inspector. The inspection occurred at a time when the regiment was in an unsettled state, due to large replacements, but the officers of the regiment all feel that, everything considered, the results will prove satisfactory. In the meantime strenuous efforts are being made to put the regiment where it should stand for the next inspection.

On November 27, 1920, the regiment will hold a horse show. This event is looked forward to with much interest by the entire command, and the contestants in all the events are practicing daily, so that they may have their mounts in condition for the tests.

The outstanding feature of the show will be the competition for the Commanding Officer's Cup. This event involves an endurance ride for officers, followed by judging for condition and training. Colonel Parker will give a cup to the first officer winning this contest three times. The competitions will be held every six months until the trophy is won.

Several new officers have joined the regiment recently, among them being Lieutenant-Colonel Walter J. Scott, Major Karl E. Linderfelt, and Lieutenants Pickett, Daugherty, Latimer, Massey, Sweet, Sargent, and Fletcher.

FOURTH CAVALRY—Brownsville, Texas

Colonel Howard R. Hickok, Commanding

The 4th Cavalry claims the distinction of furnishing the first military escort for the President elect, Senator Warren G. Harding. Troops in garrison stations, away from border duties, may find no particular pleasure in furnishing escorts for dignitaries, but when the 4th Cavalry, on November 11, riding in column of platoons through the streets of Brownsville, Texas, escorted the President-elect in parade, every member of the regiment felt, for future Armistice Days, another thing to be remembered. The visit of Senator Harding to southeastern Texas was a new event in Texas history and the history of Brownsville. Co-operating with the citizens of the Rio Grande Valley was the 4th Cavalry, endeavoring with them to show appreciation of the honor.

Colonel Howard R. Hickok, 4th Cavalry, was chairman of the Parade Committee, and as evidence of the manner in which the parade and crowd of 30,000 people was handled and of how the 4th Cavalry responded, the following is quoted:

"Colonel HOWARD R. HICKOK,
Commanding Officer, 4th Cavalry, Fort Brown, Texas:

. . . "Senator Harding said to me yesterday that the arrangements were equal to that of any event of its kind he had ever been privileged to witness anywhere, and I want to pass this well-earned commendation directly to you, as chairman of the Parade Committee. The splendid co-operation between the military and civil authorities has been one of the gratifying things of especial notice to our distinguished guest. . . .

"Very truly yours,
"BROWNSVILLE CHAMBER OF COMMERCE,
"J. H. HOTT, *Manager*."

The following appeared in the *Brownsville Sentinel*, Brownsville, Texas, November 16, 1920:

"Whoever is responsible for marshaling the parade deserves particular praise. Each subdivision was assembled in a side street adjacent to the line of march, and turned into its appointed place without a hitch or break. No Mardi Gras pageant at New Orleans, or Veiled Prophet parade in St. Louis, or Priest of Pallas spectacle in Kansas City was ever conducted more smoothly.

"The arrangements at Fort Brown for the accommodation of the speakers, reception committees, and distinguished guest, and for taking care of the press were as perfect as they could be made. Veteran journalists, who have seen such things attempted in all the important cities of the country, agreed that they had never seen the job done better."

The 4th Cavalry feels justly proud of their part of the day. The men of the regiment conducted themselves as Army men should. Each officer and man designated to have charge of certain work handled his job with credit to himself and the regiment.

Governor W. P. Hobby, of Texas, arriving in Brownsville on November 16 to pay his respects to Senator Harding, made a visit to Fort Brown. Troops of the 4th Cavalry marched in review before him, after which he met the officers of the regiment, expressed his appreciation of the spectacle, and said: "Texas is a Cavalry State. We believe in the Cavalry. There is not a Texan but what would rather fight mounted."

On November 15 Colonel De R. C. Cabell, 4th Cavalry, was retired from active duty. Colonel Cabell had been on three months' leave prior to his retirement. It was generally known, on his departure on leave, that he was expected to be retired on expiration of leave. He had been in command of the regiment since August, 1919. A farewell was given him in the form of a bridge party and dance, and both Colonel and Mrs. Cabell were presented with gifts from the officers and ladies of the Brownsville Sector. Colonel Howard R. Hickok had been in command of the regiment during Colonel Cabell's absence. Colonel Hickok joined September 23, 1920, and through Colonel Cabell's retirement becomes the senior colonel.

Track and football for the men of the regiment now form the chief means of athletic competition. A permanent track is being built for field meets, while the football team does daily practice and bemoans the fact there are few teams in the valley to give competition.

SIXTH CAVALRY—Fort Oglethorpe, Georgia

Colonel Frederick S. Foltz, Commanding

Officers and men of the regiment participated in the following events on "Military Day" (October 2, 1920), at the Chattanooga Interstate Fair, Chattanooga, Tennessee:

Mounted Relay Race.—First prize, First Sergeant Green, Troop "H"; Private Fowler, Troop "G"; Bugler Cantrell, Troop "E"; Private Sloan, Troop "F"; second prize, First Sergeant Thomas, Troop "C"; Sergeant Heitzler, Troop "B"; Private Benesley, Troop "A"; Private Smith, Troop "D"; third prize, First Sergeant Clark, Troop "K"; Bugler Ravis, Troop "M"; Private Borrah, Troop "L"; Private Hale, Troop "I."

Mounted Push Ball.—First prize, Sergeant Hughes, Troop "K"; Private Borrah, Troop "L"; Sergeant Kinly, Troop "M"; second prize, First Sergeant Thomas, Troop "C"; Sergeant Mikesell, Troop "B"; Sergeant Neault, Troop "A."

Jumping, Enlisted Men.—First prize, Sergeant Weedon, Troop "G"; second prize, Sergeant McFadden, Troop "L"; third prize, Sergeant Cassidy, Troop "E."

Jumping, Officers.—First prize, Captain Roy O. Henry, 6th Cavalry, on "Ready Money"; second prize, Lieutenant Jervey, 6th Cavalry, on "Sir Sam Browne";* third prize, Lieutenant Heiberg, 6th Cavalry, on "Bolshevik."

Tent Pegging with Saber.—First prize, Private Douglas, Troop "F"; second prize, Machinist Tuckawski, Troop "L"; third prize, Private Dickinson, Troop "I."

Saddling and Packing Contest.—First prize, Corporal Cole, Troop "C"; Private Creason, Troop "C"; second prize, Private Buresh, Troop "L"; Corporal Smith, Troop "L"; third prize, Private Sloan, Troop "F"; Private Rimasfski, Troop "F."

Mounted Rescue Race.—First prize, Private Hale, Troop "I"; Harnessman Hanscom, Troop "I"; second prize, Sergeant Smith, Troop "H"; Private Perry, Troop "H"; third prize, Corporal Smith, Troop "G"; Sergeant Roth, Troop "G."

Mounted Wrestling.—First prize, Corporal Jones, Troop "A"; second prize, Corporal Cole, Troop "C"; third prize, Corporal Gilbert, Troop "I."

A handsome cup was awarded by the Fair Association for first place in each event.

Thanksgiving Day Horse Show

A very successful horse show was held at Fort Oglethorpe, on Thanksgiving Day, under the management of Major Daniel D. Tompkins. The weather was ideal—a clear and crisp autumn day.

The events and winners were as follows:

First Event, Best Turned Out Squad.—First place, Troop "H," Sergeant O'Sullivan, Privates Kline, Klein, Davis, and Jones; second place, Troop "L," Corporal Monroe, Privates Buresh, Bohrer, Ludtke, and Miller; third place, Troop "D," Corporal Forson, Privates Snyder, Kitchen, Smith, and Huston.

Second Event, Officers' Chargers.—First Captain Holman, "Snooks"; second, Major Overton, "Flash"; third, Lieutenant Jervey, "Chickamauga."

Third Event, Enlisted Men's Mounts.—First, Sergeant Gill, Troop "H," "Jimmis"; second, Sergeant Davison, Troop "D," "Datto"; third, Corporal McCaslan, Troop "L," "Maryland."

Fourth Event, Officers' Jumping.—First, Lieutenant Heiberg, "Bolshevik"; second, Captain McGee, "Jimmie Ford"; third, Captain Holman, "Snooks."

Fifth Event, Troopers' Jumping.—First, Corporal Roach, Troop "G," "Henry Ford"; second, First Sergeant Green, Troop "H," "Mickey"; third, First Sergeant Clark, Troop "K," "Nigger."

Sixth Event, Military Jumping, Officers.—First, Captain Holman, "Snooks"; second, Major Overton, "Flash"; third, Lieutenant Heiberg, "Bolshevik."

Seventh Event, Military Jumping, Troopers.—First, Corporal Chitty, Troop "K," "Nigger"; second, Sergeant Webb, Troop "G," "Steamboat"; third, First Sergeant Mikesell, Troop "B," "Bob."

Riding Competition for Andrews Cup.—First, Miss Dale, "Snooks"; second, Miss Cramer, "Bob"; third, Mrs. Broadhurst, "Mickey."

Total number of points won by troops for Regimental Cup: Troop "H," 13; Troop "G," 8; Troop "K," 6; Troop "D," 4; Troop "L," 4; Troop "B," 1.

* Owned by Colonel Foltz.

SEVENTH CAVALRY—Fort Bliss, Texas

Colonel C. J. Symmonds, Commanding

The year 1920 had an auspicious beginning for the 7th Cavalry when, on New Year's Day, the regimental football team played and won from the 5th Cavalry team from Marfa, at the High School Stadium, El Paso, by a score of 28-0, thereby becoming the department champions.

June 25 has been selected as Organization Day for the 7th Cavalry, and on that date an appropriate ceremony was held. The reasons underlying the selection are set forth in the following order:

General Orders No. 11. } Headquarters Seventh Cavalry, United States Army, Camp at Fort Bliss, Texas, *June* 19, 1920.

1. Forty-four years ago today Major-General George A. Custer, then Lieutenant-Colonel, 7th Cavalry, and in command of the regiment, was, with six troops, camped at the mouth of the Tongue River, when he received word from Major Marcus A. Reno, 7th Cavalry, who had been sent upon a scout with the other six troops of the regiment, that he had found a large Indian trail leading up the Rosebud River. General Custer immediately took up the march for the mouth of the Rosebud, which he reached two days later, thus beginning the march and taking up the Indian trail, which led to the climax of the Yellowstone Expedition of 1876, in the battle of the Little Big Horn of June 25.

2. In this battle General Custer and all of the officers and enlisted men under his direct command, consisting of the following, were killed: Lieutenant W. W. Cook, adjutant; Dr. G. E. Lord, surgeon; Troop "C," with Captain T. W. Custer and Lieutenant H. M. Harrington; Troop "E," with Lieutenants A. E. Smith and J. G. Sturgis; Troop "F," with Captain C. W. Yates and Lieutenant W. Van W. Reily; Troop "I," with Captain M. W. Keogh and Lieutenant J. J. Crittenden.

In addition to the foregoing, a number of enlisted men and Crow Indian scouts and Lieutenants Donald McIntosh (himself of Indian blood) and B. H. Hodgson were killed with the command under Major Reno, about three miles distant from the Custer field.

3. The following are the first two paragraphs of the letter of instructions issued to General Custer on June 22, three days before the battle:

Camp at Mouth of Rosebud River,
Montana Territory, *June* 22, 1876.

Lieutenant-Colonel Custer, *7th Cavalry.*

Colonel: The Brigadier-General commanding directs that, as soon as your regiment can be made ready for the march, you will proceed up the Rosebud in pursuit of the Indians, whose trail was discovered by Major Reno a few days since. It is, of course, impossible to give you any definite instructions in regard to this movement, and were it not impossible to do so the department commander has too much confidence in your zeal, energy, and ability to wish to impose upon you precise orders which might hamper your action when nearly in contact with the enemy. . . .

E. W. Smith,
Captain 18th Infantry, Acting Assistant Adjutant-General.

4. In commemoration of the date upon which the battle of the Little Big Horn was fought, a date observed in this regiment for many years past, June 25 is hereby designated as Regimental Organization Day, in conformity with paragraph 7, General Orders No. 8, War Department, current series, to be hereafter observed as a holiday in the 7th Cavalry.

By order of Colonel Symmonds:

J. W. Cunningham,
Captain and Adjutant, 7th Cavalry, Adjutant.

On the day of the battle of the Little Big Horn, forty-four years ago today, Troop "M" was part of the command under Major Marcus A. Reno, 7th Cavalry, which consisted of Troops "M," "G," and "A," Indian scouts under Lieutenants Varnum and Hare and civilian interpreter Girard. The troop was under the command of Captain French.

Reno's command, which was reinforced by Benteen's battalion (as squadrons were then called) at 2.30 o'clock on the afternoon of the 25th, consisting of Troops "D," "K,"

and "H," was besieged until the morning of the 28th. Before being joined by Benteen, Reno had nearly run out of ammunition and had lost about twenty-nine enlisted men and Crow Indian scouts and Lieutenant Donald McIntosh (who was of Indian blood himself) and Lieutenant B. H. Hodgson, Reno's adjutant, and Dr. De Wolf, the surgeon. Benteen's ammunition was divided with Reno's men, which served until the arrival of the pack-train with ammunition, guarded by Troop "B," about 4.30 on the afternoon of the 25th.

The anniversary of the battle of the Little Big Horn was ceremoniously observed, the ladies of the regiment singing "Nearer, My God, to Thee," at the conclusion, just as Mrs. Custer says in one of her books the hymn was sung by the ladies of the regiment on June 25, 1876, while, unknown to them, the tragic battle of the Little Big Horn was being fought. Incidental to the ceremonies, Colonel Charles J. Symmonds, the regimental commander, gave most interesting reminiscences of former members of the regiment, both enlisted and official, contemporaries of Custer. Lieutenant-Colonel Ben H. Dorcy read extracts from the descriptive magazine article by General E. S. Godfrey of the battle of the Little Big Horn.

As a closing incident to Organization Day, a brilliant hop was given in the District Officers' Club in the evening.

During the year, two horse shows were held by General Howze at Fort Bliss, the first under his authority as district commander and the second as post commander.

In the first show, held June 26, the honors were carried off by the 7th Cavalry, winning the cup by the highest aggregate number of points for the entire show. Honors for the horse shows, however, were equally divided with the 8th Cavalry, the latter regiment carrying off the cup in the second show, October 5.

On July 16 a swimming meet for all organizations of the district was held at Fort Bliss, the 7th Cavalry team winning with the highest aggregate score.

On August 4 and 5 a field meet was held while the First Squadron, Headquarters Troop, and the Machine-gun Troop were absent from the post, on a practice march at Elephant Butte Dam, but in spite of this heavy handicap the 7th Cavalry won all of the cups of the meet but one, six in all, the seventh cup going to the 82d Field Artillery.

The athletic record of Garry Owens for the year, as herein outlined, is manifestly one in which the regiment can take most satisfactory pride.

NINTH CAVALRY—Camp Stotsenburg, P. I.

Colonel C. D. Rhodes, Commanding

Recently the 9th Cavalry has instituted a series of contests which have for their object the stimulation of the pride of the members in the service and in their particular regiment. First, there was a series of mounted contests to make the trooper appreciate more fully what it means to care for and train his own mount. There were entries from all grades—officers, sergeants, corporals, and privates—and the contestants were marked on bitting, complacency, seat, and on the various movements of the School of the Trooper. These tests were succeeded by competitive platoon drills, platoon tent-pitching, tugs of war, buglers' contests, Roman races, and so forth.

A less spectacular competition was inaugurated among the troops in August, to reward the respective troops that excelled in cleanliness of kitchens and dining-rooms, arrangement and condition of equipment, efficiency of paper-work, and the cleanliness and appearance of the stables. To the most efficient troop, after severe inspections, was awarded a sign of merit, so to speak, which was placed on the door of the orderly room, kitchen, store-room, or stable. The result has been to arouse an interest among the various organizations in the homely things of barrack life that has heightened to a great degree the efficiency of the whole command.

REGIMENTAL NOTES

TENTH CAVALRY—Fort Huachuca, Arizona

Colonel E. B. Winans, Commanding

September found the regiment busy with field training, with a comprehensive schedule arranged by Lieutenant-Colonel Selwyn D. Smith. The varied terrain in the reservation afforded excellent maneuvering ground for tactical and combat problems.

The polo team, comprising Major J. A. Robenson, Captain Leo G. Heffernan, Captain E. L. N. Glass, First Lieutenant Harry I. Stanton, Second Lieutenant John H. Healy, substitute, played the 1st Cavalry team at Douglas, winning both games of the sub-tournament to determine the Arizona District representative at El Paso. At the latter place our team was mauled by the 7th Cavalry team in two games, whose speed, teamwork, and goal-shooting accuracy amazed us. At the present writing we hear that the 7th cleaned up handily at Fort Sam Houston for the 8th Corps Area championship. We played at El Paso under the handicap of three partly crippled players, due to accidents on the field during practice games.

The regiment lost 112 men by transfer to the Cavalry School Detachment on November 2. The recruits arriving are of good caliber, and have made the regiment slightly over strength. We are still short of officers, having but one officer per troop.

Major Robenson's equitation class for the ladies has progressed enthusiastically from the slow-trot stage to jumping stiff hurdles.

Several large hops have been held at the club building lately, on the occasion of Major-General Dickman's visit, Hallowe'en, and Election night.

Anticipating a coming tournament with the 1st Cavalry, the polo field has been dragged and scraped, and a very fast field is now provided. A grand stand has been added for the spectators who attend the Wednesday and Sunday practice games. Several good players are developing fast, and an excellent team is in the making.

Under Colonel Winans' leadership in fostering mounted sports, a half-mile track has been laid out near the target range. Two race meets have had enthusiastic audiences, and, with the development of the "prospects" in the troops, real races will be a weekly feature.

With the return of K Troop from the border outposts, the whole regiment is in the garrison except the troop at Naco, which enjoys a fine post of its own.

ELEVENTH CAVALRY—Presidio of Monterey, California

Colonel J. M. Jenkins, Commanding

Troop Movements.—Troop A, from Presidio of Monterey to Calexico, July 28, 1920; Troop D, from Presidio of Monterey to El Campo, August 16, 1920; Platoon Machine-gun Troop, from Presidio of Monterey to Calexico, August 26, 1920; Troop H, from Calexico to Presidio of Monterey, September 1, 1920; Troop E, from El Campo to Presidio of Monterey, August 31, 1920; Platoon Machine-gun Troop, from Calexico to Presidio of Monterey, August 31, 1920.

Early in October it was decided to re-establish Camp L. J. Hearn, and to move the troop from El Campo to Camp Hearn, leaving one platoon as a garrison at El Campo. At the same time orders were received at regimental headquarters to increase the strength of Troop D by forty men, bringing the strength of this troop up to one hundred. This troop is ideally situated at Camp Hearn, twelve miles from San Diego, in excellent temporary buildings of the cantonment type, with good shelter for its horses and excellent ground adjacent to the cantonment for drill and maneuvers. The platoon at El Campo is to be relieved monthly.

The regiment was reported full strength (minimum strength, Tables of Organization, 1917) on September 30, 1920. Since then small detachments of recruits have been arriving from various points throughout the United States and troops average approximately eighty men.

Sufficient horses to mount the entire command have been requisitioned for and are expected early in December.

Schedules of instruction have been arranged so as to permit those desiring to take advantage of the E. and R. courses in the afternoon every facility for attending classes. These courses are quite popular, the results attained excellent, and, considering the youth of the average recruit, cannot help but be beneficial to the Army and country at large.

The supplementary target season has been completed by all recruits who joined since the completion of the regular season.

Troop G, Captain Pierce commanding, completed a seven-day practice march to San Jose and return, on November 14, for the purpose of taking part in the Armistice Day celebration at that place. The troop returned to the post in excellent condition, with no sore backs, which, considering the fact that 90 per cent of the men were recruits of less than three months' service, is considered quite remarkable.

Troop M, Lieutenant Burgess commanding, marched to Watsonville for the Armistice Day celebration, and the impression created by this troop was commented on favorably by the Chamber of Commerce.

THIRTEENTH CAVALRY—Fort Clark, Texas

Colonel Edward Anderson, Commanding

The 13th Cavalry is again under the command of Colonel Edward Anderson, who returned to the regiment November 19, from a three months' leave. Colonel Roy B. Harper was in command during the absence of Colonel Anderson.

Proposed March.—Among the interesting bits of news that Colonel Anderson brought to the 13th Cavalry is the possibility of the longest march ever attempted by a military unit the size of a regiment, from Fort Clark, Texas, to Fort Ethan Allen, Vermont—a distance of about three thousand miles. This is the tentative plan of the Chief of Cavalry. The proposed march will begin some time in the early spring and take about five months. New cavalry equipment will be tested during the march.

Armistice Day Celebration.—The community of Brackettville and the post observed Armistice Day by a joint celebration of two days, including Wild West, military, and other sports. A barbecue was held in connection with the celebration. The principal event of the celebration was a hard-fought game of football between the regimental teams of the 12th and 13th Cavalry. The final score was 7 to 0 in favor of the "Lucky 13th." Memorial services were held the following Sunday.

Turkey Shoot.—A turkey shoot was held at the target range the Saturday before Thanksgiving. The shoot was held under the direction of Lieutenant Michael Fody, who holds the President's Cup for marksmanship. The proceeds, amounting to $50.00, were turned over to the Red Cross in their drive. Twenty-two turkeys were awarded to the winners, among whom were a number of ladies.

Improvements.—Fort Clark is having its share of improvements. The old storehouse on the northwest corner of the post has been remodeled into the Officers' Mess and Club House. A dining-room, kitchen, club and guest-room are on the lower floor. The ball-room occupies the entire upper floor, which opens out upon a covered veranda extending entirely around the building. The wooded section along the banks of the Las Moras is converted into a park of the same name, where the athletic field is situated. A football field has been laid out and is the scene of the football tournament which is being played for the troop championship of the regiment. The building formerly occupied by the

Officers' Club, next to the post headquarters, has been transferred into the Hostess Service Club. A barracks has been fitted up as a Non-commissioned Club House. A large shipment of salvage pipe from Camp Travis has arrived and is to be used to pipe water from the post to the polo grounds on the drill field.

Miscellaneous.—The supplementary target-practice season for 1920 was completed by the regiment November 15, the regular course having been fired without qualification for pay or insignia. Troop "M" left Fort Clark for Camp Eagle Pass November 19 for a tour of duty on border patrol, relieving Troop "K," and on November 23 Troop "K" returned to the post. The second squadron is now stationed at Fort Ringgold, Texas, having marched via the Rio Grande road, leaving here July 26, 1920. The 12th Cavalry (Palestine Guards), from Del Rio, camped on the reservation from September 16 to September 25, during which time they fired their combat practice and also opposed the 13th Cavalry in an interesting maneuver.

FOURTEENTH CAVALRY—Fort Des Moines, Iowa

Colonel Robert A. Brown, Commanding

The 14th Cavalry, after eight years of border service, has been transferred to Fort Des Moines, Iowa, with one squadron on detached service as guard at Camp Dodge, Iowa.

The post at Fort Des Moines was used during the war, first as an officers' training camp and later on as General Hospital No. 26, and was very much run down on account of not having been occupied by line troops for several years. Work has been going on in an endeavor to put the quarters and post back in proper shape and also install a heating plant in the riding hall.

While on the border, the regiment was separated and a great number of the organizations were on outpost, and no polo was played, but upon arrival at this post, polo was again started in the regiment. Major S. M. Williams has been assigned polo representative of the regiment, but, as the cold weather has set in, only riding-hall training can be followed. The prospects look very good for next season.

The regimental football team played a number of games with the American Legion organizations and outside teams in and around Des Moines this season.

Upon arrival of this regiment at Fort Des Moines the regiment was about 430 men short of the authorized strength, but recruits have been coming in at the rate of about one hundred a month, and we expect to be filled up to authorized strength about January 1, 1921.

The American Legion posts in this vicinity are very active, and a spirit of friendship is being developed between the Regular Army and the American Legion that is thought to be beneficial to both parties.

Many new officers have joined the regiment recently, but a corresponding number of old ones have been ordered on recruiting duty and on various other detached service.

Regimental hops for officers and enlisted men are being held weekly in the Service Club. A regimental dinner is being planned for the near future.

An active interest is being taken in the course in hippology that is being taken up in the officers' school. This course differs from the usual course of hippology, in that it consists of a series of thirty lectures each on assigned subjects and given by the different officers. Many new ideas on the horse, horse-breeding, and care of animals are being brought forth, and the course is felt to be doubly beneficial to all concerned. Aside from the purely professional side of the course, an officer learns how to get up on his feet and put his ideas in a logical sequence before his fellow-officers.

Thanksgiving Day came around with ideal Thanksgiving weather. The program of the day consisted mainly of big dinners, and the general sentiment of all is that the Government is a pretty fine host.

The Reserve Officers Department

MINOR TACTICS

THE PROBLEMS which appear in the Reserve Officers Department are taken from the course at the Cavalry School. The course in minor tactics at the school is for the junior officers of Cavalry and embodies the tactical principles and doctrine largely drawn from our own teachings and experiences. All of the map problems in the course are based on the Gettysburg 3-inch map.* The problem below was prepared by Lieutenant-Colonel L. A. I. Chapman, Cavalry.

MAP PROBLEM No. 4

Outposts

Maps: General Map—Gettysburg-Antietam.
Geological Survey—Gettysburg-Antietam 1/62500.
Gettysburg-Antietam 3" Map.

GENERAL SITUATION

The Potomac River separates hostile States—North, Red; South, Blue.

The 1st Blue Cavalry Brigade, acting independently, has entered Red territory on a mission of reconnaissance, in the direction of Carlisle. Brigade Headquarters and the 2d Cavalry are due to reach Gettysburg October 21, 1920, from Union Bridge.

The 1st Blue Cavalry marches from Union Mills, October 21, 1920, via Littlestown and New Oxford, on New Chester.

Red forces are concentrating in the vicinity of Harrisburg, and advance Red troops of all arms are reported at Carlisle.

SPECIAL SITUATION (BLUE)

Contact with small Red Cavalry patrols was established October 20 by the 1st Blue Cavalry along the line of the Gettysburg-York Road, in the vicinity of New Oxford. The enemy patrols withdrew to the north and northwest.

At 3.00 p. m., at the northern exit of New Chester, Colonel A, commanding the 1st Blue Cavalry, dictates to his squadron commanders, his staff, and to Captain B, who has been summoned for that purpose, the following order:

Field Order No. N.

1ST BLUE CAVALRY,
NEW CHESTER, PA., *October* 21, 1920—3.00 p. m.

Map: Gettysburg-Antietam G. S. 1/62500

1. The enemy's cavalry patrols have retired to the north through HAMPTON and BOWLDER toward YORK SPRINGS, and through HUNTERSTOWN toward TABLE ROCK. Brigade Headquarters and 2d Cavalry are due in GETTYSBURG this afternoon.

* Copies of the Gettysburg map and the Gettysburg-Antietam sheets, on which this problem is based, may be obtained from the United States Cavalry Association at five cents each, unmounted.

Our patrols now in the vicinity of HAMPTON and HUNTERSTOWN are to return at dark.

2. The regiment halts for the night north of CONEWAGO CREEK, along the NEW CHESTER-OAK GROVE SCHOOL Road.

3. (*a*) Captain B, Troop B, will establish the outpost, holding the line—left bank of CONEWAGO CREEK due east of OAK GROVE SCHOOL, OAK GROVE SCHOOL, farm-house on CONEWAGO CREEK due south of OAK GROVE SCHOOL. Captain B will send patrols to BOWLDER, HEIDLERSBURG, and PLAINVIEW.

(*b*) The advance guard, Troop A, will cover the establishment of the outpost when it will join the regiment.

Regimental Headquarters, Headquarters Troop, and 1st squadron will camp east of the OAK GROVE SCHOOL-NEW CHESTER Road. Administration Troop and 2d squadron will camp west of the OAK GROVE SCHOOL-NEW CHESTER Road.

The troop designated for interior guard will establish a detached post of one platoon south of CONEWAGO CREEK, on the OAK GROVE SCHOOL-NEW CHESTER Road, to hold the bridge and to observe the roads entering NEW CHESTER from points south of the stream.

(*x*) In case of attack, the outpost line of resistance will be reinforced.

4. C and F trains will join their troops.

5. Message center at first farm-house north of CONEWAGO CREEK, on the OAK GROVE SCHOOL-NEW CHESTER Road.

A,
Colonel.

Copy to:
C. O., 1st Bl. Cav. Brig.
File.

Dictated to:
C. O., 1st Sq.
C. O., 2d Sq.
C. O., Troop B.
Staff.

At the time this order is published the regiment is halted, dismounted, head of column at northern exit of New Chester (62.8-59.3). Troop B is at the head of the 1st squadron, at the bend of the road (62.8-59.1), just south of the point where the head of the column rests. Troop A, the advance guard during the day's march, has formed a march outpost, and the main body of the troop can be seen halted on the hill at the farm-house (62.2-60.0), about 600 yards northwest of the bridge.

Required:

I. Captain B's immediate action on receipt of the above order.
II. His estimate of the situation.
III. His outpost order.

SOLUTION

I. *Immediate Action of Captain B:*

He sends his orderly to the troop with the following verbal message to Lieutenant A, the second in command:

"Give my compliments to Lieutenant A and tell him to mount the troop and march it forward to this point, where I will join."

He then arranges with the colonel to permit the troop to water in Conewago Creek, near the bridge north of New Chester, before the rest of the regiment, so that the troop

will be ready to go on outpost. He informs the colonel that he will reconnoiter the outpost line at once; that as soon as the troop is watered it will be held near the farm-house where Troop A is now halted, and that messages sent there will reach him.

Captain B joins the troop as it comes up, and to his lieutenants, the first sergeant, and sergeant commanding the auto-rifle platoon he gives the following warning order when they halt to water near the bridge:

"Enemy patrols retired to the north through HAMPTON and BOWLDER toward YORK SPRINGS and through HUNTERSTOWN toward TABLE ROCK.

"Patrols of the regiment are now in the vicinity of HAMPTON and HUNTERSTOWN. These will return to camp at dark. The regiment halts for the night just north of CONEWAGO CREEK, on both sides of this road. Headquarters at the first farm-house north of CONEWAGO CREEK, on the NEW CHESTER-OAK GROVE SCHOOL Road.

"This troop forms the outpost tonight.

"Lieutenant C will supervise watering the horses at once. He will then conduct the troop to the farm-house about 600 yards northwest of the bridge, where A Troop now is, and await orders.

"From the 3d platoon Lieutenant C will send patrols of four men each to BOWLDER, HEIDLERSBURG, and PLAINVIEW. These patrols will observe roads entering those points from the northeast, north, and northwest, remaining in observation until dark, when they will rejoin the troop.

"F and C trains will join the troop.

"Lieutenants A and B will accompany me on the reconnaissance of the outpost position."

DISCUSSION

Captain A has now arranged to water his troop, and to send out the patrols required by his mission, and has warned the troop of its coming duty. He could have marched the troop directly to the bend of the road, where Troop A now is, and from there have made an immediate disposition, to be corrected later. However, he would then have had the problem of watering his animals still to solve and but little time would have been gained. So he adopted the method stated.

He begins his reconnaissance by riding forward to Troop A with Lieutenants A and B, who will command some portions of the outpost. Here he learns from Captain A all the latter has learned of the enemy situation, of the present disposition of Troop A, and of the terrain. Captain A points out to him the features that are visible from the top of Oak Grove School Ridge.

Captain B, with his two lieutenants, then rides along the line of resistance fixed by the halt order, meanwhile estimating his situation and formulating his outpost order.

II. *Captain B's Estimate of the Situation:*

1. THE MISSION:

To form the outpost, holding the line—left bank of CONEWAGO CREEK, due east of Oak Grove School, Oak Grove School, farm-house due south of Oak Grove School. To patrol to Bowlder, Heidlersburg, and Plainview.

2. THE ENEMY:

Only cavalry patrols have been seen in our immediate front. These, by their retirement toward the northwest, indicate the presence of some larger hostile body in that

vicinity. There is nothing to indicate enemy intentions, but his movements in any force after dark will be confined to roads. He cannot approach to within three miles of the outpost line before dark without being observed.

3. OUR OWN FORCES:

The camp of the regiment is protected by Oak Grove School Ridge from direct hostile fire and observation. Roads from the camp will permit of ready reinforcement from the main body, if necessary.

Three patrols of the troop (one-half platoon) will have had 10 miles added to their march of 22 miles and will not get in till after dark. These patrols should be given the easiest portion of the duty during the night.

Patrols from the main body to Hampton and Hunterstown will also be coming in about dark. These patrols may have valuable information about the enemy. Our outpost line must also be warned of their expected approach.

4. THE TERRAIN:

Line of resistance is on high ground, not commanded by anything in the vicinity which might be occupied by the enemy.

Three groups of roads enter the outpost line from the enemy direction: the two roads joining at the road fork 600 yards north of Conewago Creek Bridge, the two roads joining at Oak Grove School, and the road crossing Conewago Creek 1¼ miles west of New Chester and then running east along the left bank of the stream. Each of these roads or road forks must be held with sufficient force to stop small enemy forces and to hold a large enemy force until reinforcements can be obtained from some formed body in rear.

There are no interior roads in the position south of Oak Grove School. Communication with and reinforcement of any troops near the farm-house (61.3-59.0) on Conewago Creek from any central position would therefore be difficult.

5. POSSIBLE PLANS:

(*a*) To divide the line of resistance into three sectors, assigning a platoon as picket to each.

1. Picket on road 800 yards northeast of road fork 500, with an outguard on the road still farther to the northeast, and another on the road to the Herman farm where the road crosses the ridge (62.5-60.4).

2. Picket at Oak Grove School, with outguards on the roads to the northeast and the northwest.

3. Picket at the western farm-house (61.3-59.0), the left bank of the Conewago south of Oak Grove School, with an outguard on the road toward the ford west of the farm-house. To cover the western edge of the woods between this farm and Oak Grove School by patrols.

This gives a complete line of observation, so far as the roads are concerned, permits intervening ground to be patrolled from the pickets, and gives sufficient strength on each probable line of approach to stop small hostile forces or to hold larger ones until reinforcements can arrive from the main body. It leaves no central support.

(*b*) To have a central support, such as at the farm-house where troop halted, with outguards along the line of resistance on the roads which are the probable lines of enemy approach. This provides observation at all important points, but gives but little power of resistance at any one point. Lack of roads to the southwestern half of the line will make reinforcement difficult. Rejected.

(*c*) To have a central support with three pickets. This divides the troop into four component parts. There are but three main divisions of riflemen. One platoon, at least,

would have to be so divided as to have no resisting power. All the divisions would be small, and nothing would be gained by a division into four parts instead of three. Rejected.

6. DECISION:

To divide the line into three sectors with one platoon in each as a picket:

No. 1. Left bank of Conewago Creek, about 1,000 yards northeast of New Chester Bridge, to include the road running southeast from Herman. Picket on the road 800 yards northeast of road fork 500.

No. 2. Road running southeast from Herman, exclusive to include the western edge of the wood for a distance of 400 yards southeast of Oak Grove School. Picket at Oak Grove School.

No. 3. From a point on the western edge of the wood about 400 yards southwest of Oak Grove School to the left bank of Conewago Creek. Picket at the western farm-house (61.3-59.0) on Conewago Creek.

To assign one auto-rifle squad to each platoon.

To establish the troop picket line and mess at the farm-house (62.2-60.0), about 600 yards northwest of New Chester Bridge.

To open fences so as to secure trails between the pickets and from the pickets to the troop mess.

To retain at the troop one man from each squad to care for horses, furnish picket line guard, kitchen police, etc.

III. *The Order:*

On his return to the troop, Captain A then publishes the following order:

Field Order No. N. — TROOP A, 1ST BLUE CAVALRY, FARM-HOUSE, ¾ MILE N. W. NEW CHESTER, PA., *October* 21, 1920—4.00 p. m.

Map: Gettysburg-Antietam, 3-inch, New Oxford Sheet

1. No further information of the enemy.

Patrols from the troop are in the vicinity of BOWLDER, HEIDLERSBURG, and PLAINVIEW. Patrols from the regiment are near HAMPTON and HUNTERSTOWN. These patrols return after dark.

2. Troop A forms the outpost, holding the line—left bank of CONEWAGO CREEK east of OAK GROVE SCHOOL-OAK GROVE SCHOOL left bank of CONEWAGO CREEK at farm-house due south of OAK GROVE SCHOOL.

3. (*a*) The 1st platoon, Lieutenant A, will establish Picket No. 1 on the road about 800 yards northeast of road fork 500 and will hold the sector, left bank of CONEWAGO CREEK, to include the road running southeast from HERMAN.

The 2d platoon, Lieutenant B, will establish Picket No. 2 at OAK GROVE SCHOOL and will hold the sector from the road running southeast from HERMAN, exclusive, to a point on the western edge of the woods 400 yards southwest of OAK GROVE SCHOOL.

The 3d platoon, Lieutenant C, will establish Picket No. 3 at the western farm-house, on the left bank of CONEWAGO CREEK, 1,200 yards south of OAK GROVE SCHOOL and will hold the sector from a point on the western edge of the woods 400 yards southwest of OAK GROVE SCHOOL to the left bank of CONEWAGO CREEK, inclusive.

Patrols will be sent on the odd hours from Pickets No. 1 and No. 3 to Picket No. 2 and on the even hours from Picket No. 2 to Pickets No. 1 and No. 3.

Pickets No. 1 and No. 3 will open trails to Picket No. 2 and to farm-house at the bend of the road 600 yards northwest of NEW CHESTER BRIDGE. One auto-rifle squadron will be attached to each rifle platoon.

4. Field and combat trains will park at the farm-house 600 yards northwest of NEW CHESTER BRIDGE, where the troop mess and picket line will be established. One man from each squadron will be detailed for duty at troop headquarters.

5. Message center at the farm-house 600 yards northwest of NEW CHESTER BRIDGE.

B,
Captain.

Copy to:
Colonel A.
Major A.
File.

Dictated to:
Lieutenants and non-commissioned officers in presence of troop.

SITUATION II

Based on Captain B's warning order, give Lieutenant C's action and orders to the patrols.

SOLUTION

During the time the troop is watering, Lieutenant C warns the leaders of the fact that they are to be sent on patrol. On arrival at the farm-house at the bend of the road, Lieutenant C dismounts the troop and assembles the patrols at a point on the ridge overlooking the country to the north and northwest. He then spreads his map out on the ground and orients the group. He points out various well-defined landmarks and then dictates to the patrol leaders, in the presence and hearing of their patrols, the following:

Field Order No. N. — 3D PLATOON, TROOP A, 1ST CAVALRY, OAK GROVE SCHOOL RIDGE, NEAR NEW CHESTER, PA., *October* 21, 1920—3.30 p. m.

Map: Gettysburg-Antietam G. S. 1/62500

1. Enemy patrols have retired through HAMPTON and BOWLDER (pointing) toward YORK SPRINGS (pointing).

The regiment camps on the road just north of the bridge. Patrols from the regiment are near HAMPTON and HUNTERSTOWN (pointing).

The troop forms the outpost tonight along this ridge.

2. The platoon sends patrols to BOWLDER, HEIDLERSBURG, and PLAINVIEW.

3. Corporal A's patrol will proceed via this road (pointing to the HERMAN-MARCHMYERS Road) to high ground in the vicinity of BOWLDER, and observe the town and the roads entering it from the northeast, north, northwest.

Corporal B's patrol will proceed via this road (pointing to the OAK GROVE SCHOOL-BELMONT SCHOOL Road) to high ground in the vicinity of the HEIDLERSBURG, and observe the town and roads entering it from the north, northwest, and west.

Private C's patrol will proceed via this road (pointing to the road which crosses CONEWAGO CREEK west of NEW CHESTER and leads via WOODSIDE SCHOOL) to high ground in the vicinity of PLAINVIEW, and observe the town and roads approaching it from the northeast, north, northwest, and west.

a. Any advance of hostile forces as large as a troop will be promptly reported.

Patrols will remain in observation until dark, when they will rejoin the troop.

4. . . .

5. Messages to troop headquarters at this farm-house (pointing to the farm-house where the troop is now halted).

C,
Lieutenant.

Copy to Captain B.
Dictated to Corporals A and B and Private C.
Each patrol leader jots down in his note book the order as given by Lieutenant C.

DISCUSSION

Lieutenant C's orders direct him to send from his own (3d) platoon patrols of four men each to Bowlder, Heidlersburg, and Plainview. These patrols will observe roads entering those points from the northeast, north, and northwest and remain in observation until dark, when they will rejoin the troop.

Lieutenant C has but three corporals in his platoon. He knows that in all probability his platoon will have some outpost duty to perform before the return of the three patrols after dark. He therefore selects his 1st squadron and Corporal B and three men of the 2d squadron for the duty, selecting his most capable soldier in the 1st squadron for the duty of commanding one of the patrols from that squadron.

Lieutenant C has observed the integrity of units in making up his patrol details. He has left one complete squad with its corporal and one-half another squad, for which he must designate a leader until the corporal returns.

Lieutenant C selects the routes for the patrols, thus insuring that three different roads will be reconnoitered and nothing lost by duplication of effort. He also endeavors to select routes by which he believes the enemy might advance, so that such an advance would be observed and reported. He does not specify the routes by which the patrols are to return. Preferably the patrols will return, after dark, over the same routes used on their outward journey. However, the situation may demand the use of a different route. The patrol leader must determine this and not be hampered by unnecessary instructions. Neither does Lieutenant C specify the point which the patrol is to use for observation. A hill selected by Lieutenant C from his map, which does not show timber, buildings, etc., might not be suitable in actual practice. This is left to the judgment of the patrol leader in this case, since it is the observation of certain villages and certain roads that is important. In some instances, with a different mission, some well-defined height, as Round Hill or Chestnut Hill, might be specified. In the case in hand no such well-defined height is shown on the map near to the points to be observed.

Sometimes it is advisable to designate the point at which returning patrols will enter the outposts. In this case Lieutenant C does not yet know the disposition that Captain B will make; hence he can only inform the patrols that the troop will outpost the general line of the ridge and trusts to the leaders using their best judgment in approaching that line after dark.

Lieutenant C does not specify anything in the way of equipment or rations. The men, being in campaign, have two reserve rations in their saddle pockets. The wagons are not yet up and nothing additional is procurable. Hot supper will be kept for the men on their return. Similarly, horses will be watered, groomed, and fed on the return of the patrols. Camp not yet being established, no change in equipment is advisable.

SITUATION III

Based on Captain B's field orders, what dispositions and details are made by Lieutenant B in the 2d sector?

SOLUTION

Captain B's order requires Lieutenant B, with the 2d platoon, to hold the sector: from the road running southeast from Herman, exclusive, to a point on the western edge of the woods 400 yards southwest of Oak Grove School, and to send patrols on the even hours to Pickets Nos. 1 and 3. For this duty Lieutenant B has three rifle squads and one auto-rifle squad, less one man from each squad. Of the auto-rifle squad, four men are not armed with the rifle. Of the four, three will be used as picket sentinels. The other man is available for patrol duty. (At night the pistol is a satisfactory weapon for

patrol duty.) The platoon has the three rifle squads for duty with the outguards and for patrol duty.

There are two roads, those forming the fork at Oak Grove School, to guard. The wood south of Oak Grove School has also to be guarded against enemy patrols, but patrolling ordered by the captain will accomplish this.

Lieutenant B decides:

To put 1st, 2d, and 3d rifle squads and the auto-rifle squad as a picket at the road fork at Oak Grove School.

To have a double sentinel post on each road 50 yards in advance of the picket at the road fork.

To barricade the roads after dark with wire (from the fences) 25 yards in front of the sentinel posts.

To patrol at the even hours with patrols of two men each to Pickets Nos. 1 and 2.

To use three men of the auto-rifle squad as picket sentinels.

Lieutenant B figures up his available strength and makes his detail as follows:

Available (in addition to platoon sergeant):

	Corporals.	Privates.
Three rifle squads	3	18
One auto-rifle squad	1	6 (four armed with pistols only).
Total	4	24

Required:

For the picket:

	Corporals.	Privates.
Three reliefs for corporal	3	..
Three reliefs for picket sentinel	..	3
Three reliefs for two double sentinel posts	..	12
Two reliefs for two two-men patrols	1	7
Two auto-rifle gunners	..	2
Total	4	24

The United States Cavalry Association

NOTICE

IN ACCORDANCE with the terms of the Constitution, notice is hereby given that the regular annual meeting of the United States Cavalry Association will be held at Washington, D. C., on the third Monday in January, 1921. At this meeting will take place the election of officers of the Association to replace the officers who have been serving as an emergency body under appointment by the President of the Association. The Constitution states: "The election shall be by ballot, and a plurality of all votes cast in person or by proxy shall elect" (Sec. 4, Art. VI). Seven vacancies are to be filled, namely, President, Vice-President, and five members of the Executive Council. Every member of the Association, regular or associate, is entitled to a vote. Only regular members shall be eligible to hold office. For convenience of members, a proxy is printed below. Cut this out and send it to the Secretary.

PROXY

To the Secretary, United States Cavalry Association:

I hereby designate _____, or the Secretary of the U. S. Cavalry Association, to act as my proxy and cast my vote at the regular annual meeting of the Cavalry Association for the election of officers, to be held in the city of Washington, D. C., on the third Monday in January, 1921.

Name_____

Rank_____

Witness:

_____

The Cavalry Journal

The Cavalry Action at Yanoff

BY

Lieutenant-General

N. N. GOLOVINE

Russian Army

APRIL 1921

PUBLISHED QUARTERLY BY

THE UNITED STATES CAVALRY ASSOCIATION

WASHINGTON, D. C.

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EDITED BY

JEROME W. HOWE

MAJOR OF CAVALRY

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The United States Cavalry Association

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 III of the Constitution.

Organized November 9, 1885

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Vice-President:

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Lieutenant-Colonel WALTER S. GRANT, Cavalry.

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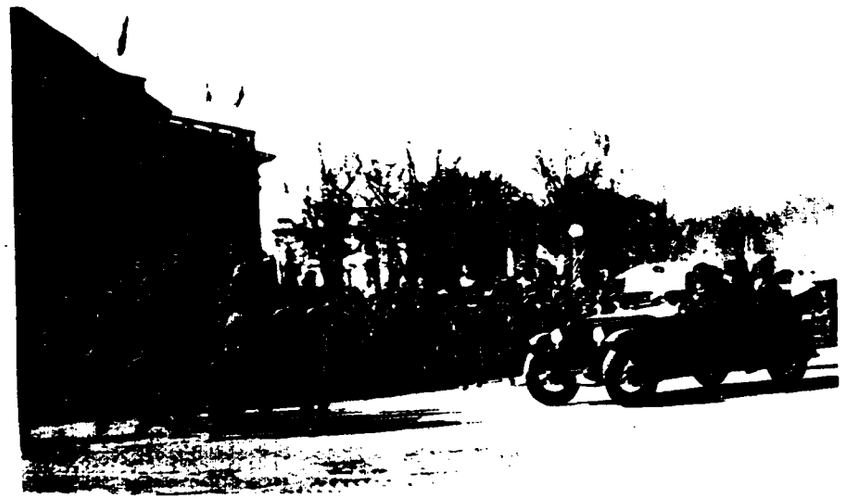

INAUGURAL ESCORT, THIRD U. S. CAVALRY, MARCH 4, 1921.

Above: Head of escort, Colonel William C. Rivers, Commanding. The Third Squadron of the Third Cavalry was the only military escort in President Harding's Inaugural.

Below: President Harding shown in photograph in rear seat of automobile with cavalry escort returning from Capitol to the White House after the Inauguration ceremony.

THE

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The 35th Division in the Vosges Mountains

FOREWORD

BY

Colonel N. F. McCLURE, Cavalry

(Commanding 35th Division, June 12 to July 20, 1918)

THE TROOPS of the 35th Division began to go into the line on the Alsace front the middle of June, 1918. The French authorities were considerably worried about what the conduct of the rank and file of this organization would be when they came to close quarters with the enemy. They knew that the men had had but a few months of training, broken by a severe winter, a long journey overseas, and frequent sojourns in transient camps. The experience of the French in making soldiers caused them to doubt our ability to obtain efficiency in such a short period of instruction.

They could not realize that that grand slogan, "Make the World Safe for Democracy," which our President had given to the American Army and Navy, had produced among our men such a splendid state of morale that it would carry them to victory despite our deficiencies in training.

As long as America is a nation the raid made by Company "H" and other troops of the 138th Infantry on the German trenches at Hilsenfirst, Alsace, July 6, 1918, will stand out as an achievement to stir the red blood in our veins.

THE TRENCH RAID AT HILSENFIRST *

Americans changed the quiet Vosges sector to a fairly lively one. They had men to be trained, battalions to be blooded, schemes to try, and nerves to test. How were they going to do it?

It was on July 6, 1918, that the men of the 35th Division had their first fight, and they won it. It was a glorified trench raid of 250 men, and all the

* Taken from the book "From Vauquois Hill to Exermont," Chapter VI, and republished in the CAVALRY JOURNAL by permission of Clair Kenamore, the author.

settings joined to make the scene one of impressive grandeur. In the battle line from Switzerland to the sea, I never saw a field more magnificently ordered for the pageantry of battle.

This was in the high Vosges, that land of the sky to which the division's destinies had carried it. The peculiar detached existence we led in the high hills made life seem unreal in many ways, with the most certain and the material things being an occasional lazy bellow of artillery or the vicious crackle of a machine-gun. We were on another stratum of human existence. Connection with the usual level of earth on which people lived was by the wire cables of the aërial tramway or by the trucks or ambulances which sometimes wound their way to the top.

Patches of forest were spread over the mountains. The pine, spruce, and fir trees rose straight as arrows, sometimes a hundred feet. From the top the mountain would descend sharply and sometimes break into a precipice and end in a wall of a canyon far below. Sometimes the slope would permit a steep grazing field. The region was like those mountains to which Kim followed his lama.

Rain-storms would blow up quickly and as quickly clear away. After these storms a sky of perfect blue would have a few fleecy clouds scudding across it and the hot sun would fill the whole beautiful land. On other days there would be a sky of intense blue, with the burning sun known in high altitudes. Still other days would be filled with blown white clouds, which would hit the mountains and drift over the summits in mist. When there were clouds in the west and the air was clear about our own mountains, there would be a sunset to rival those of Arizona or Italy or Alaska.

Across the barren, forlorn top of Hilsenfirst the twin trenches ran. The mountain was held, half and half, by the opposing armies. On our side the communicating trenches, on the western slope, were lost in a forest a little way below the top. On the German side the mountain was bare and the slope sank sharply to the second trench, which lay across the saddle ridge which connected Hilsenfirst with Steinmauer. Steinmauer, another high mountain, was strongly held by the enemy. From the sides of the saddle connecting Hilsenfirst and Steinmauer the fields dropped sharply to the valleys, and to the south was the pleasant town of Lautenbach, while to the north were the villages of Colman, Blankerstan, and Muelbach. To the east of Steinmauer was the valley of the Rhine. From all of these towns the heights of Hilsenfirst were visible, but the towns were deserted except for a few persistent old people. This brow of Hilsenfirst was like a great stage, facing the Germans. It might have been planned for a gigantic show for the assembled hills to witness.

As the sun was setting after a cloudless day, July 6, 1918, the brow of Hilsenfirst was pitted with an iron pox. Every battery in range was pounding it and the bursting of shells was a steady roar. The rank fumes of high explosive and shrapnel blew away in ugly clouds, when through the dust and tangle of war there marched toward the front of the stage two lines of men. Steady,

sure, and slow they advanced through the smoke, past the shell-torn wire, and out to the open. It was "H" Company of the 138th Infantry registering for the division on the fighting field.

French batteries for miles around thundered their applause. German guns pounded the crest in rage and hate, and the air was sibilant with the disdainful hiss of machine-guns.

The play had begun. The guns were the orchestra, the sky was the proscenium arch, and it was the part of our actors to advance to the front of the stage, pass through the footlights, which would be bursting shells, and play their parts all the way down the two aisles, which were the enemy's communicating trenches.

To not many was it given to see this brave show. Some scores of German machine-gunners had the orchestra seats, some dozens of German observers were in the balcony on the slope of Steinmauer, some hundreds of German troops were in the dugouts in the low saddle of the connecting ridge, while from the wings Americans, hidden in the grass or wire, watched their comrades sally forth. On the mountain tops for miles around other Americans watched the artillery as it flamed like fireworks, rivaling and finally eclipsing the gorgeous sunset.

Five days before the raid, H Company had been taken out of the line to a well-protected slope several kilometers in the rear, and a trench system as nearly as possible a duplicate of the one to be attacked was constructed there. The engineers designed the practice trenches from airplane photographs. Here the raid was rehearsed under command of Lieutenant William H. Leahy, who was to lead it, and the lieutenants who were to assist him.

The rehearsals and the raid itself were under the general direction of Major Comfort, who commanded the battalion. Colonel McMahon commanded the regiment.

The objects of the raid were to take prisoners and materials to identify the units opposing us, to overcome all opposition and establish our supremacy, and to destroy the enemy's dugouts and defenses, and return to our lines.

On the German side of the line, from either side of the brow, communicating trenches led from the front-line trench backward to join in a V, some 800 yards down the steep side of the mountain. In the middle area of the V, along both branches, and just below the point, it was known that there were German dugouts, strong points, and possibly stores.

There was an artillery preparation of 45 minutes and it was of a thoroughness and efficiency that I would not have thought possible in those mountains.

How the great number of guns which opened at 7.45 p. m. July 6 ever were got up the hills in such positions as to range on that mountain is still a mystery to me. They opened with a roar behind the line, and almost at the same time came the crash of their shells on the German positions in our front. They pounded the points our men were to enter, the high explosive tore great paths through the barbed-wire entanglements, and at the end of the prepara-

tion they lifted and laid their shells on the enemy battery positions to do as much as possible toward reducing the opposing fire.

From the beginning of the bombardment to the end of the raid our machine-guns whined away constantly. We were using the French St. Etienne (called familiarly "Insanity Ann"), but with whatever gun and on whatever field, we had no better troops than our machine-gun battalions, which had been the old Second Missouri, or the machine-gun companies with the infantry.

They played their part well, these machine-gunners, who are the stormy petrels of war. When a bombardment is on, everybody but the machine-gunners takes refuge in the dugouts. Even the party soon to make a raid takes cover, waiting for the "zero" hour; but the machine-gunners stay in their hazardous positions outside and play their venomous spray upon the points indicated in their orders.

It did not take the German guns long to answer our artillery. Their fire was aimed at the top of Hilsenfirst, for the German officers knew the preparation indicated that was the spot at which the raiders would come across. Our men had been taken to the top of Hilsenfirst before the bombardment started and placed in dugouts there. At 8.15 p. m. they were led out by the lieutenants to our front-line trenches, a place of magnificent terror, there to crouch until the "zero" hour.

That was the hardest time of all. Scores of German guns were shelling the brow of the hill just outside, and there was no protecting shelter of a dugout roof above them. Immense shells hurtled over them with the swish of an express train; hundreds of other shells broke just in front of them beyond the wire; there was the constant hiss of machine-gun bullets, and, almost as terrifying, there was the constant roar of gun and shell. Every officer and man knew that just as soon as he climbed out of the trench he would be in the face of all that current of fire. All watches had been synchronized, and as the hand moved nearer to the set time the strain grew tenser. One man, watching the face of his wrist-watch, in the last few minutes twice saw it disappear from sight when shell-thrown earth covered it. Every man who went over the top that evening knew into what danger he advanced.

As the men waited, three French airplanes, flying low and seemingly indifferent to the rain of shells, came out like war eagles from their eyries back in our mountains, and, flying straight and sure, lifted over the crest of Steinmauer and went on over the German gun positions and into the valley beyond. Our waiting men cheered the fliers through the smoke and crash of shells.

Lieutenant John Moll and his scouts, who had cut the wire the night before, showed the way through the gaps, and the fighting men went out on the field. Lieutenant Leahy was in command of the raid. With him on the branch of the V on our right were First Lieutenant Oliver W. Spencer and Second Lieutenant William F. Sweeney. On the other branch of the V was Second Lieutenant William S. Bryan, with a platoon and a half, and Sergeant George O.

von Land, with half a platoon. First Lieutenant John E. Mitchell had charge of the 22 moppers-up.

The lane in the wire was some 100 yards from the entrance to the communicating trench, and the men walked over the high, bald brow, through shell and machine-gun fire, with superb calmness. Barring the tense waiting under the storm of noise raised by the cannonading, this was perhaps the most trying time of the raid, the moving out to the brow of the mountain, swept by all machine-gun crossfire which could be concentrated there and beaten by all the heavy guns which could be directed against it.

No man wavered, or, if he did, the mass courage of the platoon, used as a community supply, picked up his spirits, and they moved steadily on to the brow, over it into the full view of the enemy territory, and down the steep declivity to their objectives.

Spencer and Mitchell led out their commands, and behind them came Leahy and Sweeney. On our left Bryan led the way, with von Land's party next. Into the torrent of fire the men marched like veterans. Some went down, and the stretcher-bearers gathered them up and took them back. The riflemen pressed ahead at the set speed appointed, with a calmness and courage which could have been excelled by no troops in the world. Down the mountain side they went, some in the trench, others on either side on the surface above, every German machine-gun in range trying desperately to play upon them.

As the raiders went down the hill at the opening of the advance the German trench mortars were throwing their torpedoes, known as "flying pigs," at the American lines, and the admiring travelers from the Middle West strolled along through the open field, pleasantly looking up at these engines of death hurtling over them.

As the line moved out, I noticed one fine young fellow, who seemed full of wonder and interest at his first sight of battle. A shell broke just in front of him and he fell. I had never seen him before and I never saw him again, but at his funeral the next day I learned that he was Private Clarence Walker. We came from the same town, and his grandfather had been orderly sergeant in my grandfather's company in the Civil War.

Spencer's objective was the dugouts lying below the point of the V, but as he passed another cluster of dugouts on the way down, he stopped to bomb them, just to get going properly and to loosen up the throwing arms of his men.

Mitchell and his moppers-up came charging down the hill jealously.

"Here, you quit that," Mitchell shouted. "That's my objective. Get on down the hill where you belong."

Spencer went on down the hill, bombed his dugouts, but found no prisoners. They had escaped or had been killed by the artillery. Mitchell took the job of handling the dugouts nearest him, and sent Sergeant Michenfelder with two men to clean up those in the middle of the field. He sent Corporal Omar Carroll with five men, including Mechanic William Hand, to work on the dugouts farther up the trench. Mitchell got no prisoners. All the Germans he

encountered showed fight and all were killed with pistol shots or hand-grenades. Carroll and his party had great luck. They took eight prisoners and got back with five of them. One died of wounds and two were killed while trying to escape. They had fighting all the way and killed more men than they captured.

After working through the dugouts at his own place, Mitchell moved up to where he had sent Corporal Carroll, but he left on top of a dugout, which had not yet taken fire, Private Kohm, to watch for any who tried to escape. After running into Corporal Carroll's treasure-trove of prisoners and booty, Lieutenant Mitchell forgot about Kohm, who shouted at him from the top of the smoking dugout and asked whether he should stay longer. Mitchell told him to come on in a hurry, and then I learned for the first time that Kohm was wounded in the face. Kohm refused assistance and walked to the dressing station.

On the other branch of the V, Lieutenant Bryan's band ran into a most active machine-gun before they had progressed far. Bryan ordered his men to take cover, and he gave Sergeant Errett the task of silencing the gun. Errett took a few men armed only with pistols and hand-grenades, crept forward until in range, and killed the gunners and silenced the gun with hand-grenades. He did not know he was winning the Croix de Guerre, but he was. Bryan had little difficulty after that. He followed his branch of the V to its junction with the one on the right, found Spencer there, and with him started back up the hill.

On the way back up the trying hill, Spencer did a clever thing, which doubtless saved many lives, not only of his own, but of the other commands as well. As they were proceeding up the same stem of the V down which they had come, the Germans with automatic rifles attempted a counter-attack from a distance of two or three hundred yards. Spencer had his men throw smoke grenades in direction of the enemy, and thus formed a smoke barrage behind which the Americans retired. Because the aim was thus destroyed, the casualties here were light, when otherwise they would surely have been heavy.

Sweeney had little opposition in entering the field, but on the return, when he commanded the rear guard, he was called upon to beat off a counter-attack made by automatic riflemen, which he did with his own automatic rifles.

The entire operation was under the direction of Lieutenant Leahy, and the success is a testimonial to the careful preparation which he supervised. Once the troops entered the field, each lieutenant's outfit acted as a unit and carried out its work without further direction from the commander.

There was daylight to the end of the raid. They came back in the dusk, with the glow of the fading sunset on their grimy faces, and their hearts full of the exaltation of the fray. They were soldiers now, but not yet veterans who could quickly relapse into calmness from the high fervor of battle. They toiled up the long, steep hill with the steady, even gait of men returning from their day's work. The German batteries shelled the brow of the mountain incessantly, and poured high explosives and shrapnel into the German communicating trenches through which the Americans naturally would withdraw. The enemy machine-guns fired incessantly.

The retirement was, by order, without formation. The men straggled back with a strong rear guard. The wounded were carried by members of the band, whose work throughout brought praise from all officers and men who saw it. These men, without arms and without identifying brassards, took their stretchers onto the field, watched the work of their fighting comrades, and bore the wounded back up the steep slope. The position of an unarmed man on a battlefield is always a most trying one, but these musicians worked magnificently.

When the Americans started back up the slope everything inflammable in the German position was burning. The dugouts had been destroyed with the thoroughness which high explosive and incendiary hand-grenades permit. Many of the men carried their rifles slung on their backs in the climb up the steep mountain side, although the machine-guns were giving them a terrible lashing, and Sweeney's rear guard was having a lively tilt with the counter-attack.

The raiders carried trench knives lent by the French, long, dagger-shaped weapons, with good grips and brass hilts. Upon the blade near the hilt was engraved "Revenge for 1870." Many of these were "lost." They were almost the ideal souvenir of the war, and what would a man desire more than to take home with him the weapon he first carried into battle?

In Colonel McMahon's headquarters divisional staff officers had gathered to hear of the result of the first action in which the division had taken part. Besides the chief of staff and others from the division, the commander of the brigade and his staff were there.

The men returning from the raid were required to turn in all souvenirs they had gathered, for examination by the Intelligence Department. They were to be returned later. These men, still full of the glow and afflatus of battle, told colonels and generals just how it had happened, and gave the stories quaint embroidery. The soldiers just back from the fray used soldier language, and they talked to their chiefs as friends and brothers. Although they proudly reveled in the blood and dust which stained them, there was no condescension in their attitudes to the men of high commissions.

Our losses were four men killed and 18 wounded. Seven prisoners were brought back, at least 25 of the enemy had been killed, and dugouts, defenses, and communications in the selected area had been destroyed. According to the scales of war, it was a highly profitable raid.

The Cavalry Action at Yanoff

BY

General GOLOVINE, Russian Army*

THE AUSTRO-HUNGARIAN armies were defeated in several battles to the south of Lublin and Kholm and retreated quickly.† A cavalry brigade, consisting of the Grodno hussars and the lancer regiments, was sent out to pursue the enemy. The latter was retreating in good order on a wide front, taking advantage of the ground, which offered good positions for rifle engagements. However, such retreat was possible for only fifteen or twenty miles, because farther back the enemy had to enter a large wooded area situated on the right bank of the river San.

One of the most important entries into this marshy wood area was the town of Yanoff. We were trying to get to this point quickly, as we rightly supposed that there the various supply trains and rear line organizations were concentrated.

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* Lieutenant-General N. N. Golovine, Russian Army, was born in 1875, graduated from the Military Academy (Page Cadet Corps) and the General Staff College (in 1900). He began his military service in the Horse Artillery of the Imperial Guard. He was transferred to the General Staff Corps in 1901.

Before the War of 1914-1918 he commanded a squadron and a group (three squadrons) in cavalry regiments; from 1907 to 1913 he was professor in the Imperial General Staff College. In 1908-1909 he attended the "Ecole Militaire de Guerre" in Paris, which was at that time under General (now Marshal) Foch.

Several of General Golovine's scientific military works were edited and published by the General Staff College, where he lectured on Military History (Napoleon's epoch), Cavalry Tactics, and General Staff Work.

During the War of 1914-1918 General Golovine occupied in succession the following positions:

Commander of cavalry regiment, during which time he was decorated with the St. George Sword for bravery and distinguished service.

Director of military operations of the 9th Army (Russian southwestern front).

Chief of Staff of the 7th Army (Russian southwestern front). The 7th Army broke the enemy front at Jaslovicc, on the Stripa (in Galicia), during the "Brussiloff offensive" in 1916. The result of the operation, which had been planned by General Golovine, was very successful: 1,622 officers and 77,467 men were made prisoners and 68 guns and 330 machine-guns were taken. General Golovine was decorated with the Cross of St. George for this operation (for having planned it, prepared it, and taken active part in the fighting).

Chief of Staff of the group of armies on the Rumanian front (four Russian and two Rumanian armies) until October, 1917.

After the revolution in March, 1917, took place, General Golovine was elected to the post of Director of the General Staff College by general staff officers of twelve out of fourteen armies.

† See sketch 1.

During the day of September 11, 1914, the main forces of our brigade approached the village of Godzisheff (five miles northwest of Yanoff). The vanguard consisted of two squadrons of hussars. The commanding officer of the brigade was with the vanguard, while I was with the main forces.

The country was hilly and covered with fields and thickets. Godzisheff lay in a valley. On reaching a hilltop I could see the slopes of the rising ground beyond the village. On the top of this ground one could see a strip of woods. Up those slopes our hussars were charging.

SKETCH I

The front they occupied was not wider than 200 to 300 paces, while it should have been wider. At the beginning of the war it was hard to struggle against the habit of the officers to act strictly in accordance with the regulation standard. A squadron is advised in the regulations to spread, when drilling, over the front space of five platoons, and this advice was taken literally by the officers.

Rifle fire was opened from the edge of the wood. The hussars galloped toward the edge; the firing augmented, and then, to my distress, I saw that the hussars turned backward.

Experience taught me, should the first attack not be successful, all subsequent ones would also not be, unless a new factor was added to strengthen our

forces. The rôle of such a factor under the circumstances could be played by the envelopment of the enemy's left wing. I decided, without waiting for the orders of the C. O., to dispatch two new hussar squadrons to the right, enveloping the woods from which our hussar vanguard retreated. As the greater part of my regiment was changing now to combat formation, I rode forward to take charge. Also, the two retreating squadrons had to be taken in hand. At such critical moments it is absolutely necessary for the regimental commander to be with his troops.

While I was riding toward the village I saw the hussars again try to charge the edge of the wood. Once more the attack was made on a short front, but this time with utmost haste, caused by the threat of the C. O., who became furious. Naturally the attack was unsuccessful.

It was out of the question to repeat the attack the third time on horseback, though it was necessary to cure these troops by compelling them to take the edge of the wood.

Ordering the hussars to dismount and deploy, I did not rush the advance. I desired, first, to make the line as broad as possible; second, to wait until the encircling troops reached a certain point. With the use of field-glasses it was easy to follow their movements.

The hussars took prone positions and opened fire. The officer I had sent with a report to the C. O. returned and informed me that the general approved my orders.

From the left the dismounted line of the lancers (the second regiment of the brigade) linked up with ours. From behind the village the guns of our horse artillery began to rumble. The hussars had a little rest and became quiet. In the front line the troopers lying near me were joking.

Soon one could notice that a certain confusion began among the enemy on the edge of the wood. The fire of the foe quieted down. I ordered my men to rise and advance by rushes toward the edge. The enemy hurriedly cleared the edge, and when we reached it we captured only single prisoners.

That night we spent in the village of Godzisheff, leaving a strong outpost to keep in touch with the enemy. Next day a battle was imminent for the possession of the town of Yanoff, which by this time was approached, besides our brigade, by parts of the Third Don and Third Ural Cossack divisions.

The cavalries of the European armies entered the World War believing in the theory of the "shock." The visions of the cavalry attacks, dating from the time of Frederick the Great and Napoleon, hypnotized the military mind. It is true that after the wars of 1870-71, and especially the latest wars—Anglo-Boer and the Russo-Japanese—many changes were adopted; but these changes were only corrections, and in the new cavalry regulations a great number of concessions to the conditions of modern warfare did not change the fundamental principle of the "shock," which still retained the most important place.

As late as 1910 one could see at the French cavalry maneuvers, in each cavalry division, a cuirassier brigade accoutered in cuirasses. These brigades

each side endeavored to preserve, like a fragile vessel, intact for the final "shock." Such is the force of prejudice.

The world, however, saw already the experiences of the American Civil War in 1860-64, in which the type of the modern cavalry was clearly defined. Morgan, Stuart, and Sheridan gave the world new examples of cavalry actions and lifted the veil to new thoughts. In Russia, too, we had valuable experience of our Cossack cavalry and the dragoons of Peter the Great. But this was not sufficiently appreciated and preference was given to the cavalry doctrine of the "regular" cavalry, later imported into Russia with the stamp of "made in Germany."

During the first period of the war, just at a time when the cavalry could be extensively used, the adherence to the antiquated cavalry doctrines showed itself in the fact that the cavalry *roamed* in brigade and regimental columns on the battlefields, suffered unnecessary losses, clung to the infantry, and was in its way. Owing to this fact, opportunities were allowed to escape when small cavalry units could be employed in such a way that in the course of further development of action large cavalry masses could be thrown in. However, divisions, brigades, and regiments of cavalry, when concentrated and kept together, were unable, even in modern deployed formations, to command the space necessary for the maneuvers of modern cavalry, and therefore were often helpless.

The demand of modern warfare impressed on the cavalry consists not only in avoiding the fire, but it is much more radical. It embodies the whole nature of cavalry actions and turns the situation as follows: The cavalry must have active command over great space, to be able to work properly. This again requires the renouncing of the inclination of the commanding officers to retain constantly the immediate tactical command over his subordinate units in wait for the concentration for a general cavalry "shock." The new cavalry teaching requires a new creed, in which the following basic principles should be embodied: (1) The cavalry strikes not by the force of the shock, but by means of quick maneuvering; (2) the cavalry is not afraid of wide fronts; and (3) the direction of even small units often takes the character of strategical direction.

On September 6, about a week before we reached Yanoff, our brigade, together with the Third Don Cossack division, came across large enemy forces occupying hurriedly fortified positions. The heads of our approaching infantry were changing to combat formations and were engaged in dislodging the enemy from his advance position. Our brigade moved hither and thither in long marching or platoon order on the battlefield, awaiting an opportunity for a cavalry attack; but, after several rounds of hostile shells caused 50 casualties in dead and wounded, we were turned round and left the battleground. At the same time the Third Don Cossack division was also trying to help the infantry. For this purpose the division sent out a few squadrons in succession, which galloped in single file over the exposed ground and concentrated in valleys, in

thickets, or other shelters. In this way they were at hand to assist the infantry in case the enemy should start a retreat without accepting a decisive battle. The remaining squadrons of the Cossack division were concealed behind a big wood in the rear of the infantry formations without interfering with the latter and out of sight of the enemy.

It could be expected that Yanoff, being a key to the defile, would be defended stubbornly. If we did not succeed in taking the town at a swoop, and in this case we had to proceed in the night, means had to be found to envelop Yanoff and to strike from the rear. Having this in mind, I suggested to my superior to send that evening two of my squadrons to the right and in advance. I ordered the commander of this detachment, Captain Ilienko, to veer as much as possible to the right, to get in touch with such Russian infantry units as he might find in the direction of Krasnik, and to take advantage of the first favorable chance to break into Yanoff from the rear. Especially I insisted on one thing: that these squadrons (second and fourth) should not *cling* to our main forces.

In the evening I made a tour of the remaining squadrons and spoke with the hussars. They felt somewhat embarrassed on account of the failure of their charge. I tried to encourage them by pointing to the fact that our casualties were only a few wounded; consequently the enemy was not at all strong and they could have successfully reached the edge of the wood.

The same evening I also discussed the topics of the day with the officers, and during seven years of my lecturing at the General Staff College I did not have a more attentive audience than this one in an empty barn, during supper, to the light of candles.

In the morning of September 12 the Cossacks and our brigade assumed battle formation on a narrow front and faced a most stubborn resistance. This time we had to deal with German units which had arrived to aid their allies. I sent an orderly to Captain Ilienko to explain the situation on our front and to confirm my orders to fulfill the task I gave him the previous evening. With the remaining four hussar squadrons I was ordered to form the reserve. The C. O. himself rode away to the observation point, from where he conducted the battle. From our brigade position to the right the Ural Cossacks were fighting; to the left, the Don Cossacks.

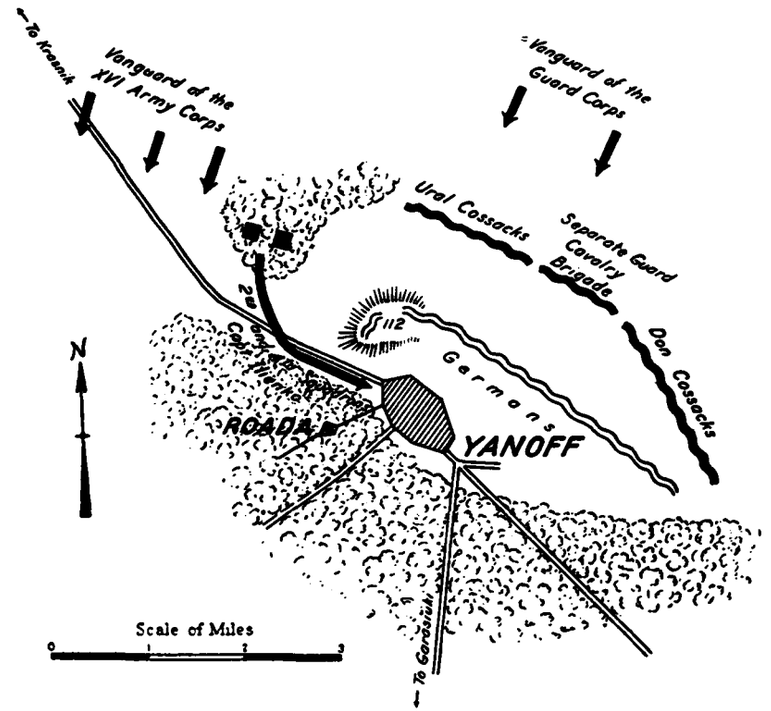
The enemy met us with a most intense artillery fire and then started an energetic advance against the Don Cossacks. The Cossack artillery nearly fell into the hands of the Germans; the situation was saved by a clever action of a lancer squadron, which opened a flanking fire with machine-guns on the advancing Germans. However, our advance was stopped.

Suddenly we heard in the town of Yanoff an explosion, which was followed by several in succession. A short time later an orderly arrived with the report that Captain Ilienko had penetrated into Yanoff, and that the Germans were in full retreat.

It happened as follows: Captain Ilienko concealed his two squadrons in a

wood northwest of Yanoff. Soon he learned from his patrols that the northwestern part of the town was very weakly occupied. Counting upon the impression the sudden appearance of the hussars in the rear of the foe would make, Captain Ilienko decided to attack immediately.

Sending out one platoon in "lava" formation, he ordered his squadrons to proceed in platoon columns by threes half a mile behind the left flank of the



SKETCH 2

Situation up to noon Sept 12, 1914.

"lava." After moving in this formation for about a mile the "lava" of the advance platoon was fired upon from Hill 112, a quarter of a mile to the north of Yanoff. Thereupon Captain Ilienko reformed both of his squadrons into the "lava" and dashed forward at a gallop. The nearer the hussars approached, the weaker the fire of the enemy infantry became. The Germans abandoned the front trenches, hurried to the next line, and finally to the outskirts of the town. On the heels of the Germans the hussars tried to break into the suburb

of Yanoff. The retreating forces, however, were firing from behind the stone wall around the church, from fences, windows, and attics. One squadron had to dismount to dislodge groups of Germans from behind their refuge, and on their heels we broke into the town itself. The greater part of the enemy infantry hastily retreated from Yanoff through the woods to the villages of Shkliarnia and Pikule.

In the town of Yanoff the second and fourth squadrons captured a large military booty, viz: 60 German and Austrian prisoners, 29 carts with rifle ammunition, 9 carts with artillery ammunition, a supply train consisting of 100 carts, with 18 tons of flour, salt, and other supplies, 5 field bakeries, 2 ambulances, about 60 remount horses, and 15 head of cattle; besides 20 of our wounded soldiers who had been taken prisoners were freed. To pursue the enemy, one platoon under the command of Lieutenant Krivsky was detached.

The news of the occupation of Yanoff by the two hussar squadrons, the continuous explosions, which could be heard, and the fires that broke out in different parts of the town gave proof of the hurried evacuation of the town by the enemy. All the hussar and lancer squadrons mounted and were ordered to go forward to Yanoff. The Germans cleared the front trenches which were built before Yanoff and our advance was met only by single shots from the outskirts of the town.

It was clear that again the time had come when cavalry could be used most effectively if quickly deployed on a wide front. The C. O. decided to take up the pursuit of the enemy with the lancers, horse artillery, and all the machine-guns advancing along the main road, Yanoff-Garasiuki. I was directed to sweep with the Grodno hussars along the roads leading out of Yanoff to the west of the main road.

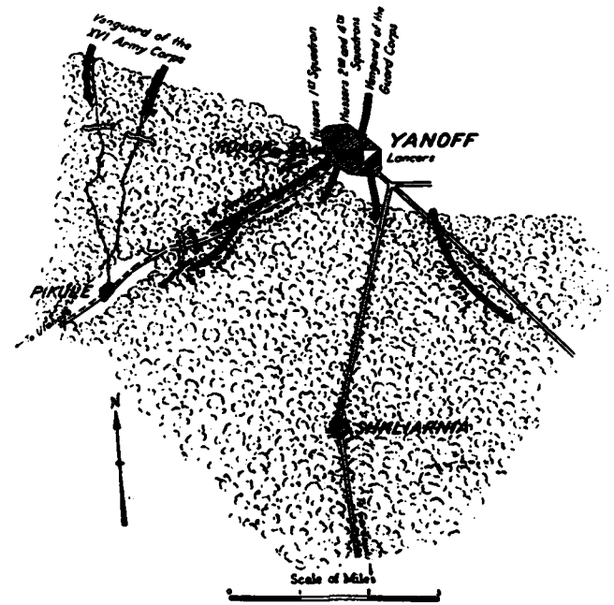
Just at that time an orderly appeared with a report from Lieutenant Krivsky to the effect that in front of the village of Rouda he was exchanging shots with some enemy units covering the supply trains. Immediately I ordered the first squadron to overthrow the enemy by a charge, to capture the trains, and after that, without delay, to rejoin the regiment.*

Simultaneously I dispatched two other squadrons (third and sixth), under the command of Colonel Lazareff, in the direction of the village of Pikule with the order to proceed as quickly as possible to Pikule, attacking all enemy units he might encounter on his way.

The remaining squadrons (second and fourth), which had just attacked Yanoff from the rear, were left under my personal command. The horses of these two squadrons had not been unsaddled for more than 24 hours; they needed some rest.† They also formed my reserve in Yanoff—an important crossing of several roads—wherefrom they could be moved, in case of need, either to reinforce the first squadron or the squadrons under the command of Colonel Lazareff.

* See sketch 3.
† The fifth squadron was detached for special duty.

The platoon of Lieutenant Krivsky encountered, as stated before, the enemy's trains retreating in the direction of Rouda and began an engagement with the infantry escort. The handful of hussars were unable to overpower the infantry, which took up a line on both sides of the road and opened fire. Therefore the commander of the first squadron, sent out to reinforce Krivsky, ordered one-half of his squadron to deploy into a wide line of "lava" to encircle the right flank of the enemy. With the other half of his squadron, also in "lava" formation, he continued to advance from the front. The dry ground and the absence of thick underbrush allowed action on horseback.



SKETCH 3

Situation about 3PM Sep 12, 1914

Having noticed our encircling movement, the enemy escort abandoned the trains and ran into the woods, and the trains were captured by the hussars. On this occasion 65 carts, with 45 remount horses, were captured; 2 ambulances and the hospital of our 48th division were retaken; also 2 officers and 85 men were made prisoners.

Colonel Lazareff, advancing with his two squadrons in the direction along the road to Pikule, discovered, one mile north of Pikule, a long column of trains which was stopping on the road. It was already 2.30 p. m.

Instantly one of his squadrons was dismounted and deployed. Wherever possible, it opened fire and started to advance rapidly in a frontal attack. The other squadron was ordered to proceed mounted in "lava" formation, to encircle the left flank. The thick, marshy forest obstructed the movement on horseback; therefore this squadron had to dismount also. The firing continued for an hour. Pressed from the front by one squadron and from the flank and rear by another, the Germans started to retreat into the woods.

When the hussars took possession of the trains, they found 3 killed German officers and more than 50 men. The rest of the escort escaped into the woods, leaving in our hands as prisoners 3 officers and 32 men. Upon questioning the prisoners, it was found that the escort of the trains was composed of 2 German companies and 2 Hungarian hussar squadrons. The exact number of the captured carts in the train could not be ascertained at that time, in view of their enormous quantity and because the hussars soon afterward had to take part in further actions. At any rate, the number of carts exceeded 1,500.

The report from the first squadron that the trains were captured and another report from Colonel Lazareff, that he was engaged in a combat with the escort of the trains near Pikule, were received by me while the two squadrons left in Yanoff were resting and feeding the horses.

I decided immediately to take the field with the two squadrons at my disposal and to proceed through the wood along a road about a mile to the east from the Yanoff-Pikule road. In this way I was in a position to give support, in case of need, to Colonel Lazareff, or, if everything was all right there, to continue my way southward 1½ miles to the west of the main road, Yanoff-Garasiuki, menacing with this move the left flank and rear of such enemy forces that might decide to take up a defensive position on the main road.

Simultaneously the lancers also left Yanoff and moved along the main road. To keep in touch with the parts of my regiment and with the lancers, I ordered two dispatch rider posts to be established, one in Yanoff, and one in the village of Shkliarnia. To the first squadron I sent a confirmation of my order to proceed immediately to the village of Shkliarnia and to await there my further instructions.

After riding for about two miles through the woods, we began to catch individual enemy soldiers coming from the north, and upon questioning them we could understand that they were fleeing from the squadrons of Colonel Lazareff. A mile farther on an orderly carrying a report from Colonel Lazareff about the capture of the trains caught up with us. I ordered Colonel Lazareff to proceed immediately with his troops to the village of Shkliarnia and to await there further instructions from me. This he did, after sending a patrol in the direction of the passage of Oulanovo to keep in touch with the enemy, leaving not more than one platoon with the captured trains. Then I turned straight south.

Reaching the height of the village of Groytzy-Mamoty,* I received information that the lancers were engaged in a stubborn fight with the German infantry on the main road, trying to force the passage through a marshy forest defile. Thereupon I decided to continue my advance southward, with the intention of getting in the rear of the enemy's infantry which was fighting with the lancers. In the course of this movement we crossed the Austrian frontier and rode straight through the woods to the village of Penk.

* See sketch 4.

Not far from the frontier our vanguard encountered a detachment of Hungarian hussars about two squadrons strong, but the Hungarians confined themselves to a few shots and disappeared in the woods in a southerly direction. In the meantime, out of the woods and from the direction of the main road, one could hear a strong rifle and machine-gun fire, the intensity of which grew stronger and stronger. The thought occurred to us that the lancers were engaged in a serious frontal attack, and therefore I decided to dispatch immediately one squadron (the fourth) in the direction of the firing, with the intention of bearing pressure on the immediate rear of the enemy. With the other squadron (the second) I continued to ride farther south, presuming that a still deeper enveloping movement in the rear of the enemy would gain for us a more decisive result, whether the enemy should be overthrown by the action of the lancers or not.

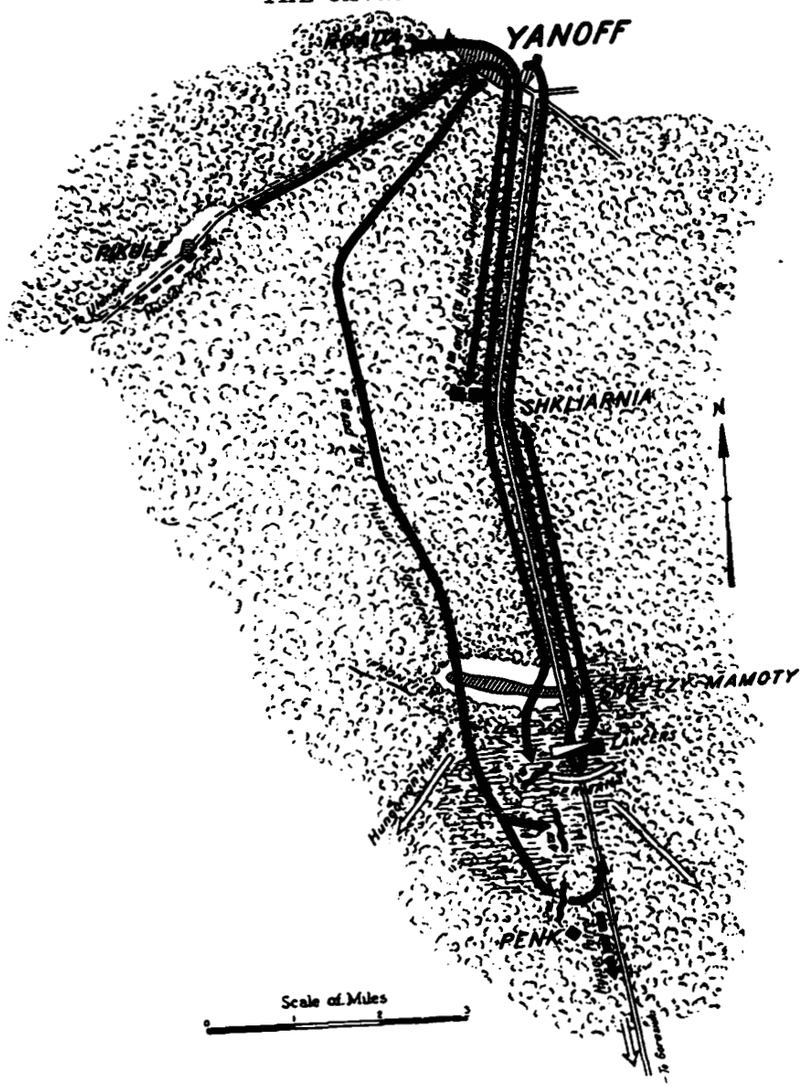
At the same time I sent an officer to Shkliarnia to meet there the first squadron, and to order its commander to continue the forward movement, so as to come up to the right flank of the lancers' position and to help them with a flanking attack on the left wing of the enemy.

The further movement of the squadron under my command was exceptionally hard. The horsemen involuntarily spread over a wide space in the thick woods; the horses often sunk up to their stomachs; but, being conscious of the necessity of relieving as soon as possible the lancers, we kept on going forward. It was getting dark.

When we reached a forest glade near the village of Penk we were met with rifle fire. I dismounted the hussars; we took the offensive and opened fire. Soon the enemy retreated. We were sticking in the moor and jumping from grass hummock to grass hummock. In the dusk, between the trees the silhouettes of the fleeing Germans, who fired back at us with explosive bullets, could be seen. We ran after them, but reaching the main road, Yanoff-Garasiuki, we lost track of them. Only a few wounded prisoners were left in our hands.

During this fighting we were listening to the firing from the direction of the lancers, and with happy feelings noticed that the firing was becoming weaker. Our encircling movement was showing results. When we reached the main road the firing quieted down entirely. I sent a patrol along the main road southward to follow the Germans. Giving time for a respite, I ordered the squadron to mount and led them along the main road to the north.

In the darkness of the night we had to pass through the battleground of the lancers. On the road we saw the corpses of German soldiers and also of our lancers. Leaving a detachment to pick up the wounded, we continued our way



SKETCH 4

Situation in the evening Sep. 12, 1914

forward to the village of Groytzy-Mamoty, where we met the outpost of our infantry as well as the first and fourth hussar squadrons. Here we stopped for night lodging. Colonel Lazareff's squadrons, which were then with the lancers in Shkliarnia, I ordered to join me in the morning of the next day.

What happened to the lancers after they left Yanoff? They moved south along the main road, sending out two squadrons as vanguard. Passing the village of Groytzy-Mamoty, the main road changed to a fascine corduroy road in the midst of a most marshy wood. Just beyond this marshy ground the lancers' vanguard was met with strong rifle fire. The squadrons dismounted, deployed on both sides of the road, and started to advance. The Germans stubbornly held their position.

Captain Bibikoff, the commander of one of the lancer vanguard squadrons, one of the best officers in the brigade, reported that, in his opinion, a further frontal attack was out of the question. Nevertheless, he was ordered to advance, and all the lancers were brought into action. The result was deplorable. Squeezed by marshes on a narrow front, suffering great losses (among other officers, the brave Captain Bibikoff fell, stricken by two bullets), the lancers were compelled to retreat under pressure of the Germans, who went over in a counter-attack. During this retreat the lancers were unable to remove their wounded and dead and had also to abandon one machine-gun.

The first squadron sent to support the lancers appeared, near the end of the fighting, on the lancers' right flank and, enveloping the left flank of the Germans, stopped their farther advance and picked up the machine-gun abandoned by the lancers.

The fourth hussar squadron appeared half a mile to the south of the first squadron and exerted a pressure on the immediate rear of the Germans. Apparently the news of a still deeper encircling (the second squadron) forced the enemy to retreat hurriedly, abandoning in their turn the wounded on the battleground. At night the lancers returned to the scene of fighting and removed their wounded and killed.

So was ended the battle of Yanoff. The historian will involuntarily take notice of the fact that two cavalry regiments, of the same strength and under the same conditions, were fighting side by side, and yet the hussars constantly had success, whereas the lancers suffered reverses. Furthermore, the hussars paid for their victories with only 8 killed and 21 wounded, while the lancers paid for their failures with more than 50 killed and wounded.

At Yanoff the verdict was clearly pronounced: *"The modern cavalry strikes not with the force of the shock, but through the quickness of its maneuvering on a wide front."*

The Cavalry

BY

First Lieutenant FENTON S. JACOBS, Third Cavalry

As "GENERAL TIME" pursues his ceaseless march, his passing leaves an impress upon all things material. The fundamental desires and emotions of man, however, regardless of race or creed, respond today to the same impulses as did those of our primal forebears. Whenever and wherever the lure of the open appeals and red blood surges in the veins of those who love adventure, dash, and romance, there one will find the mounted man in his glory and predominance, be he civilian or soldier.

The word "cavalry" (French, *cavallerie;* German, *kavallerie;* Spanish, *caballo;* Italian, *cavalleria*) is derived from the Latin word "caballus," meaning horse—a word which came into use in military literature about the middle of the sixteenth century and applied to mounted men of all kinds employed for combatant purposes.

The earliest records of mounted combatants as a distinct military organization date far back in the history of Egypt. Diodorus of Sicily states that Osymandias, who lived before the Trojan War, led 20,000 mounted men against the rebels in Bactriana. It is an odd coincidence that this number should be the present total authorized enlisted strength of the cavalry arm of the military establishment of the United States.

Josephus, A. D. 37, in his "History of Jewish Wars," states that the host of Israelites which escaped from Egypt included 50,000 horsemen and 600 chariots of war. In the first Messenian War, 743 B. C., Lycurgus formed his cavalry in divisions. In the battle of Arbela, 331 B. C., Alexander, leading 7,000 of the Macedonian cavalry, dashed into a gap of the Persian Army and by this brilliant feat of daring and skill utterly routed the enemy, thereby establishing the cavalry as a decisive tactical factor.

During the middle ages cavalry may be said to have constituted almost the only efficient combatant organization. The weapons used were battle-axes and swords, the personnel consisting almost entirely of the nobility, having an *esprit de corps* that overcame all obstacles. The serfs, not having the means to keep horses, principally composed the foot soldiers. So from that time the cavalry has been universally known as a favored arm of the service. Up to this stage the value of cavalry during combat had been primarily for the purpose of collision, which had resulted in the rapid spread of the heavy Dongola or African strain of horse flesh all over the then known world. The indigenous horses of Europe and Asia were too small for this purpose when burdened with armor.

No radical developments occurred in cavalry from the fifth century until 1554, when Marshal de Brissac formed a corps of mounted infantry, called

"dragoons," trained to fight either on horseback or on foot. Maurice of Nassau, who saw the importance of giving more mobility to this arm, was the first to organize the cavalry into regiments, each being composed of about 1,000 horses. Frederick the Great did much toward developing the tactical use of the cavalry, training his troops to excel in the arts of swords and horsemanship. Napoleon introduced the lance and defensive armor in the French Army, and later realized the importance of the charge, not so much for the actual collision, as for the moral effect of the appearance of an absolutely closed wall of horsemen approaching the adversary at full speed with lance or drawn saber.

So the cavalry was differentiated into types, according to weight and equipment. The big horses went to the cuirassiers, or heavy charging cavalry, the best light horses to the hussars, and the dragoons received the remainder; for in principle the dragoons were only infantry placed on horseback for the convenience of locomotion and were not primarily intended for combined mounted action. A dragon was used as the insignia on the helmet by the mounted soldier in the middle ages; hence the name dragoon. The cuirass is another piece of defensive armor, called "breast and back plate."

It is a singular fact that saddles were not used before the time of Constantine, A. D. 306, and stirrups were introduced by the Franks in the fifth century. When gunpowder was introduced in warfare, the cavalry hauled their projectile-throwers and cannon in vehicles to the scene of battle, which, on account of decreasing the mobility of the arm, necessitated the organization of a separate arm—ultimately field artillery.

The first mounted force that was organized in the United States under the present government was authorized by an act of Congress of March 5, 1792, which gave the President the power to raise, at his discretion, a squadron of cavalry to serve for three years, to be under a Major Commandant of Cavalry (Major William Winston, of Virginia). This squadron was organized at Pittsburgh, Pa., in 1793, and comprised four troops, consisting each of one captain, one lieutenant, one cornet (or second lieutenant), six sergeants, six corporals, one farrier, one saddler, one trumpeter, and 65 dragoons.

The uniform of the dragoon soldiers of the United States Army during the Florida and Mexican wars was a blue fatigue jacket trimmed with yellow lace, a flat forage cap with a wide yellow band, and sky-blue reinforced trousers with two yellow stripes up the outside seam; hence the appellation "Yellow Legs," as the trooper is familiarly called. This squadron, although a mere handful of men, effectively bore an honorable part in the successive campaigns against the Indians, for they were the sport-loving, two-fisted type that welcomed adventure and exploration.

On the 12th of April, 1808, Congress ordered a regiment of light dragoons of eight troops to be raised, to serve as light infantry until mounted. This was the mounted force of the Republic at the commencement of the War of 1812.

The development of cavalry, however, has never been uniform at any time

over the surface of the globe, depending largely upon the adaptability to its environment in each district. Prior to the Civil War, during Jefferson Davis's administration of the War Department, a unique experiment was begun. Difficulty had been encountered in traversing the arid stretches of land in the then sparsely settled West with the army mule and horse.

The Honorable Jefferson Davis, following up an inspiration, procured from Asia a number of camels, which he proposed to use for the purpose of transporting supplies over these Sahara-like sections of our country. Somehow, the experiment was not as successful as anticipated, probably due to the outbreak of the Civil War. Perhaps, now that the entire United States is "arid," the camel might be more easily acclimated.

The question of "horse marines" has been the object of many jests and comments. It is interesting to note, however, that during the "Boxer Uprising" in China the U. S. Marines actually organized and used to good effect in China a troop of mounted marines.

General Sheridan, acting under instructions from General Grant, made the first extensive organization of cavalry in America, which was called "The Cavalry Corps of the Army of the Potomac," comprising three divisions of 5,000 mounted men each. Their weapons were sabers and repeating carbines. It will be remembered that it was with this force that General Sheridan won his victory at Yellow Tavern, near Richmond, Va.

During the Civil War the strategical use of cavalry was greatly developed, at which time our mounted force, it is believed, was larger than any that had ever belonged to any nation on earth. The Confederate mounted force, especially, had been trained to the use of rifles from childhood, while the vast majority had never seen a sword; hence the formation of "mounted rifles," as had been organized in the Regular Army during the Mexican War. Adopting the mobility and cunning tactics of the American Indian scout and Mexican guerrilla warfare—surprising, harassing, and obtaining military information about the enemy—they resorted only in the most urgent necessity to tactics of shock and "cold steel" or dismounted action.

In referring to the relative value of cavalry to other combatant arms, Brigadier-General Lincoln C. Andrews, United States Army, on "Fundamentals of Military Science," is quoted as follows:

> "The infantry generally works *en masse,* the artilleryman under direction of his officers. They have but to execute orders. They are the body of the army, the bone and sinew of its mass and strength. The cavalry patrols are the fingers, reaching out, brushing aside, feeling for a good hold in the struggle to come; flashing back information along the nerve channels to the controlling mind. They work in small groups, often as individual scouts, perhaps a day's march away from their officers, alone with their military consciences. None but God will know whether they have done their best, whether they have dared enough to accomplish their mission."

Therefore, while cavalry must at all times be ready to dismount and fight with their rifles as skillfully as infantry, it can plainly be seen that the cavalry is primarily an auxiliary arm in campaign, and is frequently referred to as the "co-operative arm," not only tactically, but also in all of its dealings. It screens the main forces, prevents surprise and observation by the enemy, usually by defeating and driving the enemy's cavalry from the field of action, and at the same time gains valuable information by reconnaissance.

At the outbreak of hostilities there has always been a demand for some kind of supplementary force to relieve the infantry of those duties of observation and exploration which are so wearing, but vitally necessary. Through casualties or dispersion, it may occur at any time that the youngest member of the patrol, in point of service, will be left alone to carry on the work, and his ability alone may result in giving the general the very information that will bring success to the cause.

Although aviation has somewhat relieved cavalry of the work of general observation, the mobility and capacity of cavalry for detailed reconnaissance will forever make it a vital factor in a war of movement. There will always be opportunities for horsemen, well led, to get in on their enemy with sword and pistol, as in the beginning of the World War. In view of this fact, military authorities believe that indubitably the Cavalry arm will always endure. There has been much discussion on the subject since the World War. Field-Marshal Haig is quoted as saying:

> "Touching on the rôle of cavalry, it has been proved that cavalry, whether used for shock effect, under suitable conditions, or as mobile infantry, has still an indispensable part to play in modern war."

The very nature of the exacting duties required of the cavalryman, in peace and war, produces an individual excellence which doubtless is largely responsible for the splendid cavalry *esprit de corps* which has always characterized that arm—an *esprit* which prompts the trooper to button his blouse and straighten his hat when he leaves his quarters; a desire for responsibility and faithful performance of duties not prescribed by superiors in authority, but recognized as such in the individual heart.

The evolutions of cavalry drill are significantly based on the fundamentals of leadership. General Andrews further stated in his book above mentioned:

> "Cavalry leadership requires peculiar qualities: a quick eye to see a fleeting opportunity; the boldness for an equally quick decision to grasp it; the cleverness of mind to form a good plan quickly; the ability to convey that plan to subordinates in concise, clear orders; the firmness of will to carry through the plan adopted, and all the while that high demeanor of confidence, endurance, and even joy in the fight that is an inspiration to his followers."

In this connection it may be remembered that, from the days of "Light Horse" Harry Lee, the American cavalryman has performed most distinguished

services. The names of Albert Sidney Johnston, Leonard Covington, Nathan B. Forrest, E. V. and S. S. Sumner, Philip Kearney, George B. McClellan, G. H. Thomas, Joe Wheeler, Robert E. Lee, Jeb Stuart, John S. Mosby, George A. Custer, and William H. Carter, of the Indian, Mexican, and Civil wars; "Teddy" Roosevelt and Leonard Wood, of the "Rough Riders," and Generals Pershing, Harbord (who rose from the rank of private), Dickman, Henry T. Allen, *et al.*, of the World War, will forever live as the embodiment of all that is chivalrous and glorious in the profession of arms.

In the early "forties" the same latent passion for the "he-man's game," that lured men to stake their all in the hands of "Kismet" and venture forth into the great unknown West, today asserts itself when children flock to the "movies" to see on the screen a portrayal of western drama. It is to satisfy this primitive yearning for the open air of the great outdoors, this restless "where do we go from here" spirit, that young men enlist in the United States Cavalry for border service, where they can rub against real men in the wild country contiguous to the Rio Grande and where the possibility of active service is ever present.

The "Big Bend" country of Texas for years has been the refuge of outlaws, smugglers, Mexican "bad men," and "cattle thieves." There the mounted men of "Uncle Sam's" Army reign supreme, relentlessly patrolling the miles and miles of frontier, so that law, order, and Americanism may prevail. It is just this kind of service in small groups of from two to eight men that inculcates the spirit of aggressiveness, quick thinking, initiative, self-reliance, and courage. Here, in the mountain fastnesses, deep-walled canyons, or wide stretches of prairie and underbrush, from Point Isabel, at the mouth of the Rio Grande, to the sandy stretches of southern California, the cavalryman finds a veritable play-ground.

Soulless is the man who is not moved and inspired by the picturesque sight of a cavalcade wending its way down perilous trails, through defiles, fording streams, or mounting the crest of a hill at twilight. There is no place where sincere comradeship and the fraternal feeling that exists among cavalrymen is so manifest as in a bivouac. There, under the great canopy of heaven, men are intimately thrown together, with their numerous songs, pranks, and jokes, smoking and resting around the camp fires, while yarns of daring, romance, and adventure are spun, accompanied by the muffled munching and neighing of their most faithful friends, the horses, near by. It is then that the real virile man sighs and whispers to his buddy, "Old Timer, this is the life." The border region affords such hunting and fishing as few civilians, except the very rich, can enjoy, for one may find bear, deer, wild pig, mountain lion, rabbit, duck, and quail. During the recent drive for recruits the regiments stationed along the border experienced the least difficulty in procuring men. Probably prompted by the same impulse as during a parade in Washington a short time ago, when the mounted cavalry band and mounted troops were passing the

reviewing stand, a little boy was heard above the cheering: "Muvver, can I be a horse soldier when I grow up, and go to Texas?"

Thus today stands the majestic cavalier as of old, "a knight, a gay, dashing military man," an exemplification of all that is gallant and chivalrous. The American trooper is believed to be the most versatile and resourceful mounted soldier in the world.

In campaign, the cavalryman on patrol finds many occasions to exercise his ingenuity. "During combat, while others must hold hard, cool, and deliberate to launch their projectiles with mathematical precision along trajectories through miles of space, the cavalryman may toss his cigarette into the air and, unrestrained, launch himself right at the foe. He rides along his trajectory; the whistle of the bullets is wind in his ears, as the lines sweep forward with a yell, responding to the 'Up and at 'em' impulse."

There is no waiting for barrages nor stopping to calculate; even at drill he is taught to feel that some invisible line is drawn before him, challenging him to combat. The sensation that seems to possess him is the spirit of youth—reckless, daring, unconquerable youth—which will not be denied. The fleeting opportunity offers; then it's away with restraint; down close to the saddle, with a leg-hold of the splendid horse beneath, that is also thrilled and extending himself.

The din of a thousand different sounds—a musical chant, a dull thud of pounding hoofs, voices, the tinkling and clanking of equipment—the glint of cold steel—speed—that is the cavalry charge. It is the sport of kings, the joy of knights of old. He who has never ridden a thoroughbred horse across country has no conception of the feeling of wonderment and irresistibleness that fills the breast.

Cavalry leaders are born, not made, for no bloodless man can hope to lead on the field of cavalry combat; no weigher of *pros* and *cons* who cannot make decisions; no gentle soul who cannot joy in the actual mêlée. Years he may have, but they must not have aged his youthful heart and ardor.

Human nature always has been, is, and probably always will be the same the world over. No mystery enshrouds "Yellow Legs"; he is just any American boy who happens to be intensely human and responding to his natural impulses.

The Remount Service in the A. E. F.

BY

MAURICE F. DE BARNEVILLE

(Formerly Lieutenant, Remount Service, A. E. F., American Embassy, Paris)

THE OBJECT of this article is to throw some light upon the work performed by an organization which was little known and somewhat despised at the beginning of the war and whose activities were revealed and appreciated mostly during the period of the offensive, July-November, 1918, when the call for animals was general throughout the A. E. F. and their supply became an imperative necessity to enable our combatant divisions to fulfill the task assigned to them by the Commander-in-Chief in order to keep up with the advance of our Allies.

At the time of our entry into the war our entire Remount Service in the United States consisted of three permanent depots (Front Royal, Fort Reno, and Fort Keogh) and a half dozen officers detailed from the line, not to mention the temporary Remount corrals organized in Texas for Mexican border service. We had no central directing organization in the War Department (only one officer of the Quartermaster Corps vaguely "in charge" of Remount matters); we had, therefore, no established policy, each depot commander using his own judgment in running his outfit along such lines as he thought best; we had no Remount Manual nor Regulations, no Remount troops, the personnel being mostly civilian, with a few enlisted men of the Quartermaster Corps attached; and, worst of all, we had no Tables of Organization, so that when war was declared in April, 1917, and for a long time afterwards no one knew exactly of what the Remount Service should consist, nor how such an organization should function in time of war. This, it is true, was the case of many other new organizations that sprung up like mushrooms during the World War; but, while most of the new units or services were fully completed and equipped before leaving the United States, the Headquarters, Field, and Depot organization of the Remount Service was built *overseas*, from the ground up, with the exception of the Remount squadrons which went over in 1918 as complete units.

First organized in June, 1917, at General Pershing's first headquarters in Paris, with a total force of *three* men—one quartermaster major in charge, a clerk-interpreter (the author of this article), and a veterinary officer attached—the Remount Service of the A. E. F. expanded from this modest nucleus into a powerful organization, which on the day of the Armistice had a personnel of 493 officers and 14,598 men and operated 38 depots in France. During the two years of its existence abroad this organization received or bought 243,360 animals, purchasing 135,915 in France, 18,461 in Spain, 21,259 from the

British Army, and receiving 67,725 from the United States. After being for many months left to struggle along as best it could and often lacking the wholehearted support of G. H. Q., it finally came to be recognized as one of the important factors of our success, one of the main supply departments of the Army, and it won the highest praise from the Commander-in-Chief for its untiring efforts, in the face of many handicaps, to keep up the mobility of our combat divisions, supplying them with animals to pull their guns and bring forward their ammunition and supplies.

The many problems which faced the Remount Service in France may be summarized as follows and will be afterwards taken up individually in detail to show how they were solved:

1. Lack of personnel;
2. Lack of quarters, stables, and building material;
3. Lack of a definite policy at the beginning of the war and for several months afterwards;
4. Shortage of animals for issue;
5. Shortage of forage;
6. Mange and influenza epidemics;
7. Inadequate rail transportation;
8. Lack of liaison between Remount Service Headquarters and Division, Corps, and Army Headquarters;
9. Disposal of animals after the Armistice;
10. Co-operation with French Government and officials.

1. LACK OF PERSONNEL

This was one of the first and most urgent problems the Remount Service had to solve, the eventual use of special Remount enlisted personnel to man our depots being as yet only a mere project and the detail of combatant troops for Remount work being at first resorted to as a temporary and unavoidable expedient. It should, however, be said that for several months after the declaration of war no one, in either the War Department or at G. H. Q., knew the extent to which the United States would be engaged in helping our Allies. The French Government, through its High Commissioner in Washington, Mr. Tardieu, had made it known that it was in greatest need of American infantry and artillery troops as reserves for the French Army, and it was believed at first that our infantry and artillery units would be welded into and form part of the French Army. But later on, when General Pershing expressed the views of the American Government and the desire of the American people to see our forces in France organized as a separate command, under an American general, it became necessary to provide for all the services of supply that such an organization called for.

Although the A. E. F. project of July 10, 1917, provided for 38 Remount squadrons organized into two base depots, one line of communications depot, one Army and five corps depots, it must be noted that G. O. No. 39, G. H. Q., A. E. F., of September 18, 1917, which outlined a general organization of the

Remount Service, indicated that *Cavalry squadrons* would provisionally perform Remount duty. A month later (October, 1917) a priority schedule was established which called for four depot headquarters and 31 Remount squadrons; but, owing to the fact that animals received from the United States or purchased in France were at that time being issued *direct* to combatant troops, G. H. Q. did not see any immediate need for cabling to Washington and asking for Remount troops, and it was not until *May 12, 1918,* that the first four Remount squadrons landed in France.

When it was realized that, owing to the critical situation of the French and British armies in the early spring of 1918, due to the collapse of Russia after the treaty of Brest-Litowsk, the United States would be called upon to exert a considerable effort and send abroad a much larger number of men than was at first expected, it became necessary for the Remount Service to provide horses and mules for these new incoming divisions.

After an agreement with the French Government, purchasing in the open market began in France. It was then expected that by August 1, 1918, we would have 18 divisions in France, with corresponding services of supply, and as the allowance in animals was then figured at about 6,700 animals per division, plus those needed in the S. O. S., it meant that by August 1, 1918, the A. E. F. should require 143,087 animals. Of this number, only about 40,000 were on hand by the end of April, 1918. Through open-market purchases, the Remount Service in the spring of 1918 procured 37,038 animals, but as almost all of these were young horses, many of them unshod, it was necessary to send them first to depots to be conditioned. It was then realized that the Cavalry squadrons detailed at these depots would be wholly inadequate to take care of the large number of animals being received.

Until March, 1918, only 12 troops of the 3d Cavalry were performing Remount work. Urgent requests sent to G. H. Q. by the Chief of Remount Service through the Chief Quartermaster caused the 2d and 15th Cavalry and the 116th Ammunition Train to be assigned to Remount duty. But, even with this additional personnel (equivalent to about 33 Remount squadrons), it was still difficult to handle the situation satisfactorily and a request for 43 Remount squadrons was sent by Remount Headquarters to the Chief Quartermaster on May 11, 1918. On May 12, four Remount squadrons arrived in France. On June 24, 1918, in response to a memorandum calling for an estimate of the Remount personnel required, a report was sent to the Commanding General, S. O. S., asking for 89 Remount squadrons in addition to the combatant troops then already assigned or for 122 Remount squadrons in case this combatant personnel was relieved.

After several requests for personnel had been made by the Chief of Remount Service on May 11, June 24, July 14, and August 5, 1918, a cablegram was sent, on August 7, by G. H. Q. to Washington, asking priority for 113 Remount squadrons. On November 11, 1918, when the Armistice was signed, *we had only 36 Remount squadrons in France,* with 10 more on the way.

These figures show conclusively how the Remount Service was handicapped for lack of personnel during the entire year 1918, and the fact that it achieved such satisfactory results is due mainly to the tireless energy and the splendid *esprit de corps* which animated this organization throughout the war, and also to the foresight and perseverance of its Chief and its Executive Officer, aided by the support they received from General H. L. Rogers, Chief Quartermaster of the A. E. F.

2. LACK OF QUARTERS, STABLES, AND BUILDING MATERIAL

From the very beginning of our operations in France, the officers in charge of the Remount Service realized that we would have to construct our own depots, as it was hopeless and most unsatisfactory to adopt the billeting system in use by the French Army, whereby animals would be scattered in dark, damp, insanitary stables, barns and cow-sheds in French villages. Besides, on account of the extremely cold and rainy weather prevalent in the greater part of central and eastern France during the winter season, it was equally out of the question to have recourse to the corral system, such as used on the Mexican border.

Therefore, as early as September, 1917, the officer in charge of Remount work requested G. H. Q. to obtain permission from the French Government to select one or more sites upon which we could erect permanent barracks and stables. However, due partly to the scarcity of building material, partly to the uncertainty of the future zone of American operations, all efforts made by the Remount Service along this line remained fruitless prior to the spring of 1918, G. H. Q. seeing no necessity for the immediate construction of depots.

Fortunately, we were able to obtain the immediate use of the three French receiving depots at Saint Nazaire, La Rochelle, and Merignac (Bordeaux), which had been used by our Allies, up to our entry in the war, for the reception of animals from the United States and Canada. Had it not been that these three ready-made depots were turned over to us in 1917, we would have been greatly embarrassed in receiving our own shipments of animals from overseas, inasmuch as lumber for construction work was almost unobtainable during the winter of 1917-18, as the Forestry engineers in charge of supplying same had barely started their operations and most of the lumber shipped from their sawmills was utilized primarily for hospital and warehouse construction.

In the spring of 1918 the Remount Service had received the authorization to purchase animals in the open market in France, and it was expected to procure about 50,000 head from this source. An urgent appeal was then made to G. H. Q. for stabling facilities to accommodate this large influx of animals. In March, 1918, the French Remount Service turned over to us six small depots, or annexes, with a capacity of from 400 to 600 head each. This, of course, did not begin to fill our needs, and G. H. Q. was again applied to for permission to construct several depots in the base and intermediate sections. On May 7 this authority was finally received, and on May 11 a Remount officer was appointed

by the Chief of Remount Service to select sites and submit plans. On May 21 a report was made to the Chief Quartermaster recommending the establishment of five depots with the following capacity:

Selles-sur-Cher	2,000	head.
Gievres	5,000	"
Sougy	4,000	"
Lux	2,000	"
Gray	2,000	"
Total	15,000	"

Up to that time we had in operation the three base depots above mentioned, at Saint Nazaire, La Rochelle, and Merignac, and the six small annexes turned over by the French, and the advance depot at Bourbonne-les-Bains, established in October, 1917, by a squadron of the 3d Cavalry, and where the billeting system had been used with very unsatisfactory results for several months, until some French portable stables were secured. During the winter of 1917-18 the corrals of that depot were from fetlock to knee-deep in mud, and almost 20,000 cubic yards of rock had to be hauled from a quarry one mile distant to make suitable standings and roads.

British Remount depots were visited in the spring of 1918 by officers of our Remount Service to obtain the benefit of our Allies' three years experience in the field, and some of their methods and types of construction were adapted to our own requirements.

Later on the project to establish a depot at Gray was abandoned, but from time to time, as our requirements became greater, authority was obtained to establish additional depots (Montier-sur-Saulx, Carbon-Blanc, La Pallice, Bayonne, the latter for receiving and conditioning animals bought in Spain). The Remount Service also operated depots at the various artillery training camps: Le Valdahon, Coetquidan, Souge, La Courtine. After the Armistice additional depots were established in French cavalry and artillery barracks at Besancon, Commercy, Verdun, and Nancy and three in the 3d Army area in Germany.

3. LACK OF A DEFINITE POLICY

Although the necessity for an organization for purchasing, receiving, conditioning, and supplying animals for the A. E. F. was evident from the day we entered the war, it was not until September 18, 1917, that a General Order (Number 39) was published by G. H. Q. organizing officially the Remount Service. Up to that time and since the arrival of our first troops in France, in July, 1917, an officer of the Quartermaster Corps had been "nominally in charge" of Remount work, which at that time consisted mostly of purchasing animals from the French Army and submitting reports of these purchases to G. H. Q., which cabled them to the War Department. It was not until November 12, 1917, that the designation of "Chief of the Remount Service" was officially given to that officer.

The policy of the Remount Service (if it may be said that any such policy then existed) was, in those days, supposed to be framed by G-1 at G. H. Q., but that office had too many important matters on its hands to be bothered with such a secondary branch of the Army as the Remount Service, which received at the time very little encouragement and scant consideration.

It was not until January 12, 1918, that Tables of Organization of the Remount Service were made up (Confidential Series-D, T. of O. No. 332), giving the Remount Service its legal charter and making of it a permanent and well-defined branch of the Quartermaster Corps. Up to that time its general organization had been shaped solely by General Order No. 39, G. H. Q., A. E. F., above mentioned. Even then the functions of the Remount Service were not even clearly indicated, for, in addition to caring for the animal situation, the Remount Service was also in charge of the Veterinary Service, the procurement and issue of forage, of harness and horse-drawn wagons, water-carts, rolling-kitchens, and ambulances. It even operated the *lost-baggage department* of the A. E. F. These various attributions made it an unwieldy and chaotic organization to handle; but gradually most of these heterogeneous functions were transferred to other departments of the Quartermaster Corps, where they properly belonged, while the Veterinary Service in August, 1918, became part of the Medical Corps.

One early feature of the Remount Service which interfered with its success was that the personnel and the depots were placed under the direction of the commanding generals of the various sections—base, intermediate, and advance. This was changed on July 26, 1918, when the immediate control of the depots and their personnel for administrative purposes was vested in the Chief of Remount Service, representing in this capacity the Chief Quartermaster of the A. E. F.

Another unsatisfactory anomaly in the early history of the A. E. F. was the co-existence of two chiefs of Remount Service, one at G. H. Q., the other at Headquarters of the Line of Communications, with the inevitable result of duplicate reports and sometimes conflicting requests reaching G. H. Q. from these two heads of the service. This abnormal state of affairs was abolished when, in March, 1918, the headquarters' office of the Remount Service at Chaumont moved to Tours and became merged into the former Line of Communications Remount Headquarters, or rather absorbed it, functioning thereafter directly under the Chief Quartermaster of the A. E. F.

One of the important needs of the Remount Service was filled when in May, 1918, a set of regulations was compiled in pamphlet form and issued to the personnel by the Chief of Remount Service. Up to that time depot commanders had been acting mostly upon their own initiative and from personal experience in schooling their personnel in the numerous duties connected with the care, feeding, shoeing, conditioning, and shipping of animals. The "Regulations" of May, 1918, were superseded in October of that year by a much more complete "Manual," which covered every field of action of the Remount work.

4. SHORTAGE OF ANIMALS FOR ISSUE

This, of course, formed the basis of much criticism, directed against the Remount Service, especially during the period of the major operations in the summer and fall of 1918; but, of course, these complaints were entirely unjustified, as the Remount Service could not supply what it did not have, nor could the depots issue sick or unfit stock. It is an open secret that the shortage of animals became so acute during the Argonne offensive that the efficacy of that operation was almost impaired by it, and had the war lasted a few weeks longer our First Army would have become immobilized for lack of animals. Cases have been cited where artillerymen had to haul their guns along the road after their teams had been killed or had fallen exhausted by the wayside. Every animal in the Remount depots, barring the sick, had been shipped to the front and the French had turned over to us 13,000 horses in the midst of the final offensive. In spite of all this, the total shortage of animals in the A. E. F. (including the S. O. S.) on November 11, 1918, was 163,382. The following copies of telegrams sent during that period give an idea of the situation:

HEADQUARTERS 1ST ARMY, *Sept.* 7, 1918.

COMMANDING GENERAL, S. O. S.:

Number 29, G-4.—You are advised that the situation with reference to the First Army is critical. Desire to emphasize this fact. We were given assurance that animals would be forthcoming at rate of four hundred per day. They are not being received. There is no time for delay in this matter. If animals are available, request that they be shipped at once, and pressed by every means possible. Request this wire be acknowledged and assurance given that animals will be forwarded as stated. DRUM.

. . . . . .

G-4, G. H. Q. HEADQUARTERS 1ST ARMY, *Sept.* 13, '18.

Number 77, G-4-R.—Following is an example of the wires being received in this office giving remount situation. This from Fourth Corps: 1-G, Number 84. Attention G-4. Horse situation most serious in this corps. All divisions badly in need of animals. Divisions are placed in the situation of not being able to properly evacuate animals in view of fact that no replacements are available; consequently the animals which are only partially fit for duty are retained by organizations rather than evacuate them due to fact that the unit in question will be without proper facilities for movement. Can anything be done in this matter? Unquote. Cannot something be done to require French to deliver animals. With motor transportation short and animal transportation so reduced on account of shortage and unfit condition of animals, supply presents a grave problem where active operations are considered. DEWITT, G-4.

. . . . . .

B-87-A, 242 O. B., 1 Ex Rush. H. A. E. F., *Oct.* 8, 1918.

COMMANDING GENERAL, S. O. S., *Tours:*

Number 3271, G-1.—The military situation demands that extreme measures be taken to supply the First Army immediately with additional animals. The Commander-in-Chief directs that you ship at once to First Army all horses in cavalry organizations and approximately 50 per cent of all other animals now in services of supply organizations or activities. Only animals suitable for combat service should be selected. Arrangements should be made to expedite delivery of every possible animal from hospitals to Remount depots. All animals in Remount depots which are in even fair condition for combat service should be shipped at once, without being held for training or for any other purpose. Animals should be shod locally before shipment whenever this will not involve unusual delay. All animals except those of the Reserve Supply Wagon Train now at Nevers will be turned in to the nearest Remount depot for shipment. Animals of Reserve Supply Wagon Train will be shipped direct from Nevers under orders from Chief Remount Service. You are authorized to hire animals locally, with drivers when necessary, for purpose of replacing animals shipped to First Army. Every possible measure should be taken to expedite shipment of greatest possible number of animals in the least possible time. Make arrangements for prompt forwarding animals and telegraph progress frequently to these headquarters. ANDREWS.

. . . . . .

Only at one time during the entire war did the A. E. F. have its requisite allowance of animals; that was in October, 1917, when we had only one division overseas (the First), which had been fully horsed through purchases made in France and shipments from the States. The principal cause of our shortage of animals was evidently lack of tonnage. It was reasonably considered more important to ship men and also supplies and ammunition, of which our French Allies were in the greatest need, than horses and mules, inasmuch as the French Government, as early as June 15, 1917, had cabled to its military attaché in Washington to make our War Department a concrete offer of enough animals to equip our First Division to go overseas (4,850 horses and 2,100 mules); and later, on July 1, a further offer was made through the same channels to supply the A. E. F. with 7,000 animals *per month*.

This last offer caused our War Department to cancel its plans for shipping any more animals abroad, and no more ships were converted into horse transports. As a matter of fact, no shipments from the United States were received in France from July 4, 1917, to November, 1917, the tonnage of the animal transports having been diverted to other purposes. Unfortunately it turned out, on August 23, 1917, that while the French Government agreed to live up to its first offer, it found itself unable to supply us a single animal beyond the number required for our First Division, already in France. It agreed, however, to "loan" us 4,000 draft horses for the Artillery Brigade of the 26th Division, then expected to arrive shortly. Beyond this it could not furnish anything, owing to the needs of the French Army.

Purchasing by our Remount Service, therefore, stopped in France, and by that time (November, 1917) shipments from the States were resumed, but at such a slow rate that they could not keep up with the growing requirements of

the A. E. F., as division after division landed in France and requisitioned the Remount Service for its allowance of animals. On February 22, 1918, a cable was sent to the War Department indicating a shortage of 22,900 animals.

At a conference held on February 19, 1918, with the Chief of the French Remount Service, it was learned that the French expected to purchase in the open market, up to August, about 100,000 animals, 50 per cent of which they promised to turn over to the A. E. F. at purchase price plus 30 per cent. This brilliant prospect caused G. H. Q. to cable the War Department to ship thereafter only heavy draft horses at the rate of 2,000 per month. But once again our hopes were dashed, for our share of the yield from the open-market purchases was only 31,589 animals up to June, 1918, and the War Department had once more stopped altogether all shipments of horses since April. The result was that the A. E. F. shortage in animals had made a tremendous leap, amounting to 125,934 by June 25, 1918.

It was then that the French Government, realizing the hopelessness of our situation and needing animals for its own armies, ordered the requisitioning of every available and suitable horse and mule in the hands of the civilian population. This operation began on June 20, lasting until August 15, and gave us 74,070 animals, or about 70 per cent of the total obtained in this manner.

At the same time G. H. Q. had granted the Remount Service authority to purchase animals in Spain, and in June, 1918, several Remount officers and veterinarians were sent to that country, where they contracted with local dealers for the delivery, subject to inspection, of a certain number of cavalry horses and mules. It had been hoped to secure about 30,000 head from this source, but operations were hindered by the ill will of the Spanish Government, which, in July, 1918, declared an embargo on the exportation of horses and mules. This royal decree was due to German influence, which was all-powerful in Spain, but diplomatic pressure was brought into play and the embargo was lifted, or rather permission was obtained to send 20,000 head to France. Of these 20,000 animals, 10,763 were exported before purchasing ceased in Spain, after the Armistice. Including the shipments made before the embargo went into effect, a total of 21,259 animals were received from Spain.

Mention should also be made here of the animals supplied by the British Expeditionary Forces to our ten divisions which received their training in the British areas. The total received was 18,883 head, while 2,376 were obtained from the B. E. F. subsequently and even after the Armistice.

In the summer and fall of 1918, G. H. Q., realizing how critical the shortage of animals was becoming and fearing that our operations might become hampered thereby, cabled several times to Washington requesting urgently the shipment of animals to the A. E. F. On June 30 a cable was sent asking for 8,000 heavy draft horses per month. On July 12 another request was cabled, urging shipment of 25,000 animals of various classes per month. On the 21st the War Department replied that, owing to lack of tonnage, only 11,000 per month

could be shipped prior to September 1, 1918. G. H. Q. then cabled back, asking that certain vessels be converted without delay into horse-boats. In the meantime changes were made in the Divisional Tables of Organization, reducing to a strict minimum the allowance of animals, and steps were taken to motorize a certain number of artillery brigades. In spite of all this, the situation became so serious that on September 14 G. H. Q. sent a further cable to the War Department asking for the shipment of 30,000 animals per month. Washington answered that it was impossible, under present conditions, to ship that many animals, and, as an instance of how badly our Animal Transport Service was crippled for want of boats, it may be stated that during the time of our greatest emergency only three horse-boats arrived in September, 1918, and three in October, bringing a total of 4,409 animals instead of the 22,000, which should have been sent, according to the War Department's cabled promise of July 21.

5. FORAGE SHORTAGE

As stated under the heading of "Lack of Policy," the Remount Service during its early history had to look after the procurement and issue of forage, which was a source of continual worry. The French Army relieved the situation partially in the winter of 1917-18 by supplying us with a certain amount of hay. It had been expected that the 1917 French oats and hay crops would enable us to purchase much forage locally, and accordingly the shipments from the United States were curtailed. However, the crops did not yield the quantities anticipated and a shortage of forage ensued; so that, in February, 1918, all animals of the A. E. F. had to be placed on half rations; but subsequent shipments from America soon made it possible to re-establish the normal ration. By the end of March, 1918, forage procurement and supply ceased to be a function of the Remount Service and was transferred to the Supply Division of the Chief Quartermaster's Office, where it logically belonged.

6. MANGE AND INFLUENZA EPIDEMICS

Mange and influenza were at all times more or less prevalent among the animals of the Allied armies, and those of the A. E. F. did not escape the contagion, in spite of the combined efforts of the Remount Service and veterinary personnel. This was unavoidable when one realizes the climatic and sanitary conditions under which horses and mules had to live. Besides, many of the animals received were young and naturally susceptible to all the ills that are incident to shipment and exposure. Most of these young animals arrived at the depots already infected with shipping fever and influenza.

At many of the depots during the winter months, mud in the corrals was almost knee-deep, and the standings themselves could not be kept dry. Some depots were, of course, established in localities where conditions were far from ideal—overcrowding, lack of exercise and grooming due to shortage of Remount personnel, improper isolation of sick animals, insufficient veterinary personnel, etc. This was the case at most of the artillery training camps where

Remount depots were established: at Camp de Souge 543 animals died in three months, mostly of influenza, while at Camp Coetquidan the mortality in four months, from May 1 to August 31, 1918, reached 1,151, with a percentage of sick animals running during the same period from 36 per cent in May to 90 per cent in June and 82 per cent in August, the majority of the cases being influenza and infectious pneumonia.

Fighting mange was an equally hard task, as a great number of our animals contracted this disease, which is the bane of large armies in the field. Dipping vats similar to those used by the British and sulphurous gas chambers adapted from the French were used at all Remount depots to disinfect and fumigate the animals affected, and both methods gave very satisfactory results.

7. INADEQUATE RAIL TRANSPORTATION

Whoever has had the unpleasant experience of traveling in the French stock cars commonly designated as having a capacity of "40 Hommes—8 Chevaux" realizes the problem that faced the Remount Service in shipping large numbers of animals. These cars, which hold only eight ordinary horses or ten small mules apiece, besides being much too small, were without means of ventilation and generally much the worse for wear and tear during three years of rough usage before we came in the war. In addition to this, it was generally impossible to obtain any of this rolling stock when badly needed for shipments to the front. Appeals to the French railroad authorities invariably brought the reply that they were already doing all they could to assist us, and that cars would be furnished as soon as available.

This shortage of rail transportation was felt especially during the latter part of the 1918 offensive, when all lines leading to the front were congested with long trainloads of ammunition and supplies, and it was then necessary for the Remount Service in many cases to send animals overland in convoys from the advance depots to the actual battle line, some 150 to 200 kilometers distant. Even after the Armistice, when the Allied armies advanced into Germany, it was almost impossible to obtain stock cars for shipments of animals, as all the rolling stock was utilized to convey troops and material towards the Rhine.

8. LACK OF LIAISON BETWEEN REMOUNT SERVICE HEADQUARTERS AND DIVISION, CORPS, AND ARMY HEADQUARTERS

For a long time there existed no direct connection between the Remount Service Headquarters and the division, corps, and army headquarters. Animal requirements of combat troops were unknown to the Remount Service until requisitions came through G. H. Q., A. E. F. Therefore, early statistics of animals on hand in the A. E. F. established by the Remount Service had to be more or less guesswork, as divisions did not report their losses or had the habit of transferring animals from one to another without reporting these changes to the proper authorities; there was no co-ordination possible between field

troops and Remount Headquarters, since no instructions had been issued by G. H. Q. to division commanders to send periodical reports of animal status to the Remount Service.

It was only in May, 1918, that all division commanders and commanding officers of organizations in the Services of Supply were ordered by G. H. Q. to report *weekly* to the Chief Quartermaster, A. E. F., for the information of the Remount Division, the number of animals, by *classes*, which they had on hand, as well as the animal losses during the preceding week. These reports were sent by telegraph or telephone and were of great value in estimating the animal requirements of the A. E. F., though at first many division commanders regarded these statistics as still another instance of army red tape and failed to impress upon their subordinates the importance of reporting correct figures.

Another fact which prompted the Remount Service to urge the assignment of Remount liaison officers at division, corps, and army headquarters was that few men in the combat organizations knew how to care for animals, even in the Regular Army divisions, which were filled largely with recruits. Most of these men knew more about repairing a "Ford" than grooming or feeding a horse.

With the approval of G. H. Q., a Remount officer was first assigned in July, 1918, to Headquarters First Corps, then in action south of the Marne; this officer's instructions were to look after the receiving, handling, and evacuation of animals, and he performed these duties so satisfactorily that G. H. Q. agreed to the plan proposed by the Remount Service to have Remount liaison officers attached to all division, corps, and army headquarters. Other assignments of officers were made, until on November 11, 1918, all corps and army headquarters and most divisions had a Remount officer attached to their staff. These officers submitted twice a month to the Chief of Remount Service a tabulated report of animal status in their respective organization, showing receipts, losses, transfers, and classification of animals on hand. These reports made it possible for the Remount Division at Tours to prepare estimates for replacements and submit consolidated reports of animal strength to G. H. Q.

The Divisional, Corps, and Army Remount officers were of great assistance to organization commanders as technical advisers in all questions of administration relating to the distribution, care, and feeding of animals; they also gave informal talks to regimental and battalion officers on similar subjects, as well as on stable management, grooming and shoeing, care of harness, etc.; they inspected all incoming shipments and supervised the evacuation of sick and wounded animals to veterinary units. Finally, they reported to the division, corps, or army commander conditions that they could not correct themselves or which required disciplinary measures. Within a short time after these Remount officers had taken over their duties a great improvement was noticeable in the appearance and condition of animals in the hands of the various organizations; it was possible thereafter for the Remount Service Headquarters to keep in close touch with the needs of every division in the A. E. F.

9. DISPOSAL OF ANIMALS AFTER THE ARMISTICE

When the Armistice was signed there were some 170,000 animals on hand in the A. E. F. Of this number 50,430 were assigned to the 10 divisions, corps, and army troops that formed the new Third Army, leaving a balance of about 120,000 to be disposed of by the Remount Service as fast as they were no longer required by organizations returning to the United States.

Shipments from America were stopped after the Armistice, but quite a number of horse-boats which were either loading at Newport News or on the way on November 11 arrived in France until the latter part of December, 1918, so that on January 1, 1919, there were 192,386 animals on hand in the A. E. F. and the Third Army. For the first time, in 1918, the Remount Service was able to fill all requisitions, at the same time holding a large surplus of animals in its depots. The prospect was then that this surplus would materially increase as units released for return to the States would transfer their animals to the Remount Service. It was, therefore, a vital question to dispose of the horses and mules thus turned in, and the question of disposal was taken up with the French Government. The latter, at first, was most anxious to have the sales conducted under its auspices, and took over some 15,000 head from our depots after inspection by a military commission. The animals were sold at auction in various parts of France by French authorities, but the sales were most disadvantageous to the interests of the United States, as the French auctioneers sold the animals very much below their real market value and did not attempt to push the bidding beyond a very low figure. Many horses and mules were sacrificed at probably not over half of what we could have sold them for, and these animals which the French Commission had selected were the best in our depots.

Later on, in March, 1919, a subsequent agreement with the French Government gave the Remount Service the necessary authorization to hold its own auction sales. We were able in this manner to dispose of a very large number of animals at prices far better than those obtained by the French officials; 600 auction sales were held by the Remount Service in every part of France—south, southwest, and east of Paris and in Paris itself. Private sales to farmers and dealers were held at the same time at all the Remount depots; so that, through both auction and private sales, 113,098 animals were disposed of between March 1 and June 30, 1919.

The French Government had also purchased, on its own account, 33,045 of our animals to be distributed among the inhabitants of the devastated regions, and other governments (Belgium, Poland, Serbia, Switzerland, and Czechoslovakia) became interested in purchasing some of our surplus stock of horses and mules, the Poles buying 5,500 horses from the Third Army and the Belgians 490 cavalry horses from the 6th Cavalry.

All these sales were conducted under the direction of the Remount Service, which had its officers and men detailed to convoy the animals to the selling

point, conduct the sales, and deposit the proceeds with the nearest disbursing quartermaster. The reports of all these sales, showing number and classification of animals sold and average prices by classes, were compiled at Remount Service Headquarters and submitted to the U. S. Liquidation Commission. In order to complete this work, three Remount officers and four enlisted clerks remained on duty in France until the end of October, 1919, after all other Remount personnel had returned to the States. By that time the Third Army itself had been reduced to about one brigade's strength and had disposed locally of all surplus animals, retaining only about 600 horses and mules.

10. CO-OPERATION WITH FRENCH GOVERNMENT AND OFFICIALS

A history of the Remount Service of the A. E. F. would not be complete if a few lines were not written on this subject, for the Remount Service was and had to be, more than any other branch of the service, in constant relation with the French authorities. Local purchases of animals, designation of sites for Remount depots, transfers of horses from the French Army to the A. E. F., sale of surplus animals to the French Government and inhabitants—all these questions brought us constantly in touch with French officials and army officers.

While on a few occasions and in specific cases unfortunate misunderstandings were caused by ignorance of the language on both sides, disregard of local customs, and lack of diplomacy on our part, it should be said that these few occurrences did not spoil the good relations we had with our Allies, who almost invariably acceded to our requests and showed us every courtesy; they were always glad to give us the benefit of their three years' experience in the war and save us from making mistakes which had cost them dearly.

One of the few and earliest cases of friction in our dealings with the French occurred in September, 1917, when our Remount officers in Besancon were inspecting horses shipped by French Army depots to our 1st Artillery Brigade, then commanded by General Peyton C. March. A French Army major was attached to our purchasing board as representative of the Minister of War, and he became very indignant when the American officers turned down a number of horses that did not conform to our specifications, on account of blemishes, age, size, or color. After this French officer had vigorously protested, with outstretched arms, against this action, he finally declared that, inasmuch as such horses as we had turned down were used daily by the French Army at the front to good advantage, and as they had nothing better to offer us, he would stop the inspection right there and then and refer the matter to the Minister of War. This unfortunate and unpleasant situation was ended a few days later upon receipt of orders from G. H. Q. to reject only animals that were absolutely unsound or unfit for work and to turn these down only after consultation with the French veterinarian on the board.

Several other misunderstandings happened during the purchase and disposal of animals, but, on the whole, our dealings with the French were of the

most pleasant sort, and in finishing this article it is only fitting and just to address an expression of thanks to the several French officers assigned to the Remount Service, who on many occasions were of invaluable assistance to our own men in straightening out difficult questions and whose genial ways won for them many friendships in the Remount Service of the A. E. F.

I can only cite by name a few of these liaison officers with whom I came personally in contact: Colonel Jean Caillault and Commandant de Brye, of the French Mission at Tours; Captain de Marenches and Captain de La Ferronnays, of the French Mission at G. H. Q.; Captain Koenig and Lieutenant Dumas, of the French Commission with our Remount Purchasing Board at Besancon; Captain Raoul-Duval, attached to our Advance Section Remount Office; Captain de Reinach-Werth and Lieutenant de Fonlongue, attached to our Paris office; and Lieutenant de Vallombrosa, liaison officer at Merignac Remount Depot. The Chief of the French Remount Service, General Forqueray, and his assistant, Colonel Tinel, were both always ready to co-operate with us and gave our officers every facility to visit French depots.

To all of these the American Remount Service is indebted for their friendly and full-hearted support and assistance in an hour of need, when we were learning the game. I think it can truly be said that we have profited by the lessons of the World War, as far as our Remount Service is concerned, and that we now have an organization to be proud of and upon which we may rely in future emergencies.

TH' MORNIN'S MORNIN'

A Ballad of the Border Patrol

BY

DAMON RUNYON, One o' Langhorne's Men

("Lord George" Langhorne commands the 8th Cavalry, patrolling the Mexican border until lately in the Big Bend country)

Me in the Polyclinic, with a hole where I wear me hat,
From a piece o' shell in the Argonne that knocked a battalion flat;
Tabbed as a wounded doughboy an' lookin' a lot the part—
One o' Lord George Langhorne's men an' a cavalryman at heart.

Me in the Polyclinic an' all the world outside,
An' I'm readin' here in the paper how George has gone for a ride;
I'm hearin' the reak o' the saddles an' the roar as the columns start—
One o' Lord George Langhorne's men an' a cavalryman at heart.

Over a year since the Argonne, an' two since I got that hunch
Down in the Big Bend district, to serve with the doughboy bunch;
Then come that shell in the Argonne, dumpin' my apple cart—
One o' Lord George Langhorne's men an' a cavalryman at heart.

The dust drifts by the window—a minute ago 'twuz sleet—
An' the noise o' the city yonder is the sound o' the horses' feet
Poundin' along through the mesquite, as the buzzards lift an' dart,
An' I'm off on a ride with Langhorne—a cavalryman at heart.

Me with a busted sconce piece an' a year on the flat o' me back;
Fourteen times on the table for the croakers to have their hack;
An' the nurse, she says, "Keep quiet!" an' her tone is a little tart;
But I'm ridin' tonight with ol' Lord George—a cavalryman at heart.

Me on me ol' sorrel, Sandy, an' hoppin' along like hell,
Ridin' past miles o' pillows, away from that hospital smell;
Chasin' a bunch o' interns, an' nurses, an' doctors smart—
"Trot! Gallop!"—I foller ol' Langhorne—a cavalryman at heart.

Clancy here at me elbow an' Sweeney there at me hip,
Lord George leadin' the column an' hittin' a bear o' a clip—
"Halt!" an' we're out o' the saddles an' wait for the row to start—
All o' Lord George Langhorne's men an' cavalrymen at heart.

The nurse says, "He had a night sweat an' he didn't sleep none too well";
I'm back again on the pillows an' smellin' that hospital smell,
Tabbed as a wounded doughboy an' lookin' a lot the part—
One o' Lord George Langhorne's men an' a cavalryman at heart.

Cavalry Signal Communications

BY

Major O. S. ALBRIGHT, Signal Corps (Infantry)

(*Continued from the January Number*)

INDEPENDENT CAVALRY

THE VARIOUS rôles which independent cavalry will be called upon to play are more numerous and diversified than in the case of advance or advance-guard cavalry. In so far as the consideration of their signal communications is concerned, these rôles may be divided into two general classes—that is, (1) when the cavalry body is employed in a widely dispersed formation, as a screen or in searching for contact with hostile forces, and (2) when the cavalry body acts in a compact mass, as when holding a certain locality or in making a concerted attack upon a definite enemy position.

The following principles of signal communication apply as well for similar units of advance or even of advance-guard cavalry when employed under similar conditions.

A cavalry division acting as the independent cavalry of an army or a corps may be taken as a typical example. When employed either in dispersed or in mass formation, the directing control of the cavalry division and the channels of communication of course remain the same. The means employed for communication from the division command post to the command post of the controlling unit, army or corps, would serve as well in one case as in the other. For communication within the cavalry division, however, wire communication from division to brigade and from brigade to regiment would often be feasible when the cavalry was operating in close formation, whereas wire communication for dispersed formations would be impracticable.

Considering a cavalry division acting as the independent cavalry of an army, the necessary channels of communication are from the division command post to the army command post or headquarters, from the division command post to the command posts of its brigades and auxiliary arms, from the brigade command posts to their respective regimental command posts, from regimental command posts to their respective squadron posts, and from squadron command posts to the command posts of their respective troops.

When employed in either dispersed or close formation, what means are suitable for communication from the division command post to the army? On account of the usually long distance between the two command posts, the

chief means of communication would be radio. The radio set of the division would be adjusted for work with the army set employed in the army-to-corps net.

Next in importance comes courier service. The use of mounted couriers would be out of the question in most cases, motorcycle couriers being normally employed.

Conditions will often warrant the employment of an airplane for courier service between the division command post and the army. In case distances are great or road conditions are unfavorable, the airplane courier will often prove a more speedy messenger for important information than the motorcycle. In planning this service it is necessary to consider arrangements for getting the message to the courier airplane, perhaps at the squadron airdrome or perhaps at a landing field nearer the division command post, depending upon conditions existing at the time. It should be borne in mind that this discussion is of the means of communication for which the cavalry division only is responsible. The army would perhaps also employ a courier airplane to carry important orders to the division, either dropping them at the division panels or landing at the division command post, as warranted by the conditions of terrain.

On account of the long distances ordinarily separating the army and cavalry division command posts and the frequent moves of the latter, wire communication between them is impracticable. Commercial wires, if such happen to exist, should always be used for either telephone or telegraph service.

Visual signaling might, in extremely rare cases, be used as an emergency means of communication. For example, during operations over terrain consisting of extended stretches of flat country with isolated hills or prominent points and in country where sunlight is the rule, certain conditions might warrant the use of a heliograph or a very powerful light projector for night-work. However, in view of the reliable service of radio telegraph now developed, there seems little need of visual signaling in such cases.

Pyrotechnics would evidently be of no value, due to distance.

Identification and the rectangular signaling panels would be used habitually from the division command post to the airplane.

Usually pigeons will prove an excellent means of communication in this case from the division command post to the army, since the army headquarters would remain in one location a sufficient length of time for the establishment there of a pigeon loft. A pigeon post of a few birds, 8 or 12, could be assigned to the division command post and prompt service for important information would be assured by this means. It must be remembered, however, that, as a rule, pigeons should be kept away from their lofts for only three or four consecutive days, when, if they have not been previously used, they should be released and a supply of fresh pigeons sent forward from the loft.

It is also a fact that in all probability the events which occur the first three or four days of the operation of independent cavalry are the most important for the army commander to learn promptly. Therefore pigeons furnish a very suitable and excellent means of communication in this regard.

Dispersed Formation.—When the cavalry division is employed in dispersed formation, the following means of communication will be found suitable for use *within* the division:

(*a*) Between division command post and brigade command posts:

Radio—One set for communication to brigades,
One set for communication from the airplane.
Couriers—Usually motorcycle couriers,
Courier airplane.
Visual signaling—A remote possibility.

An airplane of the air unit operating with the division would in many cases render valuable service when employed as a courier airplane. Messages or orders from the division command post would be dropped at the brigade panels, and even at regimental panels, if it ever became desirable for the division to communicate directly with a regiment.

(*b*) Between brigade command post and regimental command posts:

Radio—One set for communication to regiments.
A set at the brigade command post for communication to the airplane is not necessary unless an airplane is especially assigned for work with the brigade.
Couriers—Usually motorcycle.
Visual signaling—A remote possibility.
Pyrotechnics—Possibly the one signal mentioned.

(*c*) Within the regiment as given under "advance cavalry."

Close Formation.—When the cavalry division is employed in close formation it presents the same aspect, as to suitable signal communications within itself, as an infantry division in combat, except that under the present organization its subordinate units, regiments and battalions, are more numerous, and a slightly greater degree of dispersion than in an infantry division is likely to exist. The same means of communication as previously mentioned are suitable in this case, and in addition wire communication and the usual pyrotechnic signals as used within an infantry division.

During combat in close formation wire communications are feasible from division command post to those of brigades, and in most cases on to those of regiments. The principle of an axis of signal communications should be followed. The wires should assure communication to the subordinate units until the division breaks from the close formation to the dispersed formation, when the means of communication suitable for the latter formation only should be continued.

Wire Line Instruments.—As will be seen by referring to the systems, four types of instruments are used over wire lines, viz., telephone, telegraph, buzzerphone, and service buzzer. The principle of operation of the telephone is the propulsion of voice currents or waves over the wires, while the principle of the other three instruments is that of the telegraph. For warfare of continuous movement, the telephone would be employed to a greater extent than the others. During periods of long stabilization, when time is available for stretching long lines from the rear to the front, wire communication would be established from the army. On these lines telephone and telegraph service would be established, the ordinary telegraph instrument being employed. The buzzerphone and service buzzer are special instruments and would be used on any wire lines where their special services were required.

The buzzerphone consists of a small portable case containing a telegraph key, head receivers, and the necessary electrical transmitting power. A special arrangement which permits its use as a telephone may be attached to it when occasion demands. Normally this should not be done, since a dual function assigned to any instrument interferes with its full and efficient employment in its particular function. The particular advantage of the buzzerphone is its secrecy when used as a telegraph instrument. As such, the interception of its messages is very difficult. When used as a telephone, the buzzerphone is no more secret than any other telephone instrument.

The service buzzer is in reality a modernized form of the old cavalry buzzer. It is contained in a small portable leather case, which contains a telegraph key, receivers, and small dry batteries. It is also equipped with an attachment which permits its use as a telephone. As a telephone instrument, it is no more powerful than any other telephone, but as a telegraph it is the most powerful instrument of its kind known. Due to this power, it is far from secret; but it is able to work over lines too long for telephone transmission and over leaking lines whose insulation has been worn by the passage of traffic or other causes; also, due to its high power, the service buzzer interferes with telephone, ordinary telegraph, buzzerphone, or radio systems with which it is in too close contact, and on this account cannot be used as an integral part of the ordinary wire system. Its use is therefore restricted to special cases which arise requiring its employment.

Cavalry as Infantry.—There is still another phase of employment of a cavalry division which has not been specifically considered in the above discussion, and that is its employment as infantry as a part of a corps. This use of a cavalry division would probably be rather unusual, and, from the viewpoint of signal communications, need be merely mentioned, since the means of communication as given for a cavalry division acting in close formation would fulfill the necessary requirement in a situation of this kind.

To summarize the suitable and requisite means of signal communication for employment by cavalry, we will have—

(A) *At the division command post:*

Radio—One set for communication to the controlling unit,
One set for communication to cavalry brigades,
One set for communication from the airplane.

Wire Communication—Necessary equipment for use to cavalry brigades during operation in close formation only.

Couriers—Motorcycle couriers at the division message center for communication to the controlling unit and to cavalry brigades (or regiments).
Courier airplane at the division airdrome or landing field for communication to the controlling unit and to cavalry brigades (or regiments).

Visual Signaling—A heliograph for emergency use to the controlling unit (the propriety of issuing this equipment to the division is questionable).

Pigeons—A pigeon post at the division message center for communication to the controlling unit.

Panels—Identification and rectangular signaling panels for communication to the airplane.

(B) *At the brigade command posts:*

Radio—One set for communication to division or controlling unit,
One set for communication to regiments,
One set for communication from airplane.

Wire Communication—Necessary equipment for use to cavalry regiments during operation in close formation only.

Couriers—Motorcycle (or mounted) couriers at the brigade message center for communication to division or controlling unit and to regiments.

Visual Signaling—A heliograph for emergency use to division or the controlling unit (see remark under A).

Pyrotechnics—Rockets.

Panels—Identification and rectangular signaling panels for communication to the airplane.

(C) *At the regimental command posts:*

Radio—One set for communication to brigade or controlling unit.
One set for communication to squadrons.

(NOTE.—A radio set for communication from the airplane is seldom necessary at a regimental headquarters. Panels and dropped messages will usually fulfill the requirements.)

Couriers—Mounted or motorcycle couriers at regimental message center for communication to brigade or controlling unit and to squadrons.

Visual Signaling—A heliograph for emergency use to brigade or the controlling unit (see remark under A).

Pyrotechnics—Rockets.

Panels—Identification and rectangular signaling panels for communication to the airplane.

(D) *At the squadron command posts:*

Radio—One set for communication to regiment or the controlling unit.

Couriers—Mounted (or motorcycle) couriers at squadron message center for communication to regiment or the controlling unit and to troops.

Visual Signaling—Flags and lamps, emergency to the rear, and to troops.

Pyrotechnics—Rifle bomb.

Panels—Identification and rectangular for signaling to the airplane.

(E) *At the troop command posts:*

Couriers—Mounted couriers for communication to squadron and platoons.

Visual Signaling—Flags and lamps for communication to squadron and platoons.

Pyrotechnics—Rifle bomb or Very pistol.

Panels—Identification and rectangular for signaling to the airplane.

The question as to the practicability and need of visual signaling by means of light projectors, lamps, heliograph, etc., except for very short distances, is a mooted one. It is quite true that, in the past and as late as the early stages of the World War, visual signaling from isolated units, especially cavalry, over quite long distances had proven very valuable. Nevertheless, it must be borne in mind that these were emergency cases, that visual signaling is a very slow method of communication and is dependent on conditions of weather and terrain, and that at the present time radio telegraphy has reached a stage of very efficient development, which was not true at the time the aforementioned incidents occurred. It is the opinion of the writer that, due to the many disadvantages of visual signaling and to the fact that all units down to the battalion and squadron are equipped with radio sets, visual signaling should be considered a means of communication suitable for employment over short distances and within the smaller units only.

CAVALRY SIGNAL PERSONNEL

In considering the organization of signal personnel for cavalry units, two main questions present themselves. First, the strength and proper organization of the signal personnel necessary to operate and maintain the various means of communication adopted for use by the different combat units; and, second, whether this personnel should be Signal Corps personnel or whether they should belong to the branch or arm of the service for which they operate.

Fundamental principles governing the organization of signal personnel serving with any unit are as follows:

(*a*) That each tactical unit should be so organized as to its signal personnel and equipment that the unit is self-sustaining and is able to operate as an independent unit whenever occasion demands;

(*b*) That the signal communication system of any unit should function smoothly as an integral part of the system of the higher unit, when the unit forms a tactical part of a higher unit;

(*c*) That the control of the signal communication system of any unit should follow the normal channels of military command, placing the responsibility for signal communications within a unit upon the unit commander.

Whether the signal personnel of a unit are furnished from the Signal Corps or whether they belong to the branch of the service for which they operate in no way affects the principles governing their tactical employment nor their requisite strength. Therefore the question of their control and the question of their required strength may be discussed and decided independently.

The War Plans Division of the General Staff has decided that the signal personnel of units lower than a division shall belong to the different arms of the service respectively, and the Signal Corps shall furnish personnel for division and higher headquarters.

In adhering to this plan the following difficulties are apparent and will have to be overcome:

(*a*) The proper development of suitable technical apparatus may be retarded;

(*b*) The training of technical operatives may not be standardized;

(*c*) The efficiency of signal communications may be lowered by the promotion to other duties of officers who have made good as signal officers.

Following the general principles of organization as enunciated above, the control of the signal personnel of any unit would be the same, whether they belonged to the Signal Corps or not. If they were Signal Corps personnel they would be permanently assigned to the tactical unit and become as much an integral part of that unit as any other subordinate unit, their control being entirely under the commander of the unit, subject, of course, to the authority of the next higher commander.

The efficiency of signal communications depends to a great extent upon the development of technical equipment most suitable to the exact conditions under which it will be employed. This equipment will be developed in Signal Corps laboratories. A necessary guide for development along proper lines is the actual front-line experience of officers trained in the particular technical specialties. An officer detailed from the line to fill temporarily the position of brigade or regimental signal officer would not in most cases be sufficiently trained for this purpose. Divergent methods of development and indefinite policies would probably result.

Standard methods of procedure should be followed in the operation and maintenance of the various technical systems in order to avoid confusion where

systems of different tactical units overlap in both respects. Better results in this respect could be obtained if a basic technical training were given throughout and standardized under one branch of the service.

It will often happen that the officer commanding the regimental or brigade signal unit will be in line for merited promotion. If he belongs to the branch of the service of the regiment or brigade, his promotion will most probably take him away from the work in which he has been specializing and in which he has made good, or he will be kept at that work and lose deserved promotion.

However, these difficulties can be overcome. Whatever scheme is adopted should follow a logical policy, and will very probably prove satisfactory, provided the policy remains unaltered a sufficient length of time to permit the smoothing off of rough edges.

Polo in a Division

BY

Major N. BUTLER BRISCOE, Cavalry

THE PROBLEM of organization and training of polo players and horses in an Infantry Division resolves itself into a question of how to get at the officers of the dismounted branches. The personnel of the mounted regiments will almost invariably include officers who have already played, and they will bring up their own new men and ponies. The young officer of infantry works under a great handicap. His organization does not keep many horses, there are too few senior officers who have taken a playing part in the game, and he has had absolutely no encouragement to own a horse. The average infantry officer is, through no fault of his own in most cases, a very poor rider. He has had neither instruction nor encouragement in the past.

The division in question was most fortunate in being stationed near a mounted post where there were several polo teams in existence as well as a civilian team in a neighboring town. The result was that the mounted officers were afforded an opportunity to play a great deal of polo. This, however, did not encourage the dismounted men to turn out, and in fact did not really develop any number of new players in the mounted regiments. We were compelled to stop the outside games and start in at the beginning with our own people, with the idea of bringing into the game as many men and horses as possible.

About this time spring came, and with it the activity of the War Department as well as a course of riding for all officers of the division. The polo representative obtained permission for the officers desiring to take up polo to do so during the equitation period instead of taking the regular course. This brought out for polo a number of men who would otherwise not have taken it up, and the results have more than justified the seeming neglect of the official status of the equitation class.

The first lessons were the usual ones in grooming, care of equipment, and adjustment, nomenclature, etc., of the equipment.

The next step, in order to keep up the interest of the men and to get away from the compulsory attitude, was to train the horses. The man was required to obtain certain results from his mount, the instructor giving the necessary explanations of methods to be used, watching the results and making corrections, always with the idea uppermost that it was the horse that was being trained. Naturally, the man learned a great deal about riding in handling the horse. There was no time spent in the usual lessons without stirrups, exercises

for the man's muscles, etc., which are the things that make the dismounted officer so weary of riding instruction. His aim is not to be a finished horseman, but to be able to ride without discomfort and to obtain some pleasure from his riding. He soon becomes tired of the no-stirrups-slow-trot game, and if you want him to take an interest in things horsey don't kill his pleasure in them.

These exercises included the starts, halts, half-halts, and much insistence on proper gaiting and loose curb reins. The method of holding the reins is that where the middle finger separates the two snaffle reins and the little finger the two curb reins, this method allowing a distinct change from the snaffle to the curb without the necessity of using the other hand. The work was first conducted on an oval track, then on a large figure eight, in column with various distances.

When this set of exercises was completed satisfactorily, the man knew how to stop, start, and control his horse's gaits and distance from the horse ahead, and the horse had learned that he was not an independent unit and would not be deserted by his fellows. The horse had also learned to change his lead when he changed direction, and the man had learned to force him to change. No effort was made to teach either man or horse to change the lead on the straightaway, the change for the turn being the important point. Similarly, no effort was made to teach the turn on the forehand, and the turn on the haunches, being the only safe method, was rigidly insisted upon.

The next set of exercises consisted of several different drills in control of direction of the horse. The leading trooper in a column with twenty-yard distances was required to turn and proceed to the rear of the column by zigzagging through the column. The platoon was divided, and exercises in abouts, passing the lines through each other, halting at the time of meeting, and so on, were given. The riders were paired off and given a mark to represent the ball, and were required to ride at it from opposite directions, teaching the man the rule on the subject and the horse to go straight in spite of the other horse. The riders were paired off for instruction in riding-off, the rules for the man and the push for the horse being learned at the same time.

The completion of these exercises gave men and horses who could and would go straight, start, stop, turn quickly, and lead properly, besides riding-off and maintaining their places without a fight between man and horse. Many horses took and passed the qualification test at this stage.

The next step was to take up the mallet. The men were put in column again at the walk with their mallets. The horses soon became accustomed to the slow swing of the mallet, as it was insisted upon that there be no "swishing" of mallets. The men were then instructed in the proper method of holding the mallet for the different strokes, how to shift their weight, and how to make the complete strokes without disturbing the reins or hitting the horse. There were several days of this drill in technique before the men tried any individual work, and the progression from this stage was not to the ball, but to the same thing at the canter, both in column and alone. The follow through was strongly

insisted upon in making all strokes, the test being that the mallet should rise at least as high as the horse's back in finishing the stroke. All men thus acquired the habit of swinging clear of the horse.

The next step was to go to the ball and carry it along as they found it without crossing over the line of the ball in order to get on the right. The usual pens and wooden horses were erected at various places around the camp, and the men came along very well with their mallet-work, learning not only to carry a still ball along, but that most important thing, to pick up a moving ball.

The next step was to pair off the men. They were assigned, according to their regiments or brigades, in pairs of forwards or pairs of backs, each man having his number and always playing in that position except for the necessary swapping with his own partner during play. It was considered a high crime for a forward to get among his own backs or for a back to get up forward. The men had only two places they could ever be called upon to play, and they each knew who their partner was and what he could do. The organization of teams for practice was simplified, and the teams could be arranged so that they were nearly matched in strength.

The fouling was all explained and practiced as the pairs were made up, and the games have been extremely clean for beginners—in fact, the worst offenders are the men who had played some before the course started. However, there has been no let-up on the rule proposition, and the referee is really there to referee, not simply to throw in the ball. He carries a whistle, and the game is stopped when a foul is committed, no matter how the cessation of play may affect the score. This system makes everybody more careful and has a tendency to impress the rules on the minds of the players.

The above course of instruction was supplemented by a series of brief articles published in the camp newspaper, a weekly, that covered the same ground as the outside instruction and was timed so as to be immediately useful. The subjects were: History of the game—information as to number of players, number of horses per player, cost of equipment, and general discussion of the value of polo to the Army and to the country as related to horseflesh; ponies—size, weight, gaits, handiness, leads, turns, etc.; equipment—starting new leather, care, adjustment, bitting, types of saddles, etc.; mallet-work; rules and plays; care of ponies before, during, and after play.

Most of the men cut the articles out and saved them, often springing the printed word of the article on the author in the discussions that arose.

The test was the same for man and horse, and consisted of a trip through the stakes (set ten yards apart), to check up on the change of lead for the change of direction. Next came the riding-off test, from a standing start, one man on each side of the instructor, who threw out a ball, each man to push the other over far enough to allow himself a back-stroke. The third requirement was that the man should make the four main strokes cleanly, forward and back on each side of the horse. The result of this test was to insure safety on the field.

When the course started, in the middle of March, the division had seven men and eleven horses that were safe on the field. By the middle of June there were over thirty horses and about twenty men who were safe on the field. The increase in horses was largest in the mounted regiments, but almost all the new men were infantry officers, qualified on the horses that they had trained and qualified themselves. A number of officers have bought their own horses, and the interest in polo is steadily increasing in the division; nearly every week there is a new man to qualify.

The results of this interest in polo prove one point conclusively, I believe; that is, that the infantry officer would like to ride and to own horses if he were properly encouraged. In the past he has been so instructed that he felt he was accomplishing nothing. Months of slow trot without stirrups may be necessary for the mounted officer, but the infantryman wants less finished instruction, more pleasure, and more encouragement.

Some of the ladies in the division have organized and always have hot tea on hand for the players during the games. The game is not hurried, and this feature brings the players together for less heated discussion than is held on the field, and allows the period to be discussed without confusion with some other period. It also allows the spectators to mingle with the players and by discussion learn more about the game. The interest taken by non-players is very helpful and in the division mentioned is very strong.

The number of new players developed sounds good, but the best result obtained is that every day you may see infantry officers out on the parade schooling horses; the trails around the camp are used for pleasure riding by these infantrymen; the horse-shows have entries in all classes from the infantry regiments, and the horses they ride are fit to ride, both in appearance and conduct. Some of the most popular ponies in the division for polo were entirely schooled by infantry officers.

CAVALRY will retain its *raison d'être* as long as quickness and surprise hold their value on the field of battle.—General WEYGAND, in *Revue de Cavalerie* for January-February, 1921.

Cavalry Reorganization

BY

Colonel GEORGE WILLIAMS, Cavalry

By the Act of June 4, 1920, the Cavalry was reduced in strength to 950 commissioned and 20,000 enlisted men, and it was prescribed by the General Staff that a Cavalry Division should number approximately 6,000 men. For these and other reasons it became necessary to reorganize. Unfortunately, the Office of the Chief of Cavalry, newly created, was not filled until August, 1920, and thus considerable delay in the final drawing up and approval of the Tables of Organization was caused.

The principal problems that arose were:

(*a*) To allot to the troop (the captain's command) sufficient strength to make it a complete and independent unit with the maximum mobility, able to conduct its own dismounted fire fight and to fight mounted.

(*b*) Not to reduce the number of regiments below seventeen if a suitable organization could be maintained by organizing that number.

(*c*) To organize a sufficient number of machine-gun squadrons, with additional machine-gun troops in such numbers as to give a proportion of at least one machine-gun troop per regiment.

(*d*) To organize at least two cavalry divisions of such strength that they would be ready for field service at all times, easily transported by rail or water, without undue strain on transportation and not take up excessive road space on the march.

(*e*) To provide for brigade and division headquarters.

(*f*) To provide for the personnel required in the Office of the Chief of Cavalry.

(*g*) To provide nine corps area units for use in training the reserves in peace and enlisted replacements in time of war.

(*h*) To provide the necessary personnel to properly conduct the Cavalry School.

(*i*) To so organize each headquarters, from division to troop, inclusive, that it would be self-contained, and thus abolish the necessity of taking fighting men from the ranks to perform special duty.

(*j*) As far as possible, to keep all units in peace at their war strength, or at least have an organization capable of expansion to war strength with the minimum of training.

(*k*) The questions of armament and equipment are so interwoven with that of organization that these subjects also had to be considered.

After a careful study of our own and such foreign tables as were available, many consultations and consideration of the most probable use to be made of our cavalry in case of an emergency, the problems were met as follows:

(*a*) The war strength of a troop was made five officers and 126 enlisted men. This troop was divided into a troop headquarters, three rifle platoons, and one automatic rifle platoon of six guns (to be armed with machine rifles in place of automatics as soon as a machine rifle is accepted for use by the Army), each platoon to be commanded by an officer. For three reasons the machine rifles were placed in a separate platoon rather than assigned two to each rifle platoon. First, if desiring to use the rifles grouped, for example, supporting a mounted attack by their fire, it would not be necessary to draw a commander from his unit to command them. In the second place, it was believed that mobility of the troop would be increased by keeping all led animals in one part of the column rather than having them scattered throughout. Finally, it was believed that where it was desired to use the machine rifles as part of the platoons, by being divided into three squads of two guns each, they could join their proper platoons when going into dismounted action with practically no longer delay than if actually marching with them. Owing to the many other requirements to be met by the 950 officers and 20,000 men, it was found that in peace time the troop could not be kept at this strength. Therefore each rifle platoon was reduced from 27 to 19 men (two squads, of a corporal and seven privates, instead of three) and troop headquarters reduced by one cook, one horseshoer, and four messengers; also, only two lieutenants were assigned to a troop instead of four. This gave a peace strength of three officers and 96 enlisted men. It is believed that this troop is capable of rapid expansion, in case of necessity, to war strength.

(*b*) Seventeen regiments were retained, having two squadrons of three troops each, a headquarters troop and service troop, the headquarters troop being composed of the men who would be with the regimental commander in action (forward echelon), the service troop forming the regimental train and offices of record (rear echelon).

(*c*) Six machine-gun squadrons of three troops each were formed with an addition of three separate machine-gun troops (one to be attached, for instruction purposes, to the Cavalry School, one to the regiment in the P. I. Department, and one to the regiment in the Hawaiian Department). The troops will consist of a peace strength of four officers and 101 enlisted men, divided into three platoons of two guns each. War strength expansion will give five officers and 105 men. After careful consideration, it was deemed best to form the machine-guns into squadrons rather than assign them to regiments, as it has been found often necessary to form provisional squadrons for machine-gun instruction, and this necessitates assigning a temporary squadron commander and staff, thus taking officers and men from their proper duties. Also, with a squadron of machine-guns assigned to each brigade, the brigade commander has a mobile fire reserve, or, if he desires, he can attach one troop to each regi-

ment, holding the third in reserve; or he can attach two to one regiment and one to the other. In normal times, when desirable, for any reason, a machine-gun troop can be attached to a regiment for duty without the necessity of increasing the staff of the regiment.

(*d*) Two cavalry divisions were organized, each comprising two cavalry brigades consisting each of two regiments, a machine-gun squadron, and brigade headquarters troop; a division headquarters, division headquarters troop, and the special troops of a division, such as the battalion of horse artillery, battalion of mounted engineers, etc. While the special troops belong to the division, their personnel comes from their own arms and the tables are made by them.

(*e*) A brigade headquarters troop was organized for each brigade headquarters, and a division headquarters troop, miscellaneous detachment (clerks, observers, etc.), and the headquarters for the special troops of a division are grouped under one command for disciplinary and administrative purposes.

(*f*) In peace an office force of fourteen officers (exclusive of the chief) and fourteen enlisted men were provided for the Office of the Chief of Cavalry This office is not a bureau and no civilian personnel is allowed.

(*g*) Each Corps Area has been furnished a squadron identical in organization with the squadron in the regiment, except that one platoon of each squadron is armed with machine-guns instead of machine rifles. This was done so that instruction in machine-guns could be given the reserves in peace and replacements in war. The war and peace strength of these squadrons (called Cavalry Training Center Squadrons) is the same. With the strength allotted, it is believed that they will be able to train the number of replacements which will be required at one time. Of course, horses, arms, and equipment will have to be added to train these replacements.

(*h*) The Cavalry School has been allotted 35 officers and 450 enlisted men in addition to the cavalry regiment and machine-gun troop on duty at the school. In war the school will train officer replacements.

(*i*) Each headquarters has been organized so that it is complete, with its communication group, orderlies, scouts, messengers, cooks, clerks, etc. As it is self-supporting, there will be no excuse for taking men from the ranks to perform special duty at any of the headquarters. The squadron headquarters detachment now belongs to squadron headquarters and is not part of the regimental headquarters troop.

(*j*) Every effort was made to keep the units in peace at the same strength as in war, but this was impossible of accomplishment if seventeen regiments were to be organized and the other requirements met that the War Department desired.

(*k*) The arms are rifle, saber, and pistol for troopers, with six machine rifles to each troop and one machine-gun squadron to each brigade. A machine-gun troop will be attached to a regiment acting alone. The development of the machine rifle and machine-gun enabled the regiment to be decreased in

numbers without greatly diminishing its fire power, and thus made possible smaller cavalry divisions (war strength of cavalry troopers to each division, 5,222), so much more mobile and available for use where rail or water transportation is required. Pack-horses have been used in place of pack-mules, as after severe tests the Cavalry Board found the horse stood the work far better than the mule. It is believed this is largely due to the fact that the pack-horse has the same gaits as the riding animals. Another advantage the pack-horses have is that they are interchangeable, when necessary, with the riding animals.

This article has been written at the request of the Editor of the CAVALRY JOURNAL in the hope that it would explain more in detail the causes for the changes in cavalry organization than the service at large could gather from merely studying the tables.

CAVALRY OF THE FUTURE

THE strategic functions of this arm will become of vital importance. The speed of the horse will be used no longer for attack, but for rapid strategic maneuvers. In this department an independent force of cavalry, properly handled, will obtain great successes of much strategic importance. Its main function will be to attack the flanks and rear of the enemy during a battle, cut his communications as the operation proceeds, and cause confusion behind the hostile front.—BERNHARDI, in *The War of the Future.**

* See Review of New Books.

Notes of the New Provisional French Cavalry Drill Regulations

THE APPEARANCE of the first volume of the new French "Provisional Cavalry Drill Regulations" enables us to obtain an insight into the theories of cavalry employment now held by the French. The veterans of war in that country mean to build up a very different cavalry than the cavalry of 1914.

The protracted service of the old cavalry units in the trenches has made a marked impress on their ideas as to cavalry organization and training. That its use in close conjunction with other arms is forecast, is seen in the fact that of the seven officers who formulated the new regulations one is an infantry, one an artillery officer. That its future principal weapon will be another than the "arme blanche" is made plain by these expressions of policy:

> "The possibility of transporting rapidly and across all kinds of country the means of powerful fire, joined to a great capacity for maneuver, are the distinctive qualities of cavalry. . . .
>
> "In the present day, cavalry fights normally with fire-action. . . .
>
> "Cavalry maneuvers mounted and fights most often on foot. Mounted combat is exceptional; but it remains possible for small units—platoons, squadrons—and should be prepared for."

The lance has been discarded. The saber is kept and practiced. It is admitted that *small* units may attack with the saber. The pistol is given to a few non-commissioned officers and automatic riflemen. The rifle and bayonet are carried by all but a few. The armament centers about the automatic rifle, and includes hand grenades, rifle grenades, intrenching tools, and gas masks.

The regulations warn that instruction in mounted evolutions and maneuver must be reduced to the minimum, in order to permit sufficient time for the training of the trooper in dismounted combat. It is recommended that the double end be accomplished by interspersing the exercises of dismounted instruction in the periods of mounted work.

These regulations look to two general types of dismounted work: The first case, of most frequent application, "in which a body of cavalry is called upon to engage along a wide front when the situation is still confused and the front subject to oscillations of considerable amplitude"; and the second case, "when the front is stabilized and the cavalry can be said to be converted for the moment into infantry."

To meet the latter case, appropriate organizations are provided. Each platoon furnishes one or two *combat groups*. A *combat group* is the elementary

unit for dismounted combat. It comprises essentially an automatic rifle, the men who serve and supply it, and those who protect it and scout for it. Or, again, the *group* comprises two *équipes*, that of the automatic rifle squad and that of the grenadiers and scouts. The latter includes one rifle grenadier and one grenade-thrower. The *group* normally numbers thirteen. It is contemplated that the *groups* and *équipes* will be the basic formations, even in the first type of combat. Upon orders being given to fight on foot, these fractions are successively assembled by their respective chiefs.

The *groups* of two platoons may be formed together into a *section*, one of the platoon leaders commanding. A *section* comprises three *groups*, and its commonest formations are: that of three lines, the *groups* being in line one behind the other; and column of threes, the *groups* being abreast in column of files. The squadron comprises four platoons, and can therefore supply two *sections* for dismounted combat. To form a *company* of four *sections*, the *sections* of two squadrons are combined, one of the captains commanding. The *battalion* is formed of the dismounted elements of a brigade, or a *battalion* of two *companies* may be formed from a regiment. A regiment comprises generally four squadrons and two sections of machine-guns. It is contemplated to increase the number of machine-gun sections to four.

Instruction which is prescribed embraces exercises in attack of positions, consolidation of positions, and methodical attacks under protection of artillery barrage. The company is practiced in various approach formations, such as the checker-board, the triangle, trapezium, and lozenge. Individual instruction gives much emphasis to the use of the machine-gun and automatic rifle and includes bayonet fencing, use of intrenching tools and gas mask.

Column of fours is the normal assembly formation for mounted platoons and column of twos the habitual formation for route and maneuver. The *battle formation*, which is the formation for the mounted charge, is in double rank, one and a half meters between ranks. It is obtained from column by the obliquing of the leading element to the right, while elements in rear come up successively on the left. No provision is made for a pistol attack, the pistol being issued only to a few individuals who do not carry rifles.

The normal formation of the squadron for assembly, march, and maneuver is the line of platoon columns (of fours or twos). Machine-gun sections are given considerable latitude of position and movement. Only two close-order formations are prescribed for the regiment. Whereas in former days the evolutions of cavalry were a function of that conception of cavalry which hinged upon the saber charge, the new theories of cavalry employment call for a greater use of extended formations.

The direction of the changes in the French regulations is clearly that in which our own theories of the employment of cavalry have kept us pretty steadily headed since the Civil War. European cavalry learned in this war the lessons which were brought home to the American cavalry half a century before. In its particular provisions, the question of how far the French regu-

lation has been produced by the emphasis placed by its authors upon some particular phases of the late war which ran through many phases, how far the result of a comprehensive study of the late war with the whole of military history as a clearly defined background—this question must inevitably arise in the mind of the American reader. The importance at this time of these new regulations to the military student, and particularly to the cavalryman, will be appreciated when it is remembered that since the elimination of Germany and Russia as organized military powers France becomes the leading military nation.

THE EDITOR.

TODAY there is reason for fearing that we are going too far in . . . underestimating the value of cavalry as such, expecting nothing more from its strategic activities simply because it was so often used wrongly in the war. It would be a great disaster if this view gained ground.—BERNHARDI, in *The War of the Future.**

* See Review of New Books.

The Number of Officers of the Regular Army and Their Distribution in Grades

BY

Major T. W. HAMMOND, General Staff Corps

THE ARMY REORGANIZATION ACT of June 4, 1920, provides, in section 4, that "there shall be one general, as now authorized by law, until a vacancy occurs in that office, after which it shall cease to exist. On and after July 1, 1920, there shall be 21 major-generals and 46 brigadier-generals of the line; 599 colonels; 674 lieutenant-colonels; 2,245 majors; 4,490 captains, 4,266 first lieutenants; 2,694 second lieutenants; and also the number of officers of the Medical Department and chaplains, hereinafter provided for, professors as now authorized by law, and the present military storekeeper." There is thus provided by this act a permanent commissioned personnel for the Regular Army of 14,968 officers, exclusive of the general officers of the line, the officers of the Medical Department, chaplains, professors, and the military storekeeper. Of these 14,968 officers, 46.5 per cent of them are in the grades of first and second lieutenant; 30 per cent of them are in the grade of captain, and 23.5 per cent of them are in field grades, 4 per cent being in the grade of colonel, 4.5 per cent in the grade of lieutenant-colonel, and 15 per cent in the grade of major. The percentages of the number of officers of the Navy in the corresponding grades are: 4 per cent in the grade of captain (colonel); 7 per cent in the grade of commander (lieutenant-colonel); 14 per cent in the grade of lieutenant-commander (major); 32½ per cent in the grade of lieutenant (captain); and 41½ per cent in the grades of lieutenant (junior grade) and ensign (first and second lieutenants). That is, under existing law, the Army has a smaller percentage of its officers in the higher grades and a larger percentage of its officers in the lower grades than the Navy.

Section 1 of this act provides for the creation in time of peace of the War Army—the Army of the United States—consisting of the Regular Army, the National Guard, and the Organized Reserves. The functions or missions of these three components of the Army of the United States in times of peace and war are not definitely defined in the act, but their missions are clearly indicated in law, and after a very careful study of the act these missions have been determined and announced by the War Department to be as follows:

The mission of the Regular Army is:

(*a*) To provide adequate garrisons in peace and in war for our overseas possessions.

(*b*) To provide adequate peace garrisons for the coast defenses within the continental limits of the United States.

(*c*) To provide adequate personnel for the development and training of the National Guard and the Organized Reserves.

(*d*) To provide the necessary personnel for the overhead of the Army of the United States, wherein the duties are of a continuing nature.

(*e*) To provide an adequate, organized, balanced, and effective expeditionary force, which shall be available for emergencies within the continental limits of the United States or elsewhere and which will serve as a model for the organization, discipline, and training of the National Guard and the Organized Reserves.

The mission of the National Guard is:

(*a*) In time of peace to provide an adequate, organized, and effective force, which shall be available in minor emergencies, or for employment within the limits of the United States, by the States or by the United States.

(*b*) In time of war or when Congress has authorized major emergencies, the use of troops in excess of those of the Regular Army, to provide an adequate, balanced, and effective component of the Army of the United States for employment by the United States without restrictions.

The mission of the Organized Reserves is:

To provide a trained, organized, and balanced force, which may be readily expanded into an adequate war component of the Army of the United States to meet any major emergency requiring the use of troops in excess of those of the Regular Army and the National Guard.

The mission of the Regular Army in time of peace, as thus announced, is no longer as it always has been heretofore, simply to organize, train, administer, equip, and supply the Regular Army, provide for the overseas garrisons, act as a police force in the United States, and give limited assistance to the National Guard and the civilian schools and colleges, but it is broadened to include, in addition, the very much larger and more responsible function of preparing the whole Army, including the Regular Army, National Guard, and Organized Reserves, for war. Such a mission can be carried out only by a permanent personnel of professionally trained officers and a number of enlisted men which will vary from time to time. The law prescribes the number of officers and provides for a maximum enlisted strength. With these officers and an enlisted strength never in excess of the maximum, the complete mission of the Regular Army must be carried out. To carry this out in a way which experience has demonstrated to be effective and efficient, the law divides the Regular Army into a number of branches, and to each branch is assigned by law and regulations certain specified duties and functions, and for each branch the law provides a definite number of officers and enlisted men.

This law was passed by Congress after a most exhaustive study of Army organization by the military committees of both Houses. In addition to extended hearings by both committees, many members of the committees traveled thousands of miles in Europe, visiting the battlefields and military activities

of the American Expeditionary Forces, and in the United States, visiting Army camps, cantonments, flying fields, schools and war-time manufacturing plants. Perhaps at no time in the history of our country has the problem of national defense and Army organization been as thoroughly gone into by Congress as immediately following the World War; and while many lessons of that war are impressed upon our legislators, perhaps no one of them is as forcibly impressed upon them as the necessity for maintaining in time of peace a body of well-trained and efficient officers. No matter how the members of those committees may disagree on matters of universal training, of industrial preparedness, and other matters connected with national defense, they are practically unanimous in agreeing that a well trained body of professional officers is not only necessary, but under our popular theory of a national military policy is the very foundation of national defense, because it is the nucleus about which the whole nation must expand in time of war.

A large standing army cannot be maintained in time of peace. Our battles of the future will be fought, as they have been fought in the past, by the citizen soldier, and experience has taught us that the citizen can devote but a very small fraction of his time in preparing himself for the performance of this the most solemn duty that he is ever called upon to perform. The study and development of the art and science of war is not for him. His duty is to fight when the time comes; but he expects that when he goes to fight he will be properly organized, properly equipped, properly armed, properly supplied, and that the whole gigantic machine for war will be so well perfected and his work and his functions so well understood by those men who devote their lives to its development that all he will have to do is to take his place in the machine when war is declared. As a matter of fact, he expects not only to be properly placed, but, in general, actually to be trained for his job after the declaration of war.

Under such a theory of national defense and with such a mission to perform, there is a solemn responsibility placed upon the officers of the Regular Army; for, after all is said and done, these 17,700 officers of the Regular Army are the only persons out of all of our more than 100 millions of people in this country and our millions in Panama, Hawaii, Porto Rico, and the Philippines who devote their time exclusively to the study of this great problem of handling the nation in arms in time of war; and, unlike every other profession, this one, which involves not only the lives of our citizens, but the security, honor, and very life of the nation itself, must be learned by study, trials, and experiments in times of peace, rather than by the actual practice of it in time of war.

Since the passage of the Act of June 4, 1920, the War Department General Staff and the chiefs of the various branches of the Army have devoted much time to the study of its provisions and its possibilities for developing a military policy consistent with our national traditions and ideals, and to the best use that can be made of the personnel provided for carrying out the Regular Army mission. These studies include such matters as the basic organization

of the Army of the United States, the functions of the three components of the Army of the United States, the territorial organization of the Army in peace and in war, the National Guard, the Organized Reserves, the Reserve personnel, and the tactical organization of the division and of all other units of a field Army. These studies are not complete and other studies are being made, but all have reached the stage where it is possible now to know that the number of Regular Army officers authorized by the Act of June 4, 1920, is sufficient, if they are properly assigned and economically used, to meet the demands of carrying out the mission of the Regular Army, and that they are distributed in grades appropriate to the duties they are to perform.

In reorganizing the Regular Army and imposing upon it a mission such as this law imposes, it was not only necessary to determine the actual number of professional officers needed to carry out this mission, but it was also necessary to determine and fix in law such provisions regarding their promotion as to insure attracting to the Army men of character and ability. This matter was given long and serious study by both military committees. Perhaps no matter connected with Army legislation has ever been as troublesome for Congress as this problem of promotion, and, strange as it may seem, no real effort seems ever to have been made by Congress in the past to solve it in accordance with sound basic principles. A study of the subject and of the history of legislation discloses some of the reasons why Congress never before succeeded in solving this difficult problem, but it is unnecessary in this paper to discuss these reasons.

This Congress, however, unlike its predecessors, determined that in reorganizing the Army this problem of promotion would be solved and, if possible, in accordance with sound and fundamental principles. After long and careful study it was decided to adopt as the governing principle a complete separation of promotion and organization and a parity of promotion among the officers of the various branches. Having agreed upon this principle, two methods of attaining it are provided in the Act of June 4, 1920, the one generally known as the single list and the other generally known as promotion after specified service in a grade.

Having adopted this governing principle and having determined upon the methods of putting it into effect, the next consideration was the rate of promotion. The rate of promotion in a military force necessarily varies from many causes. Other things being equal, however, it is obvious that it will be greatly affected by the manner of distribution in the various grades. The larger the proportion of officers of high rank, the more rapid must be the promotions through the lower grades. Generally speaking, this principle seems to have been recognized in the past only in fixing the number of officers in the various grades in the staff departments. In the line, the governing principle was to stick to the exact proportions of organizational requirements. The result has been that in the past the rate of promotion has varied widely among branches, and also that while the staff departments have had a fairly healthy flow of promotion,

the line has at all times been certain of stagnation except as legislation, by increasing one or more arms, has temporarily accelerated promotion. In all such legislation, beneficial as it may have been to those already in the service or appointed immediately after, no consideration was given to the prospects of men to be appointed later. These, like their predecessors, could have no hope of reasonable promotion except as they in turn might reach it by a legislative increase in their branches. Since the beginning of the Spanish War this condition has been disguised by the frequency of legislation making larger and smaller increases, but in 1898, at the outbreak of the Spanish War, a period of twenty-eight years had elapsed with little legislation affecting promotion in the Army. In that year, taking the grade of first lieutenant, it is found that the oldest lieutenant of the Medical Corps had, in round numbers, five years of commissioned service; of the Engineers, twelve years; Cavalry, twenty years; Infantry, twenty-four years; and Artillery, thirty-one years—that is, in 1898 the senior lieutenant of the Artillery Corps had spent thirty-one years of commissioned service in the grades of first and second lieutenant.

The Act of February 2, 1901, did practically nothing to remedy this condition, and the laws which have followed, including the Act of June 3, 1916, made little improvement; so that the situation which confronted Congress at the time of the passage of the Army Reorganization Bill was considered serious. It is a recognized fact that any profession must hold out some reasonable hope of advancement if it is to attract men of ability to adopt it as a career. The remedy in this case has already been suggested. An increased percentage in the upper grades and a corresponding decrease in the lower grades is bound to cause a more rapid flow of promotion. Of course, Congress could not create offices for the mere purpose of stimulating promotion, so a careful investigation was made to determine the duties which officers of the Regular Army would have to perform in order to be sure that these duties were commensurate with the grades provided in the proposed distribution.

That the conclusions reached as a result of this investigation are essentially correct is borne out by the detailed studies which have been made since the passage of the act, as shown in the distribution table below. That the distribution adopted will insure a reasonable rate of promotion cannot be definitely proven. An actuarial solution of this problem is not possible, as a sufficiently large number of cases do not exist on which to base such a solution. The percentages adopted were arrived at after a consideration of the distribution of officers of the Line of the Army under the Act of June 3, 1916, which clearly provided too few in the field grades; of the distribution of officers of the Medical Corps under that Act, which just as clearly provided too many in the field grades; of the distribution of the officers of the Corps of Engineers under that same Act, and of the distribution of the officers of the Navy. The distribution in the Engineers and the Navy was about the same and seemed to insure about the proper rate of promotion; so the distribution adopted in the act is very nearly the same as that in the Navy.

Table Showing a Suggested Distribution of the Field Officers of the Regular Army to the Duties Commensurate with Their Rank in Order that the Regular Army May Carry Out Effectively and Efficiently Its Mission, as Defined by the War Department, in Pursuance of Law.

This table has been prepared as a tentative working guide for those concerned in the transfer and assignment of officers.

	Colonels.	Lieut.-colonels and majors.
Infantry	76	440
Office Chief of Infantry.		
Tactical units.		
Infantry school.		
Tank organizations and school.		
Cavalry	26	100
Office Chief of Cavalry.		
Tactical units.		
Cavalry school.		
Field Artillery	42	155
Office Chief of Field Artillery.		
Tactical units.		
Field artillery schools and firing centers.		
Coast Artillery Corps	36	145
Office Chief of Coast Artillery.		
Coast defenses.		
Tactical units.		
Coast artillery school.		
Corps of Engineers	38	110
Office Chief of Engineers.		
Tactical and technical units.		
Headquarters, depots, and corps areas.		
Rivers and harbors.		
Engineer school.		
Signal Corps	10	65
Office Chief Signal Officer.		
Tactical and technical units.		
Headquarters, depots, corps areas and divisions.		
Signal Corps laboratories and depots.		
Washington-Alaska Cable and Telegraph System.		
Signal Corps school.		
Air Service	29	205
Office Chief of Air Service.		
Tactical units.		
Headquarters, depots, and corps areas.		
Supply and repair depots.		
Experimental and production plants.		
Air service schools.		

	Colonels.	Lieut.-colonels and majors.
General Staff Corps	40	135
War Department General Staff.		
General staff and troops.		
Adjutant General's Department	20	78
Office of the Adjutant General.		
Headquarters, depots, corps areas and divisions.		
Special posts.		
Inspector General's Department	18	46
Office of the Inspector General.		
Headquarters, depots, corps areas and divisions.		
Ports of embarkation.		
Judge Advocate General's Department	14	63
Office of the Judge Advocate General.		
Headquarters, depots, corps areas and divisions.		
Quartermaster Corps	38	256
Office of the Quartermaster General.		
Headquarters, depots, corps areas and divisions.		
Supply and remount depots.		
Army posts and stations.		
Bakery schools.		
Graves registration service.		
Finance Department	17	55
Office Chief of Finance.		
Headquarters, depots, corps areas and divisions.		
Finance school.		
Finance offices.		
Ordnance Department	18	78
Office Chief of Ordnance.		
Headquarters, depots, corps areas and divisions.		
Arsenals and proving grounds.		
Chemical Warfare Service	6	19
Office Chief of Chemical Warfare Service.		
Tactical units.		
Research, laboratories, supply.		
Schools.		
Bureau of Insular Affairs	1	2
Detached Officers' List:		
Reserve Officers' Training Corps	30	300
National Guard	30	225
Organized Reserves	70	306
Recruiting	8	21
Disciplinary Barracks	2	4
General Service Schools	18	80
Faculties:		
U. S. Military Academy	2	21
Miscellaneous detached duties	10	10
	180	957
Total	599	2,919

The actual distribution of officers at the present time is not the same as the distribution shown in this table. There are three principal reasons why this is so.

In the first place, because of the system of promoting officers prior to July 1, 1920, from separate lineal lists for each branch; because of unequal legislative increases in the various branches since the Spanish-American War; and because of the different principles which governed the distribution of officers in grades on the separate lineal lists, a situation developed during the course of years which at the time of the passage of the Army Reorganization Act found the younger and less experienced officers of the Army in some branches in the higher grades, while the older and more experienced officers of the Army in other branches were still in the lower grades. When the new system of promotion was put into effect, July 1, 1920, the bulk of promotion was in those branches of the service where promotion during the past twenty years had been slowest, and the least in those branches of the service where promotion during the past twenty years had been fastest. Since promotion and organization are now two entirely separate matters, we find the Cavalry, which has had the slowest promotion in the past, receiving the greatest amount of promotion on July 1, in spite of the fact that the strength of the Cavalry was actually decreased by the Act of June 4, 1920, while the Field Artillery, which has had the fastest promotion in the past, is receiving little promotion, in spite of the fact that it was practically doubled by the act. This results in having in the Army now a large number of officers of high grade who are commissioned in the Cavalry and a comparatively small number of officers of high grade who are commissioned in the Field Artillery. The Act of June 4, 1920, provides freedom of transfer of officers from one branch to another, and also authorizes the War Department to prescribe the organization of the various branches, so that the problem of bringing about a proper distribution of the experienced officers of the Army in the various branches of the service is one gradually to be solved by War Department regulations formulated in accordance with the policies and principles laid down in the Act of June 4, 1920.

In the second place, the commissioned personnel of the Regular Army was practically disorganized by the war. Regular Army officers were assigned to all sorts of duties in the World War Army, and when that Army was demobilized these officers found themselves scattered about through the remaining military establishment without any logical arrangement in a peace-time organization, and to get them properly distributed now, in accordance with the duties and functions of the Regular Army in time of peace, will require a great deal of time, because of the many difficulties which still confront the War Department in such matters as completing unfinished war work, on account of lack of sufficient mileage and transportation appropriations, and because of the discomforts and personal expense involved in the frequent moving about of officers and their families.

In the third place, the National Guard and the Organized Reserves are only in the first stages of organization, and the assignment of Regular Army officers to these duties must be gradual, as these forces develop.

That such proper distribution should be effected, however, in the shortest possible time is imperative for many reasons:

In the first place, there is an actual shortage in the total number of officers authorized by law and required to carry out the Regular Army mission. This actual shortage can be somewhat counterbalanced by a proper and correct distribution of the officers that we actually have.

In the second place, an incorrect or improper distribution of officers in the various grades means that some officers of high rank are performing duties that should be performed by officers of less experience and lower rank, and that other officers of less experience and lower rank are performing duties which should be performed by officers of more experience and higher rank.

In the third place, Congress provided the number of officers in the various grades on the theory that they were to be engaged on duties appropriate to their rank. The problem of organizing the Army and distributing these officers to their various duties is left by Congress to the War Department, and the War Department should make every possible effort to bring about a proper distribution.

In the fourth place, the officers themselves are better satisfied, perform better work, and thereby add to the efficiency of the Army as a whole, when they are assigned to duties commensurate in responsibility and importance with the rank and grade which they have.

The Act of June 4, 1920, provides that officers may be transferred from one branch of the service to another on their own application, but specifically states that an officer shall not be transferred from one branch to another without his consent. The intention of Congress in this matter was that an officer should not arbitrarily be transferred from one branch, after long years of service, to another branch against his will. In other words, it was a provision dictated by a consideration of the personal and professional feelings of the officers of the Army. At the same time Congress did not intend to and did not take away from the President the authority to assign officers to duty in accordance with the exigencies of the service. In now bringing about a redistribution of officers, the War Department is actuated by the same identical principle.

It is firmly believed that the officers of the Army, when informed of the situation which confronts the Army, will respond in the effort that all must make to correct as soon as possible the temporary illogical situation which now exists as a result of the adoption of the Single List, succeeding the unfair and unscientific system of promotion which obtained in the Army up to July 1, 1920. This problem of distribution must be solved.

Those who have made a study of the problem of National Defense, who realize the importance of developing a sound, sane, and conservative military

policy, and who understand the relation that the Regular Army bears to the development of such a policy believe that the Army can solve these problems in accordance with the principles and policies of existing law. Many, however, who, due to multitudinous other duties, have not given careful and detailed study to the intricate problems of National Defense, do not understand the relation of the Regular Army to this problem, as set forth in the latest Army legislation and as illustrated during the World War.

Many do not understand the special functions that the Regular Army has had to perform in mobilizing the man power of the nation, and again in demobilizing the great war army, created in 18 months and smoothly and with extraordinarily little disturbance dispersed in 12 months after the armistice; and, further, its function in disposing of the enormous assemblage of materials, equipment and facilities that had been gathered together to conduct a major war.

The unthinking, therefore, or the uninformed might in haste commit the country to a policy of starving or depleting the Regular Army below a functioning capacity and to an extent that, especially in the case of the commissioned personnel, could not be repaired in years of carefully studied legislation.

Realizing the danger of misunderstanding, due to the present accidental and, for the time being, illogical distribution of commissioned officers in the several arms, and the importance of a proper distribution, the War Department and the chiefs of the arms most seriously affected desire to enlist the co-operation and support of officers of the Army in bringing about, by suitable voluntary transfers or otherwise, a redistribution to the several arms to accord with the intentions of Congress, the interests of the Army, and the interests and desires of individual officers.

The Cavalry Board

BY

Major JOHN B. JOHNSON, Cavalry

THE ATTENTION of the Cavalry Board has been divided almost equally between matters of training and of equipment since the January, 1921, issue of the CAVALRY JOURNAL.

Under the first classification are included the new pamphlets, "Pistol Marksmanship," "Care of Animals," and "Cavalry Training, 1921."

"Pistol Marksmanship."—This pamphlet will replace all of that portion of the "Small Arms Firing Manual" devoted to instruction in the use of the pistol. The copy has been approved and proofread and the printed pamphlets should be in the hand of troops prior to the regular target-practice season.

A similar pamphlet entitled "Rifle Marksmanship" has been completed by the Infantry Board and should be issued in the near future.

"Care of Animals."—The manuscript of this pamphlet is nearing completion. It will embody the knowledge gained through our own experiences, and through contact with foreign armies, during the World War. It will combine and replace the various War Department publications on the subject.

"Cavalry Training, 1921."—This is designed to replace the present "Cavalry Drill Regulations, 1916." It has been made necessary by the adoption of automatic arms within the troop and the new Cavalry Tables of Organization. The text falls into several broad divisions, and these will probably be issued in turn to the Service as they are completed. Part I, including the School of the Trooper, Squad, Platoon, and Troop, will be the first to be issued.

Among the articles of equipment referred to the Experimental Section for test have been the Thomas Pack Cooking Outfit, New Model Gas-Mask Carrier, New Model Curb Bits, Web Bridles, Caliber .45 Range Dummy Cartridges, and a Cavalry Carbine.

Thomas Pack Cooking Outfit.—A very satisfactory pack cooking outfit has been developed by Lieutenant-Colonel Charles O. Thomas, 12th Cavalry. It is made as two identical side loads, each complete in itself and capable of either combined or independent use.

New Model Gas-Mask Carrier.—A new model gas-mask carrier has been tested. It is much more convenient and more comfortable than the old type. It is carried habitually under the left arm, thus doing away with the old "slung" and "alert" positions. The weight is borne on the right shoulder, which is much less fatiguing than when it is borne on the back of the neck, as is the case with the old model carrier in the "alert" position. It is much more

comfortable mounted, as the broad webbing waist belt holds the carrier snugly against the side and lessens the up-and-down movement.

It will permit the soldier to lie closer to the ground in the prone (or firing) position.

New Model Curb Bit.—A new model curb bit, designed for use as a polo bit with the Model 1920 Bridle, has been tested. Its large mouthpiece and shorter branches make it less severe than the standard curb bit.

Web Bridles.—In the event of war a shortage of leather might compel the use of webbing, even though inferior to leather. For this reason data is being collected on this subject with relation to the manufacture of bridles.

Caliber .45 Dummy Cartridges.—The demand for cartridges of this type from troop commanders who have heretofore improvised them from service cartridges has resulted in the production of a very satisfactory dummy pistol cartridge. It is intended for use on the range during instruction practice.

Cavalry Carbine.—A modification of the United States Magazine Rifle has been produced by the Ordnance Department at the request of the Cavalry Board. Although the barrel is four inches shorter than the standard rifle, the distance between front and rear sight has been increased through the substitution of a receiver sight. The weight of the carbine has been reduced to eight pounds. Tests for accuracy as compared with the standard rifle are now being conducted.

BELGIAN CAVALRY

THE BELGIAN CAVALRY regiment is divided into two groups. Each group consists of two squadrons, and on a war basis has also a machine-gun squadron. In the peace establishment there is only one machine-gun squadron per regiment. The cavalry of the army of occupation has one active group and one skeleton group per regiment. There are no machine-gun squadrons, but a section of machine-guns is attached to each squadron. Each squadron is composed of four platoons, and each platoon is divided into two sections. The section forms a combat group when dismounted, consisting of 11 men.

Educational and Vocational Training from a Regimental Commander's Viewpoint

BY

Colonel WILLIAM C. RIVERS, Cavalry

TALKING not long ago with an officer on duty in the Adjutant General's Office in connection with recruiting, the writer mentioned some of the matters alluded to below and was asked to write a brief article for one of the service journals, the statement being made that it could be copied as a recruiting leaflet and that it might possibly prove useful. I believe the recruiting branch is at present quite dormant, but it is hoped that before long it may resume its very necessary functions, which during the past couple of years it performed with such ability and success.

Some years ago the writer was asked to take a *London Times* man, en route from England to Washington, where he was to serve as correspondent, and show him some of the schools in the Philippines. We first visited Malolos, where the size and solidity of the new school plant, with its cement buildings and dormitories, made a great impression on the visitor. The completeness and quality of the equipment, such as desks, instruments, and furniture, and the general character of seriousness of the school work were to him a revelation.

"By Jove," he remarked, "I had heard the Americans were going in for this school business, but I never imagined anything like this."

I recollect that one young Filipino was reading Latin to his American teacher. This puzzled the visitor a good deal, and he ventured a tactful inquiry as to whether I thought such work practical or not.

"Oh, yes," he was told, "it is all right; we will, perhaps, make a Ph. D. out of that young man, and may make him a bishop."

Another student, an attractive Filipino maiden, was reading *Treasure Island,* and after closing the book would explain in her own words the general idea of what she had read. That worried my friend somewhat also, and as we crossed the plaza he said gravely:

"Are you quite sure that young lady understands what she is reading? I suspect she thinks it is about Washington crossing the Delaware, or something like that!"

The next place was Bacolor, where the new Trade School building, with its equipment of gas engines and other machinery, added to the interest of the visitor. While we were in the large drawing department two students got into a quarrel about something, and after they had separated one tossed a chisel across the large hall, and with Malay accuracy with the steel it hit the lad

right in the loin, point on, and made a bad wound. The young constabulary captain with us quickly took the wounded boy, laid him on one of the tables, took his first-aid packet from his own pocket, dressed the wound, and called a calesa, and off he went with the patient to the latter's home.

After that I could not revive my friend's interest in the school system again; he kept talking of the skill and readiness of the constabulary officer, and I fear I never did tell him that that particular officer had been a non-commissioned officer of the Army Medical Corps for some time before he entered the constabulary service.

We began the boom in Army education in much the same manner that we initiated education in the Philippines, without much in the way of equipment and teachers, but with much energy and enthusiasm. Those who have seen the development of education in the Islands and what it has done for the Filipinos, making due allowance for the modern doubts as to the value of undiluted education alone, without moral training or religious or technical training connected with it, will naturally be somewhat optimistic as to the value of Army education when it has settled down to a system, and when many of the officers and non-commissioned officers of the future will be men who have themselves benefited by the work they did in the Army schools.

The remarks I made that led to the request that I note them down were to the effect that from a regimental commander's view the schools were of great value to teach things that make men more skilled as soldiers, and in this manner added to the military power of the unit. A general knowledge of such things as typewriting, stenography, spelling, and punctuation add to the time officers may pass out of doors and tend to save them some of the drudgery of office work.

Stable management, hippology, telephone operation and repair, Spanish, wireless, nomenclature and repair of small arms, and similar subjects are readily taught in the schools and add to the military value of the soldier without taking time that he would more usefully spend in other military work. It may be that in the long run the best period for the purely voluntary and general educational studies will be found in the long evenings that soldiers usually have, and which after the first few days after pay day hang very heavily on their hands. Soldiers dearly like to have an early supper and nearly always have two or three or more hours of the quiet evening which the earnest and ambitious ones would be glad to devote to self-improvement.

The writer trained and took over the first of the cavalry regiments to go overseas as field artillery, and some few weeks before sent an advance party of about fifteen officers and two hundred selected men to go to school at the training camp in France. On our arrival we were put to work at what was called a twelve weeks' course to learn the French 75's. After a day or two a telegram came to cut the course down to eight weeks; then another to complete it in five weeks, on account of the knowledge of the probability of a drive by the enemy.

Our advance party had proven very capable and bore a fine reputation for

efficiency and conduct at the training camp in France. Under these circumstances they were our salvation and enabled us to function with certainty and skill when we got on the line, with our left battery right over the town of Château-Thierry, on the 5th of July, just a few days before the enemy attempted to cross the Marne in that region.

That has always seemed to me a good illustration of a good educational and vocational school. Men who were disciplined and partly trained were given freedom for a few weeks to make themselves experts in a number of things, and they then took the rest of us in hand and carried us through a difficult period with skill and rapidity.

CAVALRY WORK IN FRANCE

At the woods of Cantigny and of Clary by an audacious charge the cavalry enabled the infantry, stopped by machine-gun fire, to continue its progress. Elsewhere, as at Busigny, by pressing the enemy hard, it seized the Cambrai-St. Quentin railroad and prevented its destruction. This we learn, in simple unembellished terms, in the dispatches of Douglas Haig, who states further, "The recent combats (end of 1918) in more open country immediately rendered evident the fact that cavalry is still a necessary arm in modern war. On many occasions important results have been obtained by the cavalry, and in particular in employing it in combination with light tanks and mobile machine-gun companies. . . . In exploiting the infantry attacks and in following up closely the retirements imposed upon the enemy, the different cavalry units have accomplished a work of the greatest value."

Fundamentals of Cavalry Training Policy

(Cavalry Memorandum No. 1, War Department, December 10, 1920)

I.—GENERAL SURVEY

1. PLANS FOR TRAINING should be based on the expected conditions of probable employment rather than on abstract conditions.

2. Our cavalry will be employed either in domestic disturbances, varying in magnitude from strike or riot duty to civil war, or in war with other nations.

3. For strike or riot duty, the tactics employed will be the application of the normal drill formations of the platoon or troop. In this employment the moral effect created by mounted men is very great. For civil war, the zones of operation would probably be the centers of industry and population. There will be no long lines to consider in such employment and the accepted pre-war tactics of the divisional cavalry and the cavalry divisions should apply efficiently.

4. A study of the probable strategic and tactical situations leads to these conclusions:

a. The greatest value of cavalry will be found in its mobility, which enables it to arrive in time and place for most effective action. This action may be mounted, dismounted, or a combination of both, depending upon circumstances. Cavalry must be trained accordingly.

Under modern conditions dismounted action will be most frequent. Fire power must, therefore, be developed to the fullest and applied in suitable tactical formations.

b. Opportunities for mounted attack, generally fleeting and most frequent for platoons, troops, and squadrons, must be seized.

5. In furthering its own particular advantages of mobility, cavalry must endeavor to act always swiftly and by surprise; its employment must be characterized by extreme energy, boldness, and audacity, and willingness to accept chances against long odds. Inactivity, due to unwillingness to accept responsibility, or to any personal weakness, where some form of action is demanded, should be the unpardonable fault in any cavalry leader, in peace or in war. Mistakes in judgment or in execution are pardonable as long as activity and the spirit of initiative prevail. It is mandatory that the training of officers and men should instill this principle.

6. It is an inherent virtue, peculiar to the arm, that cavalry soldiers can be brought fresh into dismounted action after having traversed long distances, perhaps over a difficult terrain. It must be further instilled as a principle, subject to the infrequent emergency demands for sacrifice, that the horses must also arrive in condition for further effort.

7. When cavalry attacks mounted, moral effect is sought even more than the physical; this has often been accomplished with the smallest units. For this reason cavalry leaders should be ready to take advantage of every opportunity for mounted attack.

II.—GENERAL SCOPE OF TRAINING

1. What should be the characteristics of the American Cavalry to meet the various conditions of its probable employment?

2. It must not be merely mounted infantry, for it must be able to fight both mounted and dismounted. While there will be many opportunities for mounted attack by small units, they will be increasingly less frequent for the larger ones. Under modern conditions fire power has assumed very great importance, and training in its development should be second only to that for mobility.

3. There is no reason for the existence of cavalry unless it can justify itself by virtue of its special powers, by performing important duties which no other arm can perform so well: Reconnaissance and screening duties; the conduct of a pursuit; the tenacious hanging on by an elastic and highly mobile rear guard; in-and-out tactics against the sensitive spots—the flanks and rear of an enemy in position or advancing to attack, and similar missions for which it is exclusively adapted.

4. Assuming an organization, armament, equipment, and training system which does not seriously impair mobility, the first necessities in the preservation of mobile cavalry are proper mounts and trained horsemen in ranks. No cavalry soldier, whatever his other qualifications, is a good cavalryman unless he is a good rider and a good horseman. Under present conditions of one-year enlistments and the requirements of vocational training, there is not, in a properly balanced schedule of training, time to devote to the instruction of all enlisted men in higher equitation. It is believed that more attention and practice will have to be given to that branch of the soldier's education as a horseman which insures the proper care and conservation of his mount under all service conditions. Otherwise the mobility of the cavalry in war will soon disappear, due to excessive replacements by raw remounts.

5. In war it is a daily and vital duty that each trooper should know the needs and limitations of his horse and know how so to care for him that he can obtain the most from his powers of endurance without impairing them. On any of our possible theaters of operations our cavalry must be prepared to meet, frequently and successfully, the demands of long marches, followed by spirited actions, tenacious holding of positions gained, readiness to resume the offensive when relieved by our infantry. For these duties each soldier must know how to care for his horse, how to ride and control him, and how best to conserve his energies. *These* are the essentials.

6. Leaders must be highly developed in initiative, resourcefulness, quick thinking, prompt action. To develop these qualities, polo, cross-country riding,

and other similar forms of activity which make for bold riding are useful. Instruction in higher equitation should be planned exclusively for specially qualified officers and for those selected men who may be led to take a lively interest in that work.

7. In all tactics of the attack our cavalry must keep constantly in mind the use and preservation of its distinctive asset of mobility. When forced to dismount, the smallest fraction consistent with the accomplishment of the mission should be dismounted, so as to reduce to its minimum the immobilizing accumulation of led horses. Whenever the situation will permit, the dismounted attack should be of the nature of a surprise by fire. The mounted mobility of the unit should always be preserved to the last moment consistent with surprise. The maximum fire effect should be developed at once, having due regard for sufficient flank protection, thus minimizing the strength of supports and reserves. In such situations the organization of the attack in depth adopted by the infantry is inappropriate. The led horses should be as near as possible, consistent with their safety, so that, if the attack fails, the command may mount and rapidly move to a position favoring a new effort.

8. However, occasions may well arise where the cavalry, in order to fulfill its mission on a detached or semi-detached duty, must, solely by its own efforts, carry through a sustained attack against a well-organized position; this demands that our units receive training in the methods, and with the deep formations, found by our infantry to be most appropriate. In both defense and offense occasions may arise as, for instance, the holding of a vital position until the arrival of the infantry, which will demand every effort and justify every loss. The preparation and defense of such a position should, as to its essentials, follow the best infantry practice. Large units of cavalry, to include the division, are likely to be frequently called upon for sustained defensive combat unaided, and their training as units must guarantee proficiency and self-sufficiency. It is a misuse of cavalry to require immobilization for such purposes when infantry substitution is possible. When so used, their relief by infantry at the earliest possible moment should occur in order that the cavalry may be freed for missions which it alone can perform.

9. The basic doctrine of training for the American Army contemplates preparation for the offensive under open-warfare conditions; the aggressive, unrelaxing offensive is the only road to victory. Especially must cavalry training tend to establish and confirm this doctrine in the minds of all ranks, to the end that insistence upon an aggressive, daring offensive shall become a settled habit of thought. In all forms of tactical instruction, as map problems, map maneuvers, tactical rides and maneuvers, excessive caution must be penalized, the aggressive spirit favored.

10. Fire power, to the utmost possible consistent with an armament which does not seriously impair mobility, must be possessed by cavalry if it is to win in the usual combat of major importance to the high command. Increased

study, tests, and combined maneuvers are required to insure the team play which is vital as to the support of field artillery and machine-guns. Quick and accurate liaison must be developed, and a general knowledge by all officers of the powers and limitations of the horsed 75, of the machine-gun, and of the machine rifle must obtain.

III.—MISSIONS OF CAVALRY

1. Our pre-war doctrines, derived from our own experience, remain unchanged along broad lines. The conditions of modern war change their application in some respects, among which may be noted:

a. Long-distance strategical reconnaissance, such as that designed to locate enemy masses, areas of concentration, the use or non-use by enemy columns of particular roads or zones, etc., will usually be intrusted to aviation, if available. After the determination of such information by aviation the screening duties and the methods of local reconnaissance by cavalry will remain in general unaltered. Cavalry cannot be replaced by aviation in ordinary open warfare reconnaissance for the principal reasons that:

(1) Cavalry can be used successfully for the purpose at night, and under all weather conditions, and in thickly wooded or badly broken country.

(2) Cavalry can give constant observation, whereas even under favorable weather conditions observation from airplanes is necessarily intermittent.

(3) Cavalry can best determine the intentions of an enemy column or post; land fighting will usually be required.

(4) Cavalry can secure details of information in reconnaissance, such as identifications.

b. Assuming first-class powers are at war, the conditions of the modern battlefield, where all arms are engaged, will generally preclude the launching of large masses of cavalry in mounted attack for the purpose of effecting a decision. However, this decision once made primarily by the infantry the great value of cavalry will be found in its peculiar suitability for conducting the pursuit or covering the retreat.

2. Mounted action by patrols, and by troops and squadrons supporting patrols, must be expected; mounted action by regiments or larger units will be infrequent, but as there may be occasions where it may be advantageously employed, it should be included, in reduced degree for such unit, in the scope of our training. All units must be prepared to execute combinations of mounted and dismounted attacks. Such has been our consistent thought and practice. With such views the great military powers of the world are now in accord.

3. The growing development of the powers of aviation and the perfection of modern artillery and machine-guns will cause more night marching for the cavalry than heretofore. Marches of concentration, approach marches, and distant reconnaissance will often be made at night. Liaison within the command, with neighboring units, and with higher command remains unbroken

ground for the cavalry, and will have to be developed. Proper organization and training must be instituted to insure that the conduct of intelligence duties, in all cavalry units, shall be characterized in campaign by system and thoroughness, by accuracy and rapidity.

4. Experience has shown that cavalry is frequently used improperly when acting in co-operation with other arms. The tendency has always been to waste its strength either on non-cavalry duties or by undue dispersion. This tendency must be overcome by clear definition of cavalry duties, by careful instruction in courses to fit officers for high command, and by prohibiting improper use by stringent regulation.

IV.—GENERAL SCHEME OF TRAINING

1. The first consideration is, of course, the training in horsemanship. This should be constant, thorough, practical, founded on the basic principles that the horse is an animal of low intelligence, easily governed by the consistent application of the recognized aids applied with kindness; that each animal has his own peculiar limitations, which may be offset in part by intelligent training; that the measure of mobility and endurance of a unit is that of its poorest horses.

2. Thorough training in musketry is of maximum importance in connection with fire power. It must be emphasized that the efficiency of the troop with respect to the use of the rifle is to be judged by field firing results at unknown ranges rather than by target practice over known ranges. Field exercises involving the use of ball ammunition at unknown ranges and at unexpected targets should be held, the ammunition supply and terrain permitting, for patrols, platoons, troops, and squadrons.

3. Known-distance practice with the rifle, like equitation, is of absolute necessity and importance; but it is a means to an end, and the service must not be allowed to make it the end itself; readiness for the part it is expected to play under war conditions is the only criterion by which a unit should be judged in peace.

4. Thorough skill in the use of the pistol is mandatory. The pistol is the cavalryman's individual weapon; it is of the greatest use in the action of small bodies, and constitutes the greatest moral aid to the little group operating independently when the individuals of the group have confidence in their ability to use it. Pistol firing should be included in the schedules of each phase of field and garrison training.

5. The saber will be retained, not only because it is the complement of the horse in mounted attack, but because skill in handling it gives confidence to the trooper and inculcates a spirit of boldness and willingness to close, mounted, with the enemy. It should not be made a plaything for fancy drills, nor should time be wasted in mounted fencing. The trooper should know that in the general case he will have time for one stroke, one thrust, or one parry, and

no more, with each individual enemy. The impetus of the attack will carry him beyond range of his weapon before he can possibly engage in a fencing duel.

6. Tactical training should be constant and as varied as the local limitations of terrain will permit. It should begin as soon as the recruit or officer joins; all should realize that skill in horsemanship, skill with weapons, skill in organizing, equipping, and arranging for the supply of expeditions of all sizes are of no value without great skill in their tactical handling. All should realize that tactical training should begin during the instruction of the recruit and should never end; that tactical development is constant; that methods once regarded as sound frequently have to be abandoned, due to the introduction of new instrumentalities of war.

7. The execution of cavalry functions in the future will be attended with more complications than our service has in the past allowed for. The same is true with the infantry and artillery. Fortunately for them, and incidentally so for us, they have a rich fund of personal experience, of battlefield lessons, upon which they may draw in the development of their drill regulations and their school plans. We must profit by keeping informed of their up-to-date methods, and by applying them to our own problems whenever suited to our purpose.

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Sections V, Schools, and VI, Technical Cavalry Training for Troops, for lack of space, are not reprinted here.

Editorial Comment

BON VOYAGE!

THE WORK of Major Robert C. Richardson, Jr., as Editor of the CAVALRY JOURNAL and Secretary-Treasurer of the U. S. Cavalry Association was abruptly terminated by his detail to the General Staff and assignment to the Philippine Department. That work had passed from the stage of the great difficulties attendant upon the renaissance of the JOURNAL after its war suspension and was already opening into the more satisfying paths of expansion. The January issue has met with such a round of approval in all quarters that it seems to mark definitely a triumph for his fourteen months of editorship. To re-establish the JOURNAL, to set a high standard for it and attain that standard, to build up a substantial circulation and means of financial support, has demanded vision, constructive talent, and arduous labor. The Cavalry Association will be glad to record here its appreciation of that well-directed labor and its happy results.

It is not alone cavalrymen, however, who have benefited from the efforts of Major Richardson. To his unflagging zeal and energy is largely due the ultimate success of the pay bill, the increased benefits of which came as a much-needed relief to the whole commissioned personnel, and in season to check the growing discontent that was threatening to undermine the morale of the Army. So the whole service is in his debt.

The Association, through its JOURNAL, here acknowledges its high appreciation of the work of its former Secretary-Treasurer and Editor, and the best wishes of all its members, it can be safely predicted, go with him to his new station.

THE NEW CAVALRY GUIDON

NOT TO CASE any that we have! Some may go with the reorganization; but it is imperative to maintain and foster the individual organization esprit and tradition, and what more emblematic of this than the fluttering guidon! But the individual unit must be governed and actuated by a common principle and policy, if the several organizations are to be part and parcel of an American Cavalry. So the need for a single guidon—a rallying point—that will be recognized by all cavalrymen. Such a rallying point is furnished by Cavalry Memorandum Number 1: The Fundamentals of Cavalry Training Policy. Space has been allotted to it in this issue of the JOURNAL notwithstanding the fact of its previous circulation to all cavalry officers. One lingering result of the war is the copious issue of orders, circulars, changes, which tempts many officers, it is suspected, into the habit of glancing at all such official literature

(criticising, of course) and casting it forthwith into the waste-basket. "The Fundamentals of Cavalry Training Policy" deserves a better fate.

Its authors have not, it may be presumed, put it forth with the thought that its various points are not to be a subject of discussion. But it is published as the doctrine which, for the present, all American cavalrymen are called upon to *make their own*. Better, is it not, to rally unitedly to the support of a well-considered declaration of policy, and loyally, heartily set to work along the lines it maps out, than to argue and discuss forever—argue and discuss and quibble endlessly, all the while pulling in as many different directions as there are shades of opinion? It may be safely predicted that an energetic prosecution of the objects and observance of the principles set forth in this declaration of the Cavalry Doctrine—by the whole arm, by officers and troops, in the field, in garrison, in the schools, in various localities, working under various conditions and circumstances—will develop any faults or weaknesses it may hold quicker than any amount of argument.

It is a careful survey of the whole field of cavalry training. No particular point is singled out for special emphasis or treatment, so no one will find here grazing ground for the particular hobby which he may elect to ride. But every phase of cavalry employment and training is here held up to view with a clear, even light on the whole.

It is conceived in an excellent spirit of moderation. It is not drawn into violent innovations by the warfare of the Western Front. It has not followed the latest French departure of organization and tactics, centered about the automatic rifle, with an accompaniment of hand and rifle grenades and intrenching tools. It will be time to determine the proper place to be occupied by the automatic rifle or newer machine rifle after its mechanical development is completed and further study of its tactical use has been made. Its conception of a combination of extreme mobility with powerful fire effect is far from suggesting a *mounted infantry*, which, says Bernhardi in his very recent work, "The War of the Future," "is nearly always a half measure and has had little success, even in the Boer War, where the English used them on a large scale."*

It sounds a clear trumpet call of cavalry aggressiveness and audacity. It calls for a bold riding, crack shooting cavalry, that is trained not alone for primitive warfare, but for battle wherein are congregated all the arms and all the engines of modern war. Our Cavalry Doctrine! Newly formulated from tried and proved principles! Our new guidon! Uncase it and let's go!

SABER VERSUS PISTOL

Why not cease our eternal, profitless argument as to whether the pistol or the saber should be our arm, with shotguns and bolos introduced occasionally to the confusion of the issue? A truce to the same! This pronouncement of

* "It would be a mistake to replace cavalry by mounted infantry. . . . Only cavalrymen can really keep their horses fit in the long run." (Ibid.) See Review of New Books.

Cavalry Training Policy designates a use and a place for each of our three time-honored arms, and, further, suggests clearly the relative importance to be ascribed to each. Ample scope is afforded for the enthusiasms and crotchets of all. Much remains to be said of the use of the pistol and of the saber. There is place for study and test and exposition, but no place for argument. Argument perverts the fact to its own use. With all the argument that has been expended on this particular point, who is there that has been converted from his original prejudices and opinions? Of what use, then?

LIAISON

One challenge to the memorandum can be safely made. "Liaison within the command," it states, "with neighboring units, and with higher command remains unbroken ground for the cavalry." Of course, we have always had liaison. Nothing is novel in that but the term itself, which the war introduced. But it is true that the necessity for a closely linked, comprehensive, systematic liaison was never so fully and generally appreciated as it is today. And it is probably true that the cavalry has fallen farther short of developing perfect liaison than its sister arms, whereas, from the very nature of its far-flung operations, its need in this respect is perhaps the greatest.

Yet the ground of a more effective training in liaison has been broken. Considerable progress has been made with airplane communication. Message centers are frequently utilized in tactical problems. Radio pack sets and Very pistols will be used quickly enough when the necessary equipment is supplied. And it is pertinent to call attention to the fact that a valuable, well-studied article on Cavalry Signal Communications appeared in the January issue of the CAVALRY JOURNAL and is concluded in this number. It is well worth the attention of every cavalryman.

POPULATIONS AND APPROXIMATE STRENGTHS OF REGULAR ARMIES

Country.	Population.	Regular Army.	Per cent of population.
Switzerland	4,000,000	170,000	4.25
Poland	30,072,000	815,000	2.71
Roumania	17,393,200	323,600	1.86
France	39,601,500 (1911)	735,300	1.85
Belgium	7,555,600	100,000	1.32
Italy	36,740,000	464,000	1.26
Spain	20,695,700	216,600	1.05
Great Britain	45,516,000 (1911)	425,000	.93
Germany	55,086,000 (est.)	150,000	.27
United States	105,709,000 (continental)	222,900	.21
Japan	58,000,000	273,200	.47

Topics of the Day

CAVALRY JOURNAL MOVES FROM MILLS BUILDING

THE UNITED STATES CHAMBER OF COMMERCE, which leases the Mills Building, as an incident of its expansion, has ejected the U. S. Cavalry Association from its former offices, and the Association has taken up new quarters in the Pope Building, 817 14th Street, Washington, D. C.

MAJOR KOCH WINS ENDURANCE TEST RIDE

THE ARMY WON in the 300-mile endurance horse-race which started at Fort Ethan Allen, Vermont, on October 11 and ended at Camp Devens, Massachusetts, on October 15. The winner was "Mlle. Denise," an Army grade horse, ridden by Major Stanley Koch, U. S. A. The third prize was won also by an Army horse, "Bunkie," a grade animal, ridden by Lieutenant Thomas H. McCreery, U. S. A. "Kingfisher," who was one of the winners in the last year's race, ridden by Col. S. R. H. Tompkins, U. S. A., finished fourth. Of the twenty-seven horses, Army and civilian, which started in the race only ten finished. "Mlle. Denise" had only been owned by Major Koch three weeks, she having been entered by him as a substitute for the horse he intended to ride because of the sudden lameness of the original entrant. "Bunkie" was bought by Lieutenant McCreery for Army service in April, 1920, and had been trained by him in Virginia for only two months.

As for the equipment, Major Koch says:

"The equipment we carried was practically the same. The saddle was a Saumur type field officer's saddle, with pommel and cantle pockets. In the pommel pockets we carried a supply of white rock, already soaked up and wrapped in canvas to protect the other articles in the pockets. In one side I carried a bottle of Tweed's liniment and four bandages, to be used as wet bandages. In the other pocket I carried a bottle of iodine and a supply of white lotion tablets, two empty bottles to mix up the white lotion, and Tweed's liniment and four fitted horseshoes. In the cantle pockets I carried four flannel bandages, a roll of cotton batting, grooming kit consisting of a corn brush and two small bath towels, sponge, and a small canvas bucket. In the pommel roll I carried a slicker, a halter, and a roller surcingle, to be used in holding the saddle blanket while cooling out and to hold compresses soaked in white lotion in case of a sore back, and on the cantle roll a canvas horse-cover. I used an extra heavy saddle blanket to supplement the canvas cover when necessary at night, to give extra protection to the back on account of the heavy

weight carried. Each rider was required to carry 100 pounds dead-weight, so the extra weight was made up by lead which was carried in lead pads exactly as are used on the race track. The lead was cut in sheets about 4" long, 3" wide, and ⅛" thick, being carried in six pockets on each side, the top of the pockets being about 2" below the saddle bars."

Major Koch has said that the entire credit for training both "Mlle. Denise" and "Bunkie" belongs to Lieutenant McCreery.

In accordance with the regulations of the contest, the horses were brought to the field at the end of the race for final inspection by the judges. They were first put through their paces and then judged individually. The only sign of travel on the first four arrivals was when the saddles were removed and the horses' backs were found to be slightly wet.

The finish of the horses was in the following order with the total number of hours ridden and the points awarded: "Mlle. Denise," hours ridden, 46.57; points, 83.02. "Rustem Bey," 52.41; 75.94. "Bunkie," 45.55; 71.65. "Kingfisher," 56.45; 69.16. "Crabbet," 52.33; 61.00. "Dolly," 58.02; 58.91. "Castor," 58.40; 53.68. "Moscowa," 53.15; 48.50. "Noam," 59.23; 41.23. "Kemah Prince," 58.03; 40.76. The conditions of the race were based on condition, speed, and feed consumed. The six prizes awarded were as follows: First prize, $600, mounted service cup; second, $400, red ribbon; third, $300, yellow ribbon; fourth, $200, white ribbon; fifth. $150, gray ribbon; sixth, $100, black and white ribbon.

HORSES WANTED FOR ENDURANCE RACE

THE REMOUNT SERVICE has purchased one thoroughbred horse from the money donated by the Kentucky racing people for the 300-mile endurance test ride to be held next fall.

This horse is "Edomala" by "Marchmont II." out of "Alamode," and is a bay gelding about 16 hands; weight, about 1,075 pounds; age, 11 years. This horse was bred in Texas by Mr. J. W. Fuller and was not broken until this year. He has never been raced. He is regarded as a fair prospect only.

Any one who knows of suitable thoroughbreds for this test that can be bought will help promote the cause of the thoroughbred horse by notifying Major Stanley Koch, Remount Service, Munitions Building, Washington, D. C.

We are looking for short-legged, close-coupled, weight-carrying thoroughbred horses, age preferably from 7 to 10 years. The horse must either be registered or eligible for registration. They must be absolutely sound, with good feet, not too small, and must travel absolutely true. Unsightly blemishes or bad temper will not disqualify them for this work. An average size horse is desired, though the weight to be carried, 245 pounds, demands that the horse be a real weight-carrier. Speed is not important, as the test requires 60 miles, to be covered in from 9 to 12 hours, for five consecutive days.

That the horses selected will be well prepared for the race is assured by the fact that their training will be in the hands of Lieutenant T. H. McCreery, Remount Service, who has not only had wide experience in training race-horses, but trained the horses that finished first and third in last year's test.

The following gentlemen have consented to act as judges:

Major Henry Leonard, Washington, D. C.

Mr. Harry McNair, Chicago, Ill.

Mr. John R. Valentine, Bryn Mawr, Pa.

The route will probably be laid from Wrightstown, N. J., to Washington, D. C., stopping at Trenton, N. J., West Chester, Pa., Havre de Grace, Md., and Baltimore, Md.

Copies of conditions for this ride may be obtained, upon application, from Mr. C. C. Stillman, 3 East 44th Street, New York City, or from Major Koch, in Washington, D. C.

STANLEY KOCH,
Major, Quartermaster Corps.

YAQUI INDIANS FILE A PROTEST

RECENTLY STATEMENTS were published throughout the United States to the effect that "the Yaqui Indians were again on the warpath;" that they were discontented with the government of President Obregon, and were demanding that the entire vast Yaqui River valley should be turned over to them. It was represented that the situation was most serious in every respect. Now come the four chiefs of the Yaqui tribe—Espinosa, Matus, Mori, and Gomez—and file a strenuous protest, in which they flatly and unequivocally deny that there is any foundation for the reports. Instead of being discontented with the government of President Obregon, they are in hearty accord therewith. Instead of going on the warpath, they are devoting their every effort to agricultural development of their lands, and they declare that they have the utmost faith that the President will carry out his announced program to the ultimate detail, pledging their hearty support thereto. And as with the false statement about the Yaquis, so with the greater portion of the other periodical reports about this and that and the other bandit organizing a "serious revolution." They have most of their foundation in the heads of those responsible for their circulation and not elsewhere.—*Mexican Review,* March, 1921.

BRITISH CAVALRY

THE WHOLE QUESTION of the organization and employment of cavalry in the field is still under discussion and no decision in the matter has yet been reached. There have so far been no important reductions in the number of cavalry regiments. The yeomanry, however, have been reduced from 53 regiments to 10. The remaining 43 are, after a period of two years, to be converted into artillery or armored-car units.

THE AMERICAN REMOUNT ASSOCIATION

THE GOVERNMENT is backing the production of better horses and mules. This is being done by the War Department through the Remount Service, under the direction of the Quartermaster General of the United States Army. The last Congress made an appropriation of one quarter of a million dollars to further this scheme. This project is also being backed by an auxiliary society of the Remount Service known as "The American Remount Association," with offices at 1741 T street N. W., Washington, D. C.; President, R. H. Williams, Jr.; Secretary, Major A. A. Cedarwald.

Composition.—It is composed of Army officers and civilians, breeders, farmers, ranchmen, horsemen, race-horse owners, drivers and riders, wagon, buggy, saddle, and harness manufacturers; in short, people interested in the horse and mule and interests allied thereto.

Object.—(*a*) To promote and improve the production of horses and mules.

(*b*) To stimulate the breeding of high-class animals of the equine species with a view to improving their blood lines and conformation and thereby to enhance their usefulness and market value.

(*c*) To protect owners, users, breeders, and dealers against unjust and unreasonable legislation.

(*d*) To gather, co-ordinate, and disseminate data on breeding, feeding, stable management, and care of animals.

(*e*) To promote and encourage horse shows, race and hunt meets, polo, horse fairs, and riding and driving by means of competing for prizes and ribbons.

(*f*) To encourage the use of the horse commercially and for sport in healthy outdoor exercise.

(*g*) To save the riding and driving horse from degeneration and extinction.

(*h*) To imbue our people with a patriotic understanding that the horse and mule are necessary for our national defense.

Membership.—The American Remount Association has now over 1,800 members, resident in every part of the United States. We hope and expect to double this membership by the end of this year. The membership is composed of many men of influence, wealth, and high standing, not only in the horse world, but also in business, politically and socially. Horsemen interested in every class or type, race-horse owners, riders and drivers, and all interested in business related thereto are backing this Government breeding scheme.

Plan and Procedure.—Our aim is to improve and stimulate the breeding of every useful animal of the equine species, from the heavy draft to the polo pony and the mule.

Our immediate concern is to save the riding and driving horse and the high-class race-horse from extinction. We want to produce a truly American type of cavalry horse—a horse with breeding and quality as well as bone and sub-

stance—a weight-carrier and the best general-purpose horse known—a horse that will weigh from 1,000 to 1,250 pounds, standing from fifteen hands one inch to sixteen hands, tight made, with good gaits and action—a walk, trot, gallop horse that can carry weight and follow the hounds across country—a horse that can be used to advantage and economically any and everywhere except in very heavy draft. This type of a horse has splendid looks, quality, action, and vigor. Almost every commercial and military use will be met by the progeny of this breeding scheme, dependent primarily upon the size, quality, and blood lines of the mares used in breeding. Among the stallions to be placed through the United States this spring will be over one hundred head of *high-class registered thoroughbreds*—big horses with plenty of body, bone and substance. These stallions, placed in the stud through Government agencies, will be available to farmers and breeders at a minimum fee. The Government does not expect to make money, but to make it possible and feasible for the farmer and breeder to get the service of a high-class, approved stallion for their good mares. The object is to produce animals of real value and use, that will not only pay for their rearing, but bring a handsome profit when mature. We expect the progeny at maturity to make general-purpose horses, cavalry horses, riding and driving horses, show horses, hunters, race-horses, polo ponies, depending largely upon the mares selected for breeding and the care in rearing the colts; a high-class horse, both for peace and war, a link in the chain of our national defense. The colts will belong to the breeder. The Government will have no string on them. The owner will be privileged to sell them to whomsoever he pleases, at any time. However, the Government expects to depend upon this source for its supply of animals in times both of peace and war.

Registration of Half Thoroughbreds.—The New York Jockey Club has established a half-bred registry at Avon, New York, Mrs. Herbert Wadsworth in charge. This makes it possible for the farmers and owners of these colts, which will be half-breds, to register same at a nominal fee of $2.00, which is strongly recommended, because when the farmer or breeder desires to dispose of his colts a better price will be paid by civilians for the registered colts than for those that are not registered. In addition to this, registration is necessary if any type or breed of horse is to be established and recognized. All necessary information in regard to this registration can be had by writing to "Half-bred Registration Bureau, New York Jockey Club, Avon, New York."

Contract System.—For years the Government purchased all its animals by contract, after advertisement, from the lowest bidder. This method beat down the price paid by the Government to the lowest point and made it unprofitable for the farmer and breeder to produce a high-class animal. It was recognized as a mistake; therefore the Government has established a fair price to be paid during the year for each class of animals which are of proper conformation, age, and soundness to pass inspection. This system is known as the "Open

Market Purchase System" and was designed so as to give the farmer and breeder a better price for a suitable animal—a price that will make the breeding of high-class horses and mules attractive. A high-class cavalry or general-purpose horse must be made to bring as high a price in the market or to the Government as the draft horse or the draft mule. The Government, in times past, paid too little for a good cavalry horse, buying by the contract system. Purchasing in the open market has increased the price. The price paid for the right sort of animal for Government use has been increased from year to year. This is especially true of the cavalry horse.

A life membership in the American Remount Association costs $55.00, without further dues or expense. A regular membership costs $5.00 initiation fee and $3.00 for the first year's dues; total, $8.00. The dues are $3.00 per year. Send in your full name and address, occupation, the kind of membership you desire (life or regular), and your check to cover the class of membership desired, made out in favor of "The American Remount Association," to The Quartermaster, U. S. Army, 410 Scarritt Arcade, Kansas City, Missouri. Your application will be seconded by two members of the Association and sent to the Secretary of the American Remount Association, at 1741 T Street N. W., Washington, D. C. Your application will be acted upon by the Board of Directors, and upon election to membership you will be issued a certificate of membership. From time to time you will receive all data, literature, bulletins, etc., issued by the Association, which you will find interesting and instructive. It will keep you in touch with the horse world and its activities. We believe this association stands for a live and important proposition, which demands the attention of our people from a patriotic standpoint and in the interest of the national defense. Join us in a nation-wide work.

C. E. Hawkins,
Colonel, Q. M. C., Remount Service.

CAVALRY REORGANIZATION

The matter of Cavalry reorganization is in abeyance, in so far as time and manner of putting it into effect are concerned, pending War Department decisions.

EDUCATION OF ARMY CHILDREN

The Adjutant General of the Army has compiled a concise and complete list of educational institutions that offer concessions to Army children. It gives the name of each institution and the nature of the concession offered. This information in pamphlet form may be obtained by officers, warrant officers, or enlisted men upon direct application to the Adjutant General's Office.

New Books Reviewed

The U. S. Cavalry Association is in a position to furnish any of the new books reviewed in this department with a minimum of delay, and will give prompt attention to any orders submitted by the readers of the Journal.

The War with Mexico, 1846-1848. Maps. By Justin H. Smith. The Macmillan Company, New York. 8vo, 2 vols., 1183 pages. Indexed. $10.00.

The author was formerly professor of modern history in Dartmouth College. He is also author of "The Annexation of Texas," of which the subject of this review is the sequel; "Our Struggle for the Fourteenth Colony," "Arnold's March from Cambridge to Quebec," etc.

Concerning the occasion for and the sources used in writing this book the author states as follows:

"The warrant for offering another work on the subject rests primarily on the extent and results of the author's investigations. His intention was to obtain substantially all the valuable information regarding it that is in existence, and no effort was spared to reach his end. The appendix of Volume II gives a detailed account of the sources. By special authorization from the Presidents of the United States and Mexico, it was possible to examine every pertinent document belonging to the two governments. The search extended to the archives of Great Britain, France, Spain, Cuba, Colombia, and Peru, those of the American and Mexican States, and those of Mexican cities. The principal libraries here, in Mexico, and in Europe, the collections of our historical societies, and papers belonging to many individuals in this country and elsewhere were sifted. It may safely be estimated that the author examined personally more than 100,000 manuscripts bearing upon the subject, more than 1,200 books and pamphlets, and also more than 200 periodicals, the most important of which were studied, issue by issue, for the entire period. Almost exclusively the book is based upon first-hand sources, printed matter having been found of little use except for the original material it contains or for data regarding biography, geography, customs, industries, and other ancillary subjects.

"Probably more than nine-tenths of the material used in the preparation of this work is in fact new. No previous writer on the subject had been through the diplomatic and military archives of either belligerent nation, for example."

Of the various historians who have written on this war, none have made such a searching analytical investigation as has this author. His investigations are of a character which carries conviction. In addition, his style is engaging and holds the interest. The state of mutual public contemporaneous feeling of the peoples of the United States and Mexico and of the political relations between the two countries is set forth by copious quotations from contemporary publications and public and private documents.

"As a particular consequence of this full inquiry, an episode that has been regarded both in the United States and abroad as discreditable to us appears now to wear quite a different complexion."

The accounts of this war, as heretofore written, were largely a history of military

operations only. This account traces the political, diplomatic, and economic history of events from the time Mexico broke away from Spain, and gives a succinct account of the causes, external and domestic, making the war possible, and traces many political consequences of the war.

The author's narrative gives some of our popular conceptions a rude shock, yet the evidence unquestionably supports his conclusions; thus:

"Regarding Taylor, thoughtful officers did not feel enthusiastic, however. The General had shown himself slow, unskillful, wanting in penetration and foresight, and poorly grounded professionally. Nine-tenths of the regular officers felt that no talents had been displayed by him, even in the battles. 'He had shown,' said Meade, 'perfect inability to make any use of the information given him.' In the opinion of another excellent officer, he seemed 'utterly, absurdly incompetent to wield a large army.' He had failed to realize the difficulties of his position; and undervalued the enemy; and, as Bliss admitted, had had 'no conception' of the Mexican preparations. This last fact dimmed his credit, even for courage, in the minds of discerning critics. But, after all, his resolution had been superb and inspiring. He had succeeded; and among us Americans, 'nothing succeeds like success.' The reports written for him read admirably. Terse remarks of his, often tinged with soldierly humor, delighted the general taste at home, and mere questions of tactics or strategy signified in comparison rather less than zero. A tidal wave of popularity rose in his favor, and soon Thurlow Weed of New York, the Warwick of the Whig Party, came out for him as Presidential candidate. A commission as brevet major-general and other official honors did not fail to arrive."

The pen pictures of the principal actors are terse and clear-cut and should remove some heroes from their pedestals. The generally accepted view of the accuracy of Scott's strategy in the battles about Mexico City also receives consideration. One of the most interesting narratives, because of the injustice to Scott, is an account of the malign influences which caused Scott to be removed from command.

Hardly less interesting than the text itself are the copious notes. Instead of being placed at the foot of each page, where they are more or less distracting, all the notes are collected serially and follow at the end of the text of each volume.

This history is of interest to the military student because of the able description of military operations, to the general public because of the pleasing and engaging style, and to the political student and statesman because of the keen analysis of public sentiment, of the characteristics and psychology of peoples, and of the underlying causes of war, just as existent today, though temporarily occulted, as they were eighty years ago.

HOWARD R. HICKOCK,
Colonel, 4th Cavalry.

MILITARY STUDENT'S TEXT BOOK, VOL. III. By Moss & Guild. George Banta Publishing Company, Menasha, Wisconsin. Price, $1.90.

The authors nave been occupied for some years in preparing a text book for units of the Reserve Officers Training Corps. The first two volumes have been in print for some time. Volume III covers the course laid down for the third year's study, known technically as the First Year, Advanced Course. The objective of this year's course is to qualify the student as a subaltern officer.

In this book will be found the instruction in field engineering necessary to all services in common and of especial significance to engineering units of the R. O. T. C. Infantry combat, particularly necessary to the students enrolled in infantry units of the R. O. T. C., is also minutely covered.

The subject-matter is divided into a series of twenty-eight lessons, which allow for one-hour periods of class-room recitations. The subjects are well handled and simply imparted, yet thoroughly covered. The book should be of considerable value as a text book in Reserve Officers Training Corps instruction and of equal use to the applicant for a commission in the Officers' Reserve Corps.

H. T. BULL,
Major of Cavalry.

THE AMERICAN GUIDE BOOK TO FRANCE AND ITS BATTLEFIELDS. E. B. Garey, O. O. Ellis, and R. V. D. Magoffin. The Macmillan Company, New York. Price, $3.00.

It was inevitable that, following the war, there should be a plethora of guide books of one sort or another, and it is therefore well that Americans visiting France should have at their disposal one written from an American point of view. This book has been carefully prepared by three young American officers thoroughly familiar with their subject and with sufficient imagination to realize what would appeal to the American tourist in quest of new sensations along the old battle front. It may be called an elaborated Baedeker, or, rather, Four in One. It gives in part 1 all the information regarding the mechanics of travel. Part 2 is historical in nature, first dealing with Paris and its monuments, and then briefly reviewing the history of the war and that of the cities and places where Americans fought. Part 3 is devoted to the operations of each American division in France in very readable style, and part 4 gives useful statistical data. The book certainly has a practical value, and, judging from the sources from which all of the information is drawn, it may be regarded as authoritative for all purposes.

ROBERT C. RICHARDSON, JR.,
Major, General Staff Corps.

THE WAR, THE WORLD, AND WILSON. By George Creel, former Chairman of the Committee on Public Information. Harper Brothers, New York. Price, $2.00.

Although obviously written "for campaign consumption principally," Mr. Creel's defense of the acts of the Wilson Administration, which have been the main targets of opposition attack, holds now as great an appeal for the reader politically inclined as before the election.

Whether one agrees or not with the author's premises, it is impossible to deny that Mr. Creel's style, unrestrained as it is, excites interest, even if combative, and carries certainly the conviction of sincerity. Mr. Creel's journalistic training reveals itself in the title, as well as his style, although newspapermen deny the latter, and while undoubtedly "The War, the World, and Wilson" has an alliterative quality of attraction, it is nevertheless ill-chosen, for doing justice to the last named of the trilogy, it fails to make reference to the larger, and by far the most interesting, portion of the book, that dealing with the Versailles Treaty. Of all the innumerable answers to Mr. Keynes' "The Economic Consequences of the Peace" which have appeared since the extraordinary circulation of that book, Mr. Creel's rebuttal is unquestionably the most readable, and what it may lack in authoritativeness it makes up by argument, so brilliantly written that in its reading there is the oratorical element of a Bryan speech. Indeed, Mr. Creel's phrases throughout are those of the speaker rather than the writer; but they lose nothing of effectiveness thereby.

In his attempted defense of President Wilson's "partisan appeal," his appointments to the Peace Commission, and the decisions in the Roosevelt and Wood cases,

Mr. Creel is not as happy as in his Peace Treaty discussions, and friends of General Wood will resent the attempt to decry every accomplishment of the latter.

RANDOLPH C. SHAW.

NO DEFENCE. By Sir Gilbert Parker. J. B. Lippincott Co., Philadelphia. Price, $2.00.

The author's name leads one to expect something quite different. But "No Defence," even though in a much lighter vein than any of his others, is nevertheless a very enjoyable romance. It is too bad that there is so very little atmosphere of the 18th century, that it might be a story of happenings today. The plot is interesting, and the scenes laid in many countries, keeping one's interest ever alive. The characters are well drawn in bold strokes, effective without tiresome detail, contrasting the English and Irish personality in vivid scenes. Without exalting its literary place, it is still one of the good books of the day.

ELSA M. HILLDALE.

THE NEW SCIENCE OF ANALYZING CHARACTER. By Harry H. Balkin. The Four Seas Company, Boston. Price, $2.00.

In this book the author has tried to present to the public a standard text-book on the subject of analyzing character, and for his purpose has selected a number of well-known types as illustrations of his theories. Each chapter is independent, apparently, of the other, so that the reader gets a rather confused idea of just how he would analyze a person's character. It would appear that the author has deduced a few general principles based on an intelligent study of human nature and on the characteristics of well-known people of similar types—physically, mentally, and spiritually. Some of his statements and illustrations are rather obvious. For instance, he holds Roosevelt up as a man of action, Taft as one of judicial temperament, and deduces from this fact that men resembling Roosevelt and Taft physically will possess their qualities. It can hardly be said that the book has any scientific value, but it will allow the reader to pass a pleasant hour.

ROBERT C. RICHARDSON, JR.,
Major, General Staff Corps.

LES ALLURES, LE CAVALIER and ASSIETTE, ALLURES ET REACTIONS. By L. de Sévy. Published by Librairie Le Goupy, 5 Boulevard de la Madeleine, and Librairie Chapelot, 136 Boulevard Saint-Germain, Paris.

For those who have in the course of the war refreshed their acquaintance with the French language, there is a wealth of new military literature available. Attention is invited here to two recently published books of interest to the horseman by a French cavalry officer, who writes under the pseudonym of L. de Sévy. While some matters are treated almost identically in the two volumes, the subjects are for the most part freshly considered in each, and the two books are practically companion volumes, each the complement of the other. Both books are well illustrated by valuable cinematographic photographs.

"It is at Versailles," writes M. Barrès in his preface, "where French equitation has shone forth with unforgettable glory, that this treatise (Les Allures, Le Cavalier) was written by a cavalry officer who does not wish to divulge his name, but whom his pupils and comrades will recognize by the boldness and novelty of his doctrines." A strongly complimentary letter of General Sordet, who, it will be

remembered, commanded the First Cavalry Corps, which figured so conspicuously in the advance into and retreat from Belgium, precedes the author's introduction. For the benefit of such as may feel that nothing new has been written on this subject of equitation or is likely to be written, a couple of paragraphs of this letter are quoted:

> "Old stager in equitation, finding nothing more in works treating of this science, which during the first part of my career I read with avidity, than a litter of processes masking most often an entire paucity of principles, or the affirmation without proof of contestable principles, I opened no more of them.
>
> "It is with a true joy that in renouncing my abstention in favor of your beautiful work, I found that the horseman of the future would at last be endowed with a guide of inestimable value—heretofore lacking.
>
> "Your theory of equestrian dynamics and of equilibrium seems to me to be positive and irrefutable. The processes of equitation and training which you deduce from them are expounded with a clarity and simplicity which will insure results even for only slightly gifted riders. Finally, the psychological part, indispensable complement of a technique which is applied by living beings to living beings, is remarkably treated in excellent terms and with engaging temperateness."

The author proposes that before studying equitation and training it will be more logical to study the different modes of progression of the horse—the gaits. The mechanism of each gait is discussed, and especially the part played in each by the balancer, as the author terms the horse's head and neck. The distinction between the effect of the motion of this balancer and the effect of its relative position is carefully pointed out.

The second chapter, which might have had for a motto "Give when the horse gives," presents an admirable review of the qualities of mind and of physique which the rider must seek to acquire. It comprises an exhaustive discussion of *the seat*, considered in its several aspects, particularly with respect to the different gaits, and to its modifications in the jump.

The chapter on "Equitation" announces several universally appreciated (and almost as universally violated) principles, and then proceeds to a close study of the several aids. As an example of the character of this study may be cited the remark relative to the turn on the forehand: "The action of the reins in the turn on the forehand is variable and complex. With the right leg of the rider should at first be associated the right direct rein of opposition, in order to assist the beginning of the movement; then at once the left rein of opposition (direct or indirect), in order to fix the left shoulder." Or the following: "In the turn to the right at a trot, the right leg acts when the left diagonal goes forward, and the left bearing rein when the right diagonal goes forward." In the explanation of the gallop depart, the author differentiates between the aids to be applied in the case of a horse in training and a trained mount.

Chapter 4 is devoted to the training of the horse.

The reader will take considerable amusement out of the clever line sketches in caricature which accompany the chapter headings of *Assiettes, Allures et Reactions.* The first part treats exhaustively of the seat. After a careful analysis of the vertical reactions by which the tyro loses contact at regular intervals with his mount, the author mentions four processes for nullifying the reaction. The first, which he recommends for the beginner, consists in an alternate shortening and lengthening of the loin. The second, which is the method advocated for the rider who has become

properly suppled, considers the upper body as composed of two sections joined by a flexible loin which will bow and take up the vertical motion. It is difficult to grasp exactly the distinction between these two processes. The author does not elaborate sufficiently. But the difference seems to hinge on the fact that in the first, the torso of the beginner being vertically in alignment and the action of the loin being a sort of imperfect telescoping, the upward motion of the horse imparts an upward velocity to the rider's center of gravity. When the horse, by means of internal physical forces, stops his upward motion and suddenly lowers his own level, as he flexes his members, the rider's center of gravity, acted upon only by inertia and by gravity, continues for a time the upward movement. This necessitates a stretching of the loin of the rider in order that his seat and the saddle shall not part company. In the second process, the loin being in the nature of a flexible hinge, the upward motion of the horse is not communicated to the upper portion of the rider's body (his bust); hence his center of gravity does not receive much upward velocity, and has therefore no upward motion to continue when the horse's body suddenly begins its descent.

The author emphasizes the point that the second process of maintaining a seat supposes a suppleness and form of loin that is the result of certain suppling exercises and with which the rider is not naturally endowed; so that it is a mistake to endeavor to teach the beginner this process until his body has been properly suppled.

The third process mentioned, and not dwelt upon, is that of inclining the body to the rear. While this method is effective so far as escaping the vertical reaction is concerned, its several disadvantages condemn it.

The fourth process consists of a movement of the members of the rider, such members being then in the nature of balancers, whose play assists the rider to maintain his seat in the saddle. These movements—among which the considerable arm movements of the typical cow-puncher might be classed—become readily natural and reflex; but the disadvantages of this method are obvious. The author mentions a shrugging of the shoulders, formerly in vogue at Saumur, as a movement of this class.

For the beginner the following method is prescribed for obtaining the necessary suppleness of the loin (lumbar region): The rider detaches his thigh and legs from the saddle, taking a position with the thighs elevated (nearly horizontal). Then, aiding himself by means of the pommel, he pulls himself forward, bringing his buttocks as nearly up to the pommel as possible. He then brings his knees together and places his legs upon the horse's shoulders, his knees supported over the front of the side-bars of the saddle. He takes in his waist and sits, so to speak, back of his buttocks. He then achieves contact between the saddle, in which he finds himself squashed, and the end of his spine. The fixedness of his legs, assured by their adherence to the front of the saddle, allows the buttocks to maintain the extreme forward position. The McClellan saddle, with its prominent pommel, is evidently not well adapted for this exercise. The rider should make a voluntary effort to relax. This exercise is repeated frequently at the slow trot.

In the second part the author discusses at length the manner of and the reasons for the flexions and extensions of the legs at the different gaits, and emphasizes the reasons against increasing or decreasing markedly the natural speed of each gait in the employment of those gaits in long marches. His remarks about the several gaits are somewhat disconnected, but are sufficiently illuminating.

In his discussion of the gallop—relative to the cadence which should be adopted for the prolonged continuance of the gait with the least fatigue to the horse—the author cites the results arrived at by Lieutenant Bausil, who conducted some interesting and conclusive experiments in the matter of marching. The latter tells us, "After experiments, I finished by adopting for the gallop the speed of 400 meters per minute (nearly 15 miles per hour). I find this to be the cadence which a horse properly suppled and balanced generally takes, and in short a gallop sufficiently rapid, easy, and smooth."

The chapter on the "Rôle of the Reflexes" is principally devoted to promulgating the idea that this matter of the reflexes, having been utterly neglected, should be carefully analyzed. "To act, to feel, then to judge," should be the three phases of that education. To those who say so readily, "I know what I do," the author calls attention to the great difference between what riders "know" with respect to their actions and what instantaneous photographs show that they do—in the active phase of the jump, for example.

The third part of the book is devoted to an historical review, including the evolution of the position of the rider, the development of the bridle and saddle, and the use of spurs and horseshoes. Some curious and quaint bits of horse-lore are offered, culled from the writings of Xenophon, the first writer, so far as is known, on the subject of equitation.

THE EDITOR.

THE WAR OF THE FUTURE. By General von Bernhardi (translated by F. A. Holt, O. B. E.). D. Appleton and Co., New York, 1921. ($3.50 *net*.)

This notable writer needs no introduction to any military student, scarcely to the public at large. His keen insight into the development of modern military operations and the clarity of his exposition provide, in this latest work, a fountainhead of well-organized ideas which will prove to him who will study them a valuable vantage point from which to direct his study and reading of the military literature which has only begun to accumulate as an aftermath of the World War. The author makes a careful survey of that war, noting all the many changes in its character, discussing the reactions and counter-reactions of developing equipment upon tactics, and *vice versa*. His discussions and conclusions as to details are positive and instructive. He concludes, for example, that companies of 150 are better adapted to the requirements of modern war than the company of 250 used in the late war; that a labor company should be attached to each battalion, composed of less fit men, to supply transport drivers, clerks, details of various kinds; that the cavalry regiment should consist of at least 10 squadrons in addition to a reserve squadron in order that the regiment may furnish a dismounted battalion of about 750 men. With respect to cavalry, again, he is in favor of sacrificing mobility somewhat in favor of large cavalry masses, for, as he points out, in modern war weak detachments quickly fade away. He has considerable to say on the subject of cavalry and the effect of recent developments in warfare upon its employment and tactics.

While not minimizing the value of this work with regard to details of organization and tactics, it must be conceded that even the prophetic power of a Bernhardi has its limitations, and that with new developments of armament and further study of the recent conflict other conclusions than his may result. But for a wide perspective of what is now meant by war, the vast combinations of forces called into play, the powerful concentration of effort demanded, the talent of Bernhardi is supreme. His chapters on The Sources of Power and Diplomacy will have an acceptable tang for those whom the preachments of pacifists and the glorified visions of future world harmony have wearied. The world may have beaten the Boche, but Bernhardi still bristles.

THE EDITOR.

Polo

WAR DEPARTMENT

The War Department Polo Association got a good start with the first of the year. Early in January it got a string of ponies which it started training at Fort Myer. Three times a week the polo enthusiasts from the department offices and the offices of the chiefs of services turn out for a good hard work-out. Major Quekemeyer usually takes charge of the ride, which is held in the riding-hall. The average attendance is about twenty and the ponies are grouped into two divisions, in accordance with their degree of training. Each group is worked at a gallop, without rest, for twenty-five to thirty minutes. As the work progressed the double replaced the single snaffle, and some of the ponies have lately been put on the curb. Stick practice on the wooden horse has been taken up very recently.

DEATH OF H. L. HERBERT

Henry Lloyd Herbert, chairman of the American Polo Association since its formation, in 1890, died March 5, in Bridgeton, Barbados.

Mr. Herbert was 76 years old. For years he has been regarded as an international authority on polo. He was one of the founders of the polo association shortly after the game was introduced in this country by the late James Gordon Bennett. First as a player and then as referee he had been identified with most of the important international and intersectional matches.

He was often called the "father of polo" in the United States. In 1876 he organized the first polo club in this country. The first team consisted of eight men, but after several games had been played in Newport and Prospect Park, Brooklyn, it was decided to limit the number of players to five and then to four.

He was untiring in his efforts to increase interest in polo, and due largely to him the sport is now played in almost every State in the Union.

FIFTH CAVALRY

Polo in the regiment is actively and enthusiastically supported. The Polo Association has been recently organized, with a new constitution and by-laws. The officers of the association are at present Colonel James J. Hornbrook, Honorary President; Colonel O. B. Meyer (relieved and place now vacant), President; Major John P. Wheeler, Secretary-Treasurer; Major Edward Bowditch, Jr., Manager of Polo; First Lieutenant James M. Adamson, Jr., Assistant Manager of Polo. The manager of polo is regimental polo representative. In addition to the officers named above, there is an Activities Committee of the Polo Association composed of Major Edward Bowditch, Jr., Lieutenant J. M. Adamson, Jr., and Lieutenant O'Donnell, who are charged with inaugurating and organizing other activities, in addition to polo, which will encourage horsemanship and horsemastership. It is hoped that in the near future the regiment can have some horse shows and horsemanship contests.

The polo stable is in course of general reconstruction, and it is aimed to make it the model stable in the regiment. The polo detail will be coached and instructed in all that pertains to stable management, grooming, feeding, training for polo, and general care and

THE CAVALRY SCHOOL FIRST TEAM (KANSAS SUNFLOWERS)
A
which won the Cavalry School Polo Tournament, in which ten teams participated, and the
Army Championship of the Central Department

From the left: Major Grove Cullum, Major Clarence Lininger, Major Palmer Swift, Major W. W. Erwin

COLONEL GORDON JOHNSON'S MONA LISA

handling of polo ponies. At present there are forty horses in the stables, about twenty of them being more or less green remounts which were received by the regiment as suitable for polo. Some of these show traces of Percheron blood and none of them show traces of thoroughbred blood.

From twelve to sixteen officers and men come out three times a week for polo practice and play. Although the field is very dusty, it is level and convenient and there is a good grandstand. On Tuesdays and Thursdays the work on the field consists largely of coached hitting, individual work, and coached team practice. On Sundays there is usually held a short game of six periods.

SIXTH CAVALRY

General Orders
Number 6.

HEADQUARTERS, FORT OGLETHORPE, GEORGIA, *February* 11, 1921.

1. Through the initiative and efforts of Major Hugh H. Broadhurst, Cavalry, D. O. L., Commanding the Recruit Depot Post, and of the officers and men of his command, a fine new polo field, complete in every way, with grandstand, assembly room, and other conveniences, has been prepared and was formally opened and dedicated to the use of the post yesterday afternoon.

At the suggestion of Major Broadhurst, this field will be known as "The Steele Polo Field" in memoriam of the late Captain John Newton Steele, 6th Cavalry, recently killed in a polo accident at the post.

The thanks of the garrison are hereby tendered to Major Broadhurst and to the officers and men of the Recruit Depot Post for their public spirit and energetic work in providing this new field for the great horseman's sport of polo.

By order of Colonel Foltz:

W. R. HENRY,
Major, 6th Cavalry, Adjutant.

SEVENTH CAVALRY

The past quarter was a very successful one for 7th Cavalry Polo, the team winning three tournaments, the last one carrying with it the championship of the Eighth Corps Area. The 7th won over the following teams: 1st, 4th, 5th, 8th, 10th, 13th, and 16th Cavalry teams and the 82d Field Artillery, the Fort Bliss Remount, Camp Travis and Headquarters, Eighth Corps Area.

The first tournament started September 19, when we met and defeated the 8th Cavalry team 12 to 4. The first period was the only close one, the score standing 1 all at its close, for in the second the 7th obtained a 3-goal lead, and the 8th never had a chance to head us off from that time.

The 82d Field Artillery, having defeated the Fort Bliss Remount team, were our next opponents, and went down to the tune of 10 to 1. The game really was closer than the score would indicate, for the one-time cavalrymen fought hard from start to finish and missed several shots for goals by inches. This game made the 7th champions of Fort Bliss and placed us against the winner of the Arizona Tournament, the 10th Cavalry, as they had defeated the First at Douglas. The orders were for the winner of the Fort Bliss-Arizona Tournament to go to Fort Sam Houston, and, while the Fort Bliss teams were satisfied that one game with the Arizona team could decide the issue, the 10th insisted upon a series of three games. The latter had apparently failed to realize that their ponies were not sufficiently trained for fast polo, and that they had not been against keen competition before reaching Bliss, for the score of the first game was 30 to 1. In the second game the same relative standing was shown, for, with all the best ponies saved for San Antonio and a substitute at back, the score was 16 to 2.

At Fort Sam Houston a round robin was played, each of the six teams playing five games, the team winning the greatest number of games to be declared the winner, and in event of a tie the team having scored the greatest number of goals to win. Advance dope had placed the teams in two divisions, those in the first being Headquarters, 16th, and 7th, and in the second Travis, 4th, and 13th, and the play showed this correct.

In our first game we met the 16th, and a real battle was staged. The bumpy, hard fields, with no elasticity, was a great handicap and necessitated a complete reversal of playing methods, as was shown by the score. At half time the score stood: 16th, 5 goals; 7th, 2, while at the end of the eighth period it was 7 all. Both sides had made a hard fight, and in the extra period 16th scored, making it 8 to 7.

The game with the 4th was an easy one—10 to 1—being, in fact, too easy, for a little more competition would have made the 7th extend themselves more and score more goals, which were so much needed at the end of the tournament. The game with Headquarters was the best of the tournament, the 7th winning 8 to 6. Hard, fast polo was played throughout, the ball repeatedly being carried from one end of the field to the other without a score, as the man in possession was ridden so hard he had no opportunity to shoot at the goal or center the ball. Followers of polo at San Antonio declared this game the best ever played on a local field.

The game between the 16th and Headquarters brought out lots of enthusiasm, and when Headquarters won, 5 to 3, a three-cornered tie was practically inevitable, as each of these teams had won four and lost one game, and our victory over the 13th, 16 to 2, left the 7th with one defeat, three victories, and one game—that against Camp Travis—yet to be played. Due to rain, this game was postponed from Sunday to Wednesday, and when played the only field available was the poorest of the three used in the tournament, making accuracy almost impossible. Excitement ran high, as we had an opportunity to finish in 1st, 2d, 3d, or 4th place. A win by a score of 13 or better would place us ahead of the Headquarters team in goals scored and place us first, a win by 11 points would place us second, a win by 7 points would place us behind the 16th, and in third place, and the loss of the game would place us fourth.

Travis scored first at the very start of the game, and the first chukker ended 1 to 1. They scored again at the start of the second period, but it was their last score, and at half time it stood 7 to 2. We were on the good side of what was required to win out, but were still a bit worried as to the condition our opponents would show in the second half; but at the end of the fifth we had scored 11 goals and the winning of the tournament was then only a matter of time. Gay scored the much-desired 13th goal in the sixth chukker, amid great rejoicing by scattered supporters of the 7th, not the least conspicuous of whom was Colonel S. R. H. Tompkins, who had motored in from Leon Springs to see the match. Four more goals were made before time was called, the final score being 17 to 2. Major-General Dickman presented the large silver cup, donated by the *San Antonio News* and *San Antonio Express*, to the team captain, Lieutenant Gay, and to each of the five members of the team a handsome piece of silver plate, donated by the American Remount Association. General Dickman's ideas are tersely expressed in the following letter, which he wrote to the commanding officer of the 7th Cavalry a few days later:

HEADQUARTERS EIGHTH CORPS AREA,
FORT SAM HOUSTON, TEXAS, *November* 1, 1920.

Commanding Officer, 7th Cavalry, El Paso, Texas.

MY DEAR COL. SYMMONDS: It pleases me to extend to you and the officers of your regiment my congratulations for your recent victory in the 8th Corps Area Polo Tournament. I am very much in favor of polo for the officers of the mounted service, as it produces bold riders, makes for energetic and aggressive teamwork and co-operation, and tends to increase the ability of the individual to think and act quickly. I was very much pleased with the showing of your team and greatly impressed with the character and training of the mounts ridden by them.

POLO

The Championship Cup will, I hope, be treasured by your regiment, and I have no doubt that your defending team for next year will be the best that you can produce. The officers playing on the Headquarters team were struck by the clean playing of the 7th Cavalry team and their good sportsmanship. Again let me compliment you upon your success.

Sincerely,
(Signed) J. T. DICKMAN,
Major-General, U. S. Army.

The make-up of the team was Lieutenant Roy E. Craig, 1; Lieutenant Hobart R. Gay, 2; Lieutenant James C. Short, 3; Captain Delmer S. Wood, back, and Lieutenant W. Dirk Van Ingen, substitute.

An interesting feature of our visit to Fort Sam Houston was the placing of the 7th Cavalry sixth among the twenty-odd organizations competing in the Second Division Horse and Motor Show, through our work in the polo events. Eleven points were scored in these three events by taking two firsts in each of two events and third place in the other.

While speed is a prime necessity in a polo pony, one which is fast but not handy is of small value. Our ponies were by no means the fastest, in many cases not nearly so fast as those of our opponents—the 10th Cavalry having as fast a string of ponies as any we met—but they were better trained, handier, and *always* under control, and to that we owe whatever edge we may have had over the teams we met.

Two facts were clearly demonstrated regarding the shipment of ponies:

1. Ponies must have sufficient time after a long trip to get acclimated, particularly after a drop in altitude. A week is none too much.

2. When first played after a trip, they are afraid of other ponies and will not bump. They should be put in scrimmage before being played in a match, so that they will regain their confidence.

TENTH CAVALRY

In two thrilling games early in February, the Gold and Black was victorious over the 1st Cavalry Red and White.

Our ponies were a shade the slower, the stickwork about equal, but we had a shade the better teamwork to carry the ball into the goal zone and slap it through.

The first game was decided by a score of 8 to 4. In the second game the 10th led in the 6th period, 9 to 4. In the next period the 1st brought the score to 9 to 7. The game ended 10 to 7, after a hard tussle all over the field.

THIRTEENTH CAVALRY

(See Regimental Notes)

SIXTEENTH CAVALRY

(See Regimental Notes)

Cavalry School Notes

The Field Officers' Course and the Second National Guard Course commenced at the Cavalry School on March 1. The former lasts for four months, the latter for three months. The addition of these two classes increases the size of the School to 214 student officers.

The following schedule shows the subjects covered in the Field Officers' Course, the allotment of hours to each subject, and a brief description of the extent of instruction:

FIELD OFFICERS' COURSE

	Subject.	Hours. Conferences and lectures.	Practical exercises.	Review examinations.
Department of Horsemanship.	Equitation	Daily	..	..
	Hippology and stable management	..	34	..
	Horseshoeing	..	6	..
Department of Tactics.	Minor tactics	71	104	..
	Field fortifications	8	16	4
	Liaison	6	4	..
	Cavalry drill	..	16	..
	Marching and camping	..	6 days	..
Department of Cavalry Weapons.	Musketry	10	38	2
	Machine rifles	3	6	..
	Machine-guns	4	..	..
	Pistol	..	22	..
	Saber	..	3	..
Department of General Instruction.	Leadership and discipline	5	..	..
	Map-reading	9	..	6
	History	9	..	..
	Lectures on cavalry	10	..	..
	Riot duty	6	..	2
	Evacuation of sick and wounded men and animals	6	7	..
	Lectures on other arms of the service	9	..	..

DEPARTMENT OF HORSEMANSHIP

Equitation.—This instruction covers the riding of green horses, schooled horses, and jumping horses; the military seat; conditioning of animals; cross-country riding; gaiting; marching; methods to be used in training service remounts.

Hippology and Stable Management.—Includes the care and treatment of sick or injured animals; conformation and soundness of animals.

Horseshoeing.—Includes normal shoeing; shoeing for gaits; pathological shoeing, inspection of shoeing.

DEPARTMENT OF TACTICS

Minor Tactics.—The course comprises: 3 conferences on "Organization," "Estimate of Situation," and "Orders"; 13 conferences on "Other Arms"; 15 map problems (to include the brigade), each preceded by two conferences on the same subject-matter and followed by one, a critique; 4 tactical rides; 7 terrain exercises.

Field Fortifications.—The course comprises: 8 conferences covering the general characteristics of field fortifications, traces, profile, construction methods, emplacements, obstacles, etc.; 2 written reviews of the work; 4 problems, worked out on the ground.

Liaison.—The course comprises: 6 conferences in which the methods of communication and liaison in general are discussed; 2 demonstrations of the working of the technical implements used. There are, in addition, 2 problems in the course, and liaison methods are used in other problems.

Cavalry Drill.—The time devoted to cavalry drill will be employed in observing other classes, drilling and carrying out exercises in accordance with the tentative Cavalry Drill Regulations (not yet issued).

Marching and Camping.—Instruction is given in a six-day practice march.

DEPARTMENT OF CAVALRY WEAPONS

Musketry.—Musketry pamphlets of A. E. F. are followed. The subject will be covered by a series of conferences and demonstrations, using school troops.

Machine Rifles.—The subject will be covered by a series of conferences and demonstrations, illustrating mechanical features of the machine rifle, its characteristics and tactical application. Combat exercises will be included under the head of musketry.

Machine-guns.—Instruction will be given in a series of lectures in which the following subjects will be taken up: Classification of automatic arms; the Browning machine-gun; history and development of machine-guns; characteristics of machine-guns; cavalry machine-gun organization; direct fire, indirect fire, barrage fire; and the tactical employment of machine-guns. The course is very brief. Its aim is to give the field officers an appreciation of the powers and limitations of the gun and some knowledge of the tactical employment of this weapon.

Pistol.—In pistol-firing the course includes both mounted and dismounted firing. Methods of instruction are prescribed and taught throughout the course.

Saber.—Instruction in the saber will consist of observing the work of various classes in the use of the saber and the methods of instructing.

DEPARTMENT OF GENERAL INSTRUCTION

Leadership and Discipline.—Course of morale lectures on morale, instruction, discipline, and leadership.

History.—Courses of lectures on the Palestine campaign and cavalry in Europe during the World War.

Riot Duty.—Legal and tactical sides of riot duty.

Evacuation.—Evacuation of sick and wounded men and animals; Remount Service.

Lectures on Other Arms of the Service.—Course of lectures on other arms of the service.

Lectures on Cavalry.—Principles of organization of small unit for tactical training and tactical operations; the training of small cavalry units for combat in warfare against bandits or guerrillas; the training of small units in taking the necessary measures for security in camp and bivouac; observation; the rôle of cavalry and training to perform it.

Map-reading.—Scales; true and magnetic meridians; map orientation; map distances and directions; co-ordinates; conventional signs; representation of elevations; visibility; position, outpost, place, road, and panoramic sketches.

In view of the fact that it is the policy of the Chief of Cavalry to have field officers come to Riley before going to Leavenworth, some officers felt that the Field Officers' Course was and should be a coaching course for Leavenworth. The course is not a coaching course and it is not felt here that it should be. It stands on its own and is exactly

what its name connotes—The Cavalry School Field Officers' Course. In result, however, the course is distinctly preparatory; for, besides refreshing the officer on important facts, it forces him to observe the same fundamental tactical principles and gain the same habits of thought that he will use in his work at Leavenworth.

The following officers make up the Field Officers' Class:

Colonel Alexander M. Miller, Cavalry.
Lieutenant-Colonel William M. Connell, Cavalry.
Lieutenant-Colonel George W. Biegler, Cavalry.
Lieutenant-Colonel William J. Kendrick, Cavalry.
Lieutenant-Colonel Thomas L. Sherburne, 2d Cavalry.
Lieutenant-Colonel Walter J. Scott, 1st Cavalry.
Lieutenant-Colonel George H. Baird, 11th Cavalry.
Lieutenant-Colonel John Cocke, 1st Cavalry.
Lieutenant-Colonel John T. Donnelly, 4th Cavalry.
Lieutenant-Colonel Peter J. Hennessey, 10th Cavalry.
Major Daniel D. Tompkins, 6th Cavalry.
Major Edward E. Keyes, Cavalry.
Major William W. Overton, 6th Cavalry.
Major Emmet R. Harris, Cavalry.
Major John C. Pegram, Cavalry.
Major Oscar Foley, Cavalry.
Major Frank B. Kobes, 7th Cavalry.
Major Dorsey R. Rodney, 15th Cavalry.
Major Stephen W. Winfree, Cavalry.
Major Arthur G. Hixson, Cavalry.
Major Walton Goodwin, Jr., 7th Cavalry.
Major Robert M. Campbell, Cavalry.
Major Kinzie B. Edmunds, 8th Cavalry.
Major George Dillman, 8th Cavalry.
Major Hugh H. Broadhurst, Cavalry.
Major Robert Blaine, 10th Cavalry.
Major Joseph C. King, 12th Cavalry.
Major James P. Yancey, 16th Cavalry.
Major Edwin R. Van Duesen, 82d Field Artillery.
Major Henry L. C. Jones, 82d Field Artillery.

Regimental Notes

THIRD CAVALRY—Fort Myer, Virginia

Colonel William C. Rivers, Commanding

Weekly exhibition rides in the hall began November 18, with a performance for the benefit of the Army Relief Fund, which was attended by Mrs. Woodrow Wilson, the Secretary of War, the Chief of Staff, and many other notable persons. The proceeds amounted to a little over $1,000.

The other rides have been free and have been largely attended and apparently much enjoyed by the people in Washington and the vicinity, who have made many complimentary remarks concerning the skill of officers and men, the quality and condition of animals, the state of the equipment, etc.

The last open ride was an exhibition for General Pershing, that brought out a particularly large crowd, filling every seat in the hall.

On March 18 the exhibitions came to an end, with a performance in aid of the post athletic funds.

A feature of the past quarter was an inspection by the Assistant to the Chief of Cavalry. Some one has remarked that one of the best features of having a Chief is that it gives an arm of the service some one to work for and try to please, instead of working for an impersonal head, such as the War Department as a whole.

Fort Ethan Allen, Vermont, Detachment

Colonel Edgar A. Sirmyer, Commanding

In addition to following carefully planned schedules of indoor instruction, full advantage has been taken of the geographical location of the post, which makes numerous winter sports practicable.

Washington's Birthday was a red-letter day, with a program that took up the day and the evening. There was an indoor track meet in the forenoon that was well contested and at which troops F and C tied for first prize.

The horse show in the afternoon was very successful and beneficial, including classes for officers and for ladies and for the men. Major C. B. Amory and twelve men gave a special exhibition of riding horses without bridles and executing a difficult silent drill. The day closed with entertainments for officers and for the men in the evening, and did much for esprit and good feeling in the regiment.

FOURTH CAVALRY—Brownsville, Texas

Colonel Howard R. Hickok, Commanding

The 4th Cavalry was visited officially and inspected by the Chief of Cavalry early in February. General Holbrook's visit also included Mercedes and McAllen, where the second and third squadrons of the regiment are stationed. Barracks, mess halls, and stables were inspected, followed by a review and full-pack inspection on the parade ground. The regiment feels justly proud of the commendations made by the Chief of Cavalry.

A regimental field meet was held on January 26. Representatives from the second and third squadrons were present and participated in the events. Headquarters troop won the highest number of points.

The ladies' equitation class, under the instruction of Lieutenant-Colonel McGee, is progressing nicely. Interest is shown by the continued attendance of the ladies in large numbers.

The skating rink, which is one of the distinctive attractions of the post, has been reopened and is drawing much patronage.

Major Mills, I. G. D., Eighth Corps Area inspector, made his annual inspection of the regiment recently. The result was one of which we are proud.

There has been considerable social activity here during the season. A number of enjoyable hops have been given at the Officers' Club. One of the most interesting of these was a surprise affair, March 3, in honor of Lieutenant M. L. Stockton and Mrs. Stockton. Lieutenant Stockton, who was regimental adjutant, has been transferred to Camp Travis as aide-de-camp to Brigadier-General H. E. Ely.

Much interest is being shown in polo, notwithstanding the fact that the dispersion of officers at various stations along the border makes it difficult to get teams together for competitive practice. However, the regiment has great hopes in the coming corps area tournament.

FIFTH CAVALRY—Marfa, Texas

Colonel James J. Hornbrook, Commanding

All troops of the regiment are now assembled at Marfa with the exception of Troop "B," with headquarters at Holland's Ranch, Texas, and Troop "L," with headquarters in the field, patrolling 150 miles of river front. During February Troop "G" was relieved from duty at Ruidosa, Troop "H" at La Jitas, and Machine-Gun Troop at Presidio, all coming to Marfa for duty. Troop "L" left Marfa February 16 for field service at La Jitas and Presidio. Troop "L" will have a tour of duty for two months, equipped "as for the field," when they will be relieved by another troop.

With most troops of the regiment stationed at Marfa, training is to be gone into with more vim and vigor, although the regiment has attained a very high standard. Weather preventing drill is an unheard-of thing in Marfa, so no time is ever lost indoors or by horse exercise only. Regimental ceremonies are held each Saturday and squadron or regimental drills one day each week. Basic course-unit schools for officers are being held daily with the exception of Saturdays and Sundays. Schools for non-commissioned officers are held three days each week. The educational and vocational schools have a good attendance; the courses consist of general education, sections 1 and 2, motor mechanics, carpentry, and the business course. The regiment is a busy body of men, although time is found for athletics and recreation also.

On Saturday, February 12 (Lincoln's Birthday), a field meet was held at this station, in which all troops participated. Boxing and wrestling bouts are held in the Service Club each Tuesday night. There is no lack of good material. Each troop has a basket-ball team, and a series of games are being played each Saturday and Sunday afternoon. A new athletic field has been built, including a splendid 440-yard circular track. Each troop is organizing a baseball team, and a regimental team is also to be organized, to be composed of the best players on the troop teams. Dances are held in the Service Club building each Thursday night for officers and each Saturday night for enlisted personnel. Much enthusiasm is being shown in polo, both among officers and enlisted men. There are some crack players, and in the next polo tournament the 5th Cavalry polo team expects to be a strong contender. Practice line-ups, coaching in hitting, etc., are held each Tuesday and Thursday afternoon, while regular games are played each Sunday, followed by a polo

tea at the Officers' Club. The regiment has a few good ponies, and remounts are now being trained which will develop into excellent ponies.

The regiment was honored on Friday, February 11, 1921, by a visit from Major-General Willard A. Holbrook, Chief of Cavalry. In the afternoon all officers and non-commissioned officers were assembled in the Service Club and were given the pleasure of listening to an inspiring talk from our Chief of Cavalry. Major-General Holbrook left on the afternoon train, much to every one's regret, as it was expected that he would stay several days. During his five busy hours here he saw enough to satisfy him that the 5th Cavalry was keeping up its reputation as a hard-working regiment.

On the Regimental Organization Day, March 3, 1921, the regiment celebrated its 66th anniversary, the day being a regimental holiday.

SEVENTH CAVALRY—Fort Bliss, Texas

Lieutenant-Colonel Frank T. McNarney, Commanding

For the last month the regiment has been working to train animals and riders for the horse show to be held at Fort Bliss, April 20-21, 1921. At the last horse show the 8th Cavalry won by a narrow margin over the 7th Cavalry, and this regiment is determined that the result will be different this time. A ladies' riding class is going full swing and conditioning and training of animals is going forward.

The first large semi-annual field meet was held March 9. A great deal of enthusiasm was shown and a lot of promising athletic material was discovered in the regiment. Individual medals and prizes were awarded the winners. This meet accomplished a great deal toward advancing the already prominent part played by athletics.

The usual Wednesday afternoon athletic games were postponed during the last month to permit baseball to be played between the different troop teams. As soon as the winning troop teams are known there will be a series between the squadron teams to determine the championship of the regiment. When this is finished the regimental team will be picked.

As usual, boxing is playing an important part in the life of the regiment. A number of different boxers from this regiment are appearing in boxing bouts in El Paso and also in the local arena. In addition regular Friday night boxing has come to stay.

Several controlled rides have been taken by the officers and ladies of the 7th Cavalry over the new obstacle course.

EIGHTH CAVALRY—Fort Bliss, Texas

Colonel George T. Langhorne, Commanding

General Holbrook, the Chief of Cavalry, arrived February 11, 1921, and the following day a review and inspection of the cavalry brigade was held. The 8th Cavalry was highly gratified at the words of commendation from their Chief. That afternoon the officers and non-commissioned officers had the pleasure of hearing General Holbrook on the subject of Cavalry and Cavalry Personnel. The virility of the talk, coupled with logic, common sense, and judgment, and radiating a co-operative spirit, did much to reinvigorate the esprit of all those who heard him. The following day Generals Holbrook and Howze accompanied the regiment in a cross-country ride, which included more than twenty jumps of various types.

In athletic activities the regiment has been represented by a basket-ball team in the Army League. Though its record has not been as good as that of last year, when they were pennant winners, it deserves commendation. The baseball squad has been gathered

together and has started practice. Several intertroop track meets have been held; also a number of intertroop baseball games have been scheduled.

The various spring troop and trooper contests, individual to this regiment, are now under way. The trooper contest for the Langhorne trophy will be finished in the near future. Troop teams are hard at work, with the intention of wresting the trophy from Troop L.

The regimental commander has been leading in person the work in equitation for several months past. It is his belief that before men can be made good cavalrymen they must be made good horsemen—horsemen who take genuine pleasure out of all their mounted work. He acted personally as instructor of the officers' class, and aroused to a high pitch their interest in their mounts and in the art of riding. At the same time he has instructed the class of non-commissioned officers and acted as senior instructor in the troopers' equitation class. A number of ladies, both of the post and El Paso, have evinced a keen interest in riding, to the point of entering spiritedly into a thorough course of instruction under the supervision of various members of the command. Their progress has been noteworthy.

Captain Roy E. Blount has been named captain of the Cavalry Rifle team. Captain Blount's long and varied experience as a rifle shot and instructor will undoubtedly be a great asset to the Cavalry team. His services in the regiment as instructor and supervisor of instruction in the small arms and automatic rifle have been of exceptional value.

Troops F and D have been relieved from border-patrol duty by Troops B and M, B going to Fort Hancock and M to Fabens.

NINTH CAVALRY—Camp Stotsenburg, P. I.

Colonel Charles D. Rhodes, Commanding

A military tournament and horse show was held at Camp Stotsenburg, P. I., from December 13 to 18, 1920. The greatest interest was shown in the events, and there is little doubt that not only was the professional excellence of the regiment enhanced, but its morale is greatly improved by a period—five days—devoted to keen competition in military tests of a mounted character. The success of the horse show was due in great measure to the efficient handling of Colonel A. E. Kennington, 9th Cavalry, director of training.

The events of the first day included an officers' chargers event, jumping singles for non-commissioned officers, the same for privates, showings of non-commissioned officers' mounts and of privates' mounts, and of escort wagons. The winner of the officers' chargers class was Lieutenant R. L. Hammond, Lieutenant H. B. Waddell and Captain S. V. Constant taking second and third place. In the Escort Wagon event the 9th Cavalry excelled in appearance, the 1st Philippine Field Artillery in driving.

The second day's events included the Special Trick Horse Class, the best groomed mount, jumping in pairs by officers, non-commissioned officers, and privates, and a relay race. The third day witnessed the work of equitation teams of sixteen men from each organization, a Roman race, a potato race, and a pony express. On the fourth day Lieutenant Hammond won the officers' jumping event, Sergeant Ware, M. G. Troop, won the enlisted men's high jump, and Mrs. Perry carried the honors for the best riding costume, with Miss Dorothy Kennington in second place. The second squadron put on a rough-riding exhibit, and the third squadron gave a monkey drill.

On the fifth and last day of the tournament Lieutenant Alexander took first place in the officers' high jump, with a jump of 5 feet 8 inches; there were exhibitions and contests by the mountain artillery, and an officers' mule race, won by Lieutenant Hammond, brought this most interesting horse show to a close.

The judges were Brigadier-General C. G. Treat, Colonel C. D. Rhodes, Cavalry; Major

H. E. Mann, Cavalry; Major J. A. Crane, F. A.; Major R. S. Brown, A. S. (A), and Major T. G. M. Oliphant, F. A.

The regiment not only excels in all physical tests of a cavalry character, but habitually wins at least 90 per cent of the dismounted tests at the annual Department Field Meets and the Manila Carnival. The 9th Cavalry Baseball Club is now the leading team in the Department League.

TENTH CAVALRY—Fort Huachuca, Arizona

Colonel Edwin B. Winans, Commanding

The race-course has proved a popular feature of this post. In February the 1st Cavalry came up to try our speed and got a good beating. They got one second place and that is all. The largest turnout ever seen on the track was present and great enthusiasm was manifested when the Gold and Black flashed under the wire each time in the van. Another race meet is scheduled for April 2 and will comprise the following program:

First Race.—First heat of Officers' Polo Pony Race, one-fourth of a mile; entrance fee, $5.00.

Second Race.—Second heat of Officers' Polo Pony Race.

Third Race.—Enlisted Men's three-fourths of a mile; entrance fee, $1.00.

Fourth Race.—Open Race, one-half a mile; open to civilians, officers, and enlisted men. No horses barred. Entrance fee, $25.00. Purse to be the sum of the entrance fees; winner to take five-ninths; second place, three-ninths; third place, one-ninth of the purse. Race to be called off unless five entries are secured.

Fifth Race.—Enlisted Men's three-eighths of a mile. Entrance fee, $1.00.

Sixth Race.—Final heat of Officers' Polo Pony Race, to be run by the ponies taking first, second, and third place in the first and second race. The division of the purse in this case will be the same as in the fourth race.

Lovers of the horse are looking forward anxiously to the horse show scheduled for April 9, and are getting their mounts in shape to make the contest worth while. There are eight events on the program, as follows:

Event No. 1.—Officers' Charger Class.

Event No. 2.—Enlisted Men's Class.

Event No. 3.—Ladies' Open Class.

Event No. 4.—Jumping competition, individual officers.

Event No. 5.—Polo Pony Class.

Event No. 6.—Team Jumping Class, enlisted men.

Event No. 7.—Jumping competition for enlisted men.

Event No. 8.—Tennis Racket and Ball Race couples to enter; officer and lady.

A review was given to Sergeant William Floyd Saturday, February 26, as a final honor to an honorable soldier. It is a long, long time from the first hitch to the final statement; from the rookie drill to taking the salutes of the crack regiment as it sweeps by in review.

THIRTEENTH CAVALRY—Fort Clark, Texas

Colonel Roy B. Harper, Commanding

On the 24th of February Colonel Roy B. Harper again took command of the 13th Cavalry.

On February 23 Colonel Edward Anderson was the guest of honor at a stag dinner given by the officers of the regiment, on the eve of his departure for the Philippine Islands. After the dinner, which was made interesting by snappy toasts, Colonel Anderson was placed on the gridiron for an exchange of wholesome pleasantry. Then a "long-eared-desert cavalry mount" was led into the banquet hall on "Full-pack Review," the striking

features being a can of saddle soap and two cans of neat's-foot oil (the secret of the splendid condition of our harness and saddle equipment, which was especially commended by the General Inspector and the Chief of Cavalry on their recent visits to this post. Even the "dog-tags" were not omitted.

The Washington-Lincoln memorial service was observed by the officers and men of the regiment on the morning of February 22. The addresses given by the chaplain and the ministers from the Methodist and Baptist churches of Brackettville were short, to the point, and well received. At the closing of the exercises Colonel Anderson made a brief "Farewell" to the regiment, in which he said: "I was well pleased at the showing made by the regiment during the recent inspection and visit of our Chief of Cavalry. In all my thirty-five years of military service I have never seen an organization make a better showing than you did the day General Holbrook reviewed the regiment. It was a beautiful sight—beautiful."

Stimulated interest in polo is the order of the day, and there are now twenty officers and sixteen non-commissioned officers out for practice three times a week and a game on Sunday. Work has commenced on the pipe line to the polo field, and a new polo field, which adjoins and is parallel to the old field, has been staked and cleared.

The 12th Cavalry polo team went down to defeat, both at the game here and the return game at Del Rio.

The championship of the inter-troop football tournament for 1920-21 went to Troop "I." The return game of the inter-regiment series between the 12th and 13th Cavalry teams was played at Del Rio and evened up the honors between the two teams; the deciding game, which was to be played at Fort Clark, was canceled. A team from the 46th Infantry, at Eagle Pass, came over for a game and were defeated.

The Spring Boxing Tournament is under way, and every Thursday evening for the past six weeks there have been from five to seven bouts staged. The tournament is proving to be the great attraction in the field of sport. Practically every man and officer turns out for the bouts and a keen spirit of rivalry is shown between the different troops. This is bringing forward some clever boxers.

FOURTEENTH CAVALRY—Fort Des Moines, Iowa

Colonel Robert A. Brown, Commanding

The 14th Cavalry has enjoyed one of the mildest winters experienced in Iowa for the past twenty years. This was taken as an expression of good will on the part of the weather "fixer," as eight years of Texas winters have not fitted the regiment for cold weather.

Regimental headquarters with the First and Second Squadrons, Headquarters and Supply Troops are in Fort Des Moines, while the Third Squadron and Machine-Gun Troop are guarding Camp Dodge, which is shortly to be sold at public auction.

Much improvement work has been carried on in the post with good results. A steam heating plant has been installed in the riding hall with soldier labor and has proved a very satisfactory piece of work.

Drill has been carried on during the winter in the riding hall and gymnasium and in good weather on the parade ground. During the recruiting drive last fall two recruit troops were formed, and each recruit assigned to the regiment was put through a three months' course of sprouts under the instruction of specially selected officers and non-commissioned officers. Upon the expiration of their three months' course the recruits were graduated in squads and platoons of twenty-four men and assigned to the various troops. This method of handling recruits has proved very satisfactory. The instruction of the line troops was mapped out by a board of officers, and various subjects were picked out,

in which each individual man was made to qualify on an examination at the end of the course.

Saturdays have been devoted to exhibition drills in the riding hall by the various troops and much interest has been taken by the regiment in watching the progress in these drills. The Officers' Equitation Class is held daily and they have used two classes of horses on alternate days; officers' mounts are used one day and trained polo mounts the other.

The social life of the post has been very active during the winter. Des Moines is a very hospitable city and many parties have been given for the officers and soldiers of the regiment. Post dances are held weekly—alternately a dinner dance in the Officers' Club and a formal dance in the Service Club. These dances are attended by many people from Des Moines. Enlisted men's hops are also held weekly in the Service Club with the aid of the Girls' Community Service League of Des Moines.

On February 28 Major-General W. A. Holbrook, Chief of Cavalry, inspected the troops at this post and at Camp Dodge and on full pack review and inspection.

The 14th Cavalry celebrated the 20th anniversary of its organization on March 5, 1921. The program was as follows:

Reveille—salute of 14 guns. (Band marched around parade ground.)

9.00 a. m.—Regimental colors were displayed in front of headquarters and a color guard posted.

9.15 a. m.—Mounted Gymkhana on parade ground. (Events such as Mounted Relay Race, Slow Mule Race, Equipment Race, Potato Race, etc., were held. Keen competition was displayed by the various organizations.)

10.30 a. m.—Addresses in the Service Club by Colonel R. A. Brown and Sheriff Robb, ex-Chaplain of the 168th Infantry.

12.00 noon.—Holiday dinner, which was attended by the enlisted men and their friends.

2.00 p. m.—Exhibition ride in the Riding Hall by Troop "A"; Monkey Drill, Troop "C"; Musical Drill, Troop "E"; Equitation, Officers' Jumping Competition, Non-Commissioned Officers' Jumping Competition.

4.00 p. m.—Officers' tea in the Officers' Club rooms; enlisted men's tea in the Service Club.

The troops at Camp Dodge were guests of the post for the day. Every one entered into the spirit of the day and the exercises were carried off with great success.

SIXTEENTH CAVALRY—Fort Sam Houston, Texas

Colonel Walter C. Short, Commanding

The field meets held on January 19, February 2, and February 16 were a great success. Both the men entered in the various events and those who were spectators showed great enthusiasm and worked hard to win during the period of practice and the field meets.

The winners of each event were given blue, red, and white ribbons respectively for first, second, and third places.

The following events were held on the following dates:

January 19: Tent Pegging Contest, Tug of War, Trained Horse, High Jump, and Mounted Wrestling.

February 2: Officers' Jumping, Saddling Contest, Guidon Race, Trained Horse, Enlisted Men's Jumping, and Mounted Wrestling.

February 16: Mounted Gymnastics, Potato Race, Rescue Race, Enlisted Men's Jumping Contest, and Officers' Jumping Contest.

The standing of troops in the three field days is as follows:

1. Troop "C"	22
2. Machine-Gun Troop	12
3. Troop "A"	10
4. Troop "G"	8
5. Troop "M"	8
6. Troop "D"	7
7. Troop "F"	5
8. Troop "H"	5
9. Troop "K"	4
10. Troop "B"	4
11. Troop "E"	3
12. Troop "L"	3
13. Troop "I"	2
14. Headquarters Troop	2

The 16th Cavalry has kept up its polo reputation during the last two months by defeating Kelly Field, in a six-chucker game, 12-2; San Antonio, at San Antonio, 12-2, and again, on the Camp Travis field, 6-5. On February 13 we defeated the fast Eighth Corps Area Headquarters Team, in a hard-fought game, 7-5. Lieutenants T. T. Thornburgh and C. E. Dissinger are holding down No. 1, while Major H. J. M. Smith plays No. 2, Major H. E. Taylor No. 3, and Major H. W. Hall No. 4.

The Reserve Officers Department

ENLISTMENT IN THE NATIONAL GUARD AND ORGANIZED RESERVES OF SOLDIERS DISCHARGED FROM THE REGULAR ARMY TO BE ENCOURAGED

Every trained soldier discharged from the Regular Army has a potential value to the nation, and if this training is maintained and prolonged in the National Guard or in the Organized Reserves, it will continue as an active asset to the Army of the United States.

In order that discharged enlisted men who do not desire to re-enlist in the Regular Army may continue to serve in the Army of the United States, if they so desire, all such soldiers hereafter honorably discharged will be impressed with the importance of the obligation they owe to their country.

Service in the Organized Reserves is attractive for discharged soldiers who desire to accept a limited obligation only and who desire to continue their training only during the annual fifteen days' field service period, as provided by law. During training periods members receive the pay and allowances of their grades. No other duty is required of the Organized Reserves except in the event of war. Honorably discharged soldiers of the Regular Army may enlist in the Enlisted Reserve Corps in the highest grade shown on a discharge certificate. *Regulations for the organizations of combat and administrative* units of the Organized Reserves have been promulgated. These regulations and regulations for the Enlisted Reserve Corps, which will follow shortly, contain complete information as to the requirements for enlistment, the opportunities afforded for promotion, and the objects and details of the organization. Until the organization of the Reserves is effected, soldiers honorably discharged from the Regular Army who desire to enlist in the Organized Reserves will be instructed to forward their applications to the Commander of the Department or the Corps Area in which their homes are located, who will advise them at the proper time where enlistments may be made.

TRAINING OF RESERVE OFFICERS

The Secretary of War directs that the following policy be observed and be brought to the attention of reserve officers who tender their resignations, before acceptance of such resignations:

On account of the necessity for economy in expenditures and other considerations, it will be possible, in the immediate future, to call but a very small number of reserve officers to active duty for training purposes. Prior to June 30, 1922, no reserve officer will be called to active duty for training without his consent. Available funds and other considerations will probably make it impossible to call all those officers who request active duty for short periods of training.

During the time specified, to June 30, 1922, the organization of units of the Organized Reserve and the assignment of reserve officers thereto will be proceeded with. Such assignments will not demand a material amount of time of reserve officers.

The present number of reserve officers is insufficient. Those who now hold commissions are urged to defer any withdrawal from the reserve contemplated by them until the Organized Reserve has been formed and definite policies for its training formulated. When such has been done and regulations governing the Officers' Reserve Corps have been published, reserve officers will have a better understanding of their obligations, duties, and privileges and will be better qualified to determine whether or not other interests necessitate their withdrawal from the Officers' Reserve Corps. The present reserve consists of veteran officers of the World War whose moral and material assistance in the building up of the Organized Reserve will be a very material factor in the efficiency of that force and the state of preparedness of our reserve forces.

The National Guard

THE FOLLOWING OFFICERS of National Guard Cavalry are attending the Cavalry School, Fort Riley, during the term beginning March 1, 1921:

Capt. Wade Vance Bowman, Capt. William C. Motz, North Carolina; 2d Lieut. Charles H. Wood, Michigan; 1st Lieut. Carrol B. Kopf, New York; 2d Lieut. Daniel P. Brill, Idaho; Capt. Clayton E. Alderdice, 1st Lieut. Fred L. Gassman, Texas; 1st Lieut. Cecil H. Berry, New Jersey; 1st Lieut. Philip J. Crail, Iowa; 1st Lieut. Charles H. Edwards, Wyoming; Capt. Winfield D. Jones, Kansas; 1st Lieut. John E. Burke, Illinois; 1st Lieut. John E. Baird, Rhode Island; Capt. Laurence O. Cherbonnier, Wisconsin; 2d Lieut. John C. Crosthwaite, Washington; 2d Lieut. Scott V. Curry, Massachusetts; 1st Lieut. John A. Funk, Jr., Ohio.

CHIEF OF THE MILITIA BUREAU

JANUARY 1, 1921, was designated, in the act of June 4, 1920, as the date on which a National Guard officer should become Chief of the Militia Bureau, in place of a regular. This change in the law was made by pressure upon members of Congress by adjutants-general of States, the reason given being that a National Guardsman would better understand the problems of that branch of the service and would be more in sympathy therewith than a regular officer. The President has named Colonel George C. Rickards, of Oil City, Pennsylvania, to succeed General Jesse McI. Carter, who has been Chief of the Bureau since September, 1917, except while absent from August to December, 1918, in command of the 11th Division.

Eligibility for appointment as Chief of the Militia Bureau is now confined to officers and former officers of the National Guard who also hold commissions in the Officers' Reserve Corps, who have had not less than ten years' service in the National Guard, at least five of which has been in the line, and who must have attained at least the grade of major in such service. Colonel Rickards far more than meets these requirements. He began his military career by enlisting in the Pennsylvania National Guard in 1877 and was promoted from grade to grade, becoming colonel in 1907 and brigadier-general in 1919. He commanded the 16th Pennsylvania Infantry in the Spanish War and also on the Mexican border in 1916 and 1917. In the reorganization of 1917 his regiment became the 112th, 28th Division, with which he served through the World War, part of the time in command of a brigade. He was wounded in the operations in the Argonne. By experience and ability he is considered to be an excellent selection for the duties of the Chief of the Militia Bureau for the next four years.

William G. Price, at present commanding the Pennsylvania National Guard, has been nominated for appointment as a brigadier-general. General Price served as a brigadier-general of the U. S. Army from August 5, 1917, until discharged, May 15, 1919.

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EDITED BY
JEROME W. HOWE
MAJOR OF CAVALRY

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The Polish-Bolshevik Cavalry Campaigns of 1920

BY

Major ELBERT E. FARMAN, Jr., Cavalry *

(Military Attache to Poland)

THE CONDITIONS in the Polish-Bolshevik campaigns resemble more nearly those we are likely to meet with in future operations than anything seen in France. The great distances, lack of roads, insufficiency of railroads, and slight density of troops approximate somewhat to the conditions which might be met with in an American theater of war. These campaigns, therefore, present few points of resemblance with the warfare of the Western Front. They resemble the World War in the enormous length of front, but differ from it in the density of the line. They differ from wars of the past in that the weapons used were those developed by the World War and also in the fact that even in the theaters of principal operations the troops were deployed on a wide front. Cavalry played an important rôle. Twice, at least, it played a decisive one. It had a great, perhaps decisive, influence on the entire campaign.

The terrain and climate are admirably suited to cavalry operations. East of the Bug, on the whole front of over a thousand kilometers, there are only two macadamized roads. Both of these roads run perpendicularly to the front—one through Rovno to Kiev, the other from Brest-Litovsk to Bobrusk. The other roads are unsurfaced and vary according to the nature of the soil. In places they run through deep sand that is unpassable at all seasons for motor vehicles. In other places, in dry weather, the roads are usually practicable; but the many streams, some very wide, with marshy banks, are serious obstacles for motor

* The writer desires to acknowledge the assistance of Colonel Loir, Chief of the Cavalry Section of the French Military Mission to Poland, and of several of his officers in the preparation of this account.

vehicles. The bridges are of wood, too light for heavy trucks. Most of them had been burned many times during the past six years and replaced by temporary bridges or not at all. Several times during the operations slight rains immobilized all motor transport for days.

The country is generally flat or slightly rolling, except in the extreme south. There are many forests. In the south, before the war, the country was well cultivated. Now there are everywhere large waste stretches. The population east of the Bug is sparse, except in the southern sector. The peasantry live usually in villages. The buildings are of logs, with thatched roofs. There are few isolated farms. In the center of the towns there are brick buildings with thick walls, clustered about a solidly built church. These towns formed strong points and were continually used as such. The railway facilities are poor. These were rendered worse by the destruction of many large bridges which required months to rebuild, the inadequacy of railway material, and the use of different gauges.

The population varies greatly in character. Everywhere east of the Bug, clear to the Dnieper, the town population is partly Polish. Poles are scattered in patches among the country population. The great landowners are mostly Polish. They had left the country during the first Bolshevik occupation, 1918-1919. Their administrators, head farmers, house servants, and other dependents, who were generally Poles, had, however, remained. In the southeast the majority of the peasantry is Ukrainian, and the state of civilization is about that of the French peasantry before the Revolution. They are, however, much more warlike and willing to fight. In the north the peasantry is White Russian, with an admixture of many Poles, and in the extreme north some Lithuanians. The White Russian peasantry is very apathetic. In all towns a great part of the population is Jewish.

The Poles, wherever found or of whatever social condition, are intensely patriotic. Their devotion could be relied upon, and their knowledge of local conditions was of great value to the Polish armies. The attitude of the peasantry, except the Poles, may in general be characterized by saying that they were tired of war and were unfriendly to whichever army was in occupation. The Jews were at first very unfriendly to the Poles, and many of the younger ones were Bolsheviks. After the experience of a few weeks of Bolshevik occupation they became much more amicable to the Poles.

During the preliminary peace negotiations with the Bolsheviks the Polish High Command prepared a big stroke, to be launched in the event these negotiations failed. With the breaking off of these negotiations the preparations were rapidly completed. Heretofore the operations against the Bolsheviks had been conducted on a comparatively small scale, and consisted of a series of local actions which resulted in pushing the Bolshevik lines eastward. This time, profiting by the political situation in the Ukraine, a large-scale operation was planned with the intention of dealing a crushing blow. It was not merely planned to push back the Bolsheviks, but to cut off and eliminate as a fighting

force a large part of their southern army, by placing forces in their rear and across their main lines of retreat. The advance was made at the end of April and was completely successful. By the end of May the country south of the Pripet was cleared of Bolshevik forces and Kiev was captured. During this operation, which can be considered as the first phase of the 1920 campaign, the cavalry played a decisive part.

The Polish morale was now high. Every man felt that he could beat half a dozen Bolsheviks. Polish losses had been insignificant. Then came Budenny. With daring and dash this astonishing leader threw his cavalry divisions against the Polish line, felt for its weak points, found them, and broke through. The Polish cavalry, greatly outnumbered, was neutralized, and the whole Polish force, almost without a fight, was thrown into confusion. It retreated, panic-stricken, from position to position, out of each of which in turn Budenny, by rapid movements, outflanked them. This second phase ended with the Poles in full rout westward and Rovno evacuated to the enemy.

By these reverses the Polish High Command was impressed with the immediate necessity for additional cavalry units, and by the end of July there had been hurriedly got together a cavalry corps of two small divisions and a brigade. This force took the field against Budenny in the hope of capturing him and his whole force. They failed to accomplish this; but Budenny was beaten, the morale of the Poles was greatly improved, and the terror which the mere name of Budenny inspired disappeared. The field of active operations now shifted to the north, and a large part of the cavalry corps was transferred to the new front. Budenny did not follow, but advanced on Lemberg instead. Though there was little to oppose him, he advanced but slowly. About August 20 he was within 25 miles of the city, with his patrols well to the northwest and southwest of it. He received orders to proceed northward and attack the northern flank of the Polish armies, which were moving northeastward into the Bolshevik rear. Though several times repeated, the order was not obeyed for several days, Budenny insisting upon continuing toward Lemberg. Apparently the prospect of looting the city appealed to him more strongly than the importance of saving the main Bolshevik armies from defeat. Finally Budenny moved, but too late. In a series of actions near Zamosc, in early September, he displayed much energy, but was completely defeated and has since ceased to be a factor on the Polish front.

North of the Pripet the Poles had only one weak cavalry brigade when the Bolshevik attack started, on July 4. The Bolsheviks had a corps of cavalry of two divisions, which during their whole advance marched on the right flank, along the Lithuanian and German borders. This corps was not handled with the ability shown by Budenny, or things might have gone worse for the Poles. In addition to this cavalry corps, a cavalry division appeared for a time. The cavalry corps, called the IIId, played an important part in the defeat of the Poles on July 4–6. It forced the front on the Polish left and reached their rear,

taking many prisoners and turning the Polish defeat into a rout. As a result, the Polish First Army was so badly beaten that it ceased to be a military force capable of resistance. The Fourth Polish Army, on the right of the First, was carried along in the retreat and soon became nearly as badly disorganized as the First. About July 27–28 the Poles evacuated Grodno. From then on, for a period of several days, there were no Polish troops between the Bobr and the German frontier. The Bolshevik cavalry advanced through this gap slowly, without energy. The menace of its presence, however, contributed to cause the continued Polish withdrawals.

While the fate of the whole campaign hung upon the operations in the north, the Poles at the end of July were preparing for their counter-offensive against Budenny in the south. The reasons which influenced the Poles to divert forces for an operation of secondary importance at so critical a moment appear to have been both political—that is, the desire to hold east Galicia—and the fear of Budenny and the desire to eliminate him. This diversion came near costing the Poles dearly.

In the north the lack of cavalry was keenly felt. To stop the Bolshevik advance along the German frontier, cavalry was needed. The Poles had organized a weak force of cavalry, which took part in the actions at Ostrolenka. It was very poorly handled. After the fall of Ostrolenka the Bolshevik cavalry displayed more energy. It crossed the Omuleto, occupied Chorzele, Prasnysz, Ciechanow, Mlawa, and continued to advance rapidly until on August 15 it crossed the Vistula at Wloclawek and, farther to the west, reached on the 17th and 18th the Drewenz River east of Thorn.

The main offensive operation of the Poles started from the Wieprz on August 16 and advanced northeastward into the Bolshevik rear. This great success could not be fully exploited, due to lack of cavalry. Motor trucks and horse-drawn carts were used to hasten the forward movement of the tired infantry, but the burned bridges stopped the vehicles, and part of the Bolshevik army escaped. The plans for this operation included the organization of a large cavalry force in the north. The formation of a cavalry corps north of Modlin was begun. This force was designed to protect the Polish left and, later on in the operation, turn the Bolshevik right. The first brigade of this corps started operations south of Ciechanow about August 13. Several brigades and regiments arrived in time to participate in the operation and assisted in the Bolshevik defeat. Events moved too rapidly, however, for the cavalry corps to complete its concentration. With the defeat of the Bolsheviks some of the cavalry was sent to assist in the operations against Budenny near Zamosc. Orders for this move were issued too late and the cavalry did not arrive.

The Polish High Command needed large forces of cavalry everywhere to carry out its strategic operations. Commanders at the front were continually calling for more cavalry to meet their local requirements. The numbers of the Polish cavalry were so far below these requirements that the cavalry was con-

tinually being moved. Orders for important cavalry movements, as a consequence, were frequently issued by general headquarters too late, and the best opportunities for the employment of cavalry were lost, permitting large forces of Bolsheviks to escape.

The Poles now planned a general advance in the south. A cavalry corps of two divisions, each of three regiments, was organized near Vladimir-Volysk. The regiments were so small that the total combatant strength did not exceed 3,500 sabers. This cavalry corps was to advance to Rovno and Dubno and cut off the Bolshevik retreat. The latter were already completely beaten and demoralized. The cavalry corps captured a large number of prisoners, but the Bolsheviks had begun their retreat before the Polish operations were ready, and a large part of the Bolshevik force escaped. Budenny withdrew without fighting.

Meanwhile an independent cavalry brigade, starting from the region north of Stanislawow toward Kremenetz, cut off the retreat of a large force of Bolsheviks and took many prisoners, guns, and material. The cavalry corps advanced to Novgrad. From here it carried out a well-executed raid to the railway junction of Korosten, bringing back prisoners in excess of its own strength. There was only one Polish cavalry brigade in the north at the end of September. It was on the north flank, and by a rapid march reached the railway north of Lida, cutting off the retreat of the Bolsheviks in that direction.

In the foregoing paragraphs an attempt has been made to present a brief history of the Polish-Bolshevik operations, particularly as related to the cavalry of the two armies, throughout the whole campaign of 1920. Details have purposely been omitted. The first two phases of this campaign, however, including the advance and initial successes of the Poles and their subsequent rout by Budenny, deserve a more particular review. Before undertaking a further narration of events, this seems a proper point at which to remark upon the character of the cavalry forces involved.

The Poles had, at the beginning of the campaign, seven cavalry brigades. After the serious defeat by Budenny's cavalry in June, the Poles hastily organized new cavalry regiments and partly reorganized the old ones, creating in all thirty regiments. Each brigade consisted normally of three regiments and a group of artillery. Brigades often had two regiments, sometimes four. Two or three batteries constituted the artillery groups. Each regiment consisted of four "saber" squadrons, one machine-gun squadron, and one technical squadron. These squadrons had a prescribed strength of about 150 men. The machine-gun squadrons had eight guns. The technical squadron comprised headquarters orderlies, signalmen, etc. The squadrons usually had much less than 150 men.

There were no permanent divisions. A division was formed by placing two or more brigades together under a division commander, who was given a staff, etc. There were practically no division troops; even the artillery belonged to the brigades. Corps were organized by placing similarly more than one division

under a corps commander. Staffs were unorganized and much too large. Auxiliary troops were lacking.

The troops were indifferently trained. Each regimental commander employed in his regiment the regulations he had previously used, Austrian or Russian, as the case might be. Lack of horses, food, clothing, and supplies prevented real training during the winter and early spring. The troopers carried the short carbine, saber, and lance. Officers and non-commissioned officers were armed with the pistol. There were no automatic rifles. The rifle was carried slung across the trooper's back. The machine-guns, of different models, were carried both on horseback and in carts. The terrain was flat or slightly rolling and almost everywhere practicable for small native wagons. The troops were generally well mounted. The small native horse, with a certain amount of good blood, predominated. In general, the height was well under 15.2, often 14.3, and occasionally less. These small horses are very hardy and have enough blood to gallop well. The Posnanians had large horses. They made a splendid appearance at first, but soon lost flesh. Some officers took their thoroughbreds with them. The care of the horses was good. This was not due to attention to this particular by the officers, but to the individual trooper, who was always foraging for his horse and at every opportunity fed him. Horses did not always receive enough water. Officers paid little attention to this and left it to the initiative of the individual trooper. The forage ration was in theory about the same as ours. In practice the horse got what his rider could rustle for him.

Marches were poorly conducted. Most of the marching was done at a walk, which was often too slow. On the other hand, individuals and small groups were continually galloping without reason. The length of marches varied greatly. Sometimes 75 kilometers were made in 24 hours; 30 kilometers was, perhaps, the average length of march. The First Cavalry Division made on the average about 1,000 kilometers per month during June, July, and August, exclusive of patrols and distances covered by small units. Tactical consideration allowing, the march did not usually start until about 8 a. m. A long halt was made at noon, during which girths were loosened. The number of sore backs, considering the conditions, was not large.

The officers did not concern themselves greatly with details, in the matter of caring for their men. In general, the men took care of themselves. Most units had rolling kitchens and received a hot meal from them each evening. In the morning they had coffee and bread. At noon they ate a piece of bread and occasionally some cold meat or sausage which they had left over from the night before. The issue of rations was largely supplemented by foraging.

Discipline in its outward forms was good. In reality there was none. Failure to obey orders, delay or slackness in their execution, was the rule, and more so in the higher grades. March discipline did not exist. Straggling and pillaging were the rule. In this respect the war was similar to that of the Mid-

dle Ages. The population suffered and was correspondingly hostile to all troops. The efforts made by the high authorities to protect the population met with no response from subordinate commanders, who openly admitted pillaging and stealing as the only means for the troops to live, since no regular supply system functioned.

With respect to the tactics employed by the Polish cavalry, it may be said to be characterized by the mounted charge. On every occasion they wanted to charge, usually without reconnaissance and without proper utilization of the terrain. This tendency to charge often cost dearly, but on many occasions was remarkably successful. The charge was executed in extended order with the lance. Its effect was almost entirely moral, as the trooper had insufficient instruction in the use of the lance. There were numerous instances of a charge at unbroken infantry and machine-guns over open terrain. So great was the moral effect of the charging cavalry that the enemy fled before them, abandoning excellent positions. There was practically no dismounted action. The men did not know how to use their carbines. There was much useless firing from horseback, occasionally with real moral results, but never with many casualties. There was no effort to utilize the terrain or to take cover. Large units stood in close order in exposed positions, when near by there was excellent cover. This resulted frequently in direct hits from artillery at short range, which resulted in great confusion and panic.

At the commencement of Budenny's operations the Polish disposition lacked depth. Almost the whole Polish Army was spread out in a long line of companies or platoons, each in a village, with little or no contact with each other and with few reserves. When attacked at any point, the line had little power of resistance. Once through this line, Budenny's cavalry met with little opposition, and immediately occupied themselves with the destruction of communications. They then proceeded to carry out their mission by destroying a railroad center, massacring the population, and robbing. Later on, the Polish General Staff reorganized this system, disposing the units in the rear of the front and maintaining a very thin line of observation, thereby having sufficient troops disposed at intervals in readiness for a counter-attack. Directly the enemy had pierced the weak line of observation with his cavalry masses, the Polish units in rear, by maneuvering, would attack in the flank. This system gave excellent results. Insufficient cavalry usually prevented the Poles from pursuing their advantage.

Ever since the exploits of General Denekin's cavalry, the Bolsheviks have laid great stress on the employment of that arm. It was mainly through the instrumentality of large cavalry units formed by the Bolsheviks during the summer of 1919 that Denekin was later defeated. This success of the Bolsheviks resulted in the strengthening of the cavalry, which contributed to the success of the operations against the Poles during the summer. The Bolsheviks used extensively large mounted formations—Budenny's cavalry army in the

south and the IIId cavalry corps in the northern sector of the Polish front. Budenny's cavalry was largely responsible also for Wrangel's defeat.

Budenny is said to be a large man, of good appearance, about thirty-five years old. He has little education. He rarely rides horseback, but moves by carriage. He was a non-commissioned officer of cavalry in the old Russian Army. Officers who knew him then say that he did not appear particularly able. Whether or not he has real military ability is questioned. It is often said that his Chief of Operations, Zotoff, is the man who really forms the military plans. But Budenny is without doubt a man of great determination and strength of will. His Chief of Staff and a large part of the staff usually remain well in the rear. Zotoff is in charge of the advance section of the staff, which remains with Budenny.

As in all Bolshevik units, there are commissaires attached to Budenny to watch him. No orders are valid without their approval. Most of the officers were in the old Russian Army. They were brought into the Bolshevik Army by different circumstances. A few joined because they are convinced Bolsheviks; many because it is easier to be an officer in the Bolshevik Army than to make a living otherwise; others were conscripted. Some entered from pure love of adventure and plunder.

The troops consist of Cossacks and non-Cossacks. The Cossacks serve the Soviet Government because it temporarily replaces the old Czar Government which they formerly served. They are, in general, anti-Bolshevik in sentiment. Whole units have deserted to the Poles. The non-Cossacks are mostly conscripted peasants or those who have volunteered for the good food and plunder or for the love of adventure. In the army, there are a certain number of real Communists.

Budenny's force was named the First Cavalry Army. It consisted of the 4th, 6th, 11th, and 14th Cavalry divisions. A division had two or three brigades, each of two regiments, and one battalion of artillery. The regiments had four squadrons of 70 to 100 combatants. Headquarters had a special guard of 500 picked men. Budenny's force may have had 12,000 or more cavalrymen, in addition to the men in the trains and auxiliary forces. The armament was most varied. Most of the troopers carried a short carbine. Many of them carried the saber of curved, cutting model. None were armed with lances at the beginning, but later carried captured ones. Each squadron had two or three machine-guns. These were usually mounted on the back seat of a carriage, a Victoria, or similar springed vehicle, from which they were fired to the rear. During the summer, when the grain crops of the Ukraine were very high, these machine-guns were able to fire over the top of the grain. Small-arms ammunition seemed to be supplied in plenty, and an enormous amount was expended, mostly in pure waste. The horses were only fair, being mostly small peasant horses.

The artillery, consisting principally of three-inch guns, was drawn by oxen

when not in the presence of the enemy. The men were usually mounted. The guns were fairly well handled, but the shells rarely exploded. There was generally a shortage of artillery ammunition. A number of armored cars were used early in the operations. These seem to have disappeared in the course of the campaign. Four armored trains were assigned to the Cavalry Army. They were of doubtful value, as the cavalry usually operated too far from the railway. Each cavalry division and army headquarters had a radio station.

The Cavalry Army was moved from the Caucasus to the Polish front by marching. It required two months to make the march. The divisions marched separately, in general over the same road, following each other at distances of two days. The daily marches were from 30 to 35 kilometers. Every fourth day was normally a day of rest. There were also three rests of three days each during the entire march. There was no organized supply system and the troops lived by "requisition" (so called) and pillaging.

Budenny invariably tried encircling movements in order to reach the rear of his opponent without fighting. If he ran into opposition, he did not persist, but tried elsewhere. A second or third failure did not discourage him. With great determination he kept on trying. Having four divisions at his disposal, he could feel the line at different points with part of his force, while the remainder was in the reserve, ready to exploit a success. The Poles, having repulsed him at many points, would congratulate themselves on their success, when Budenny, having found the unguarded point, would pass through and suddenly appear in the rear. Confusion and retreat resulted for the Poles, usually almost without a battle. In this method of handling cavalry, Budenny may be regarded as almost a model to be followed.

Budenny's favorite formation for attack seems to have been one in which the attacking unit was formed in successive lines of foragers, with intervals of about 10 paces, on an extensive front, giving the impression to those attacked that the whole terrain was filled with advancing cavalrymen. In the rear of these successive lines of foragers would be machine-guns drawn by one- or two-horse teams. These were only used after the cavalry had wheeled to one or both flanks. Budenny's divisions usually operated at some distance from each other, with much independence of action. There is no instance of the whole force being engaged at one time under his immediate command, though each division appears to have been always well under his general direction.

The individual use of arms was poor. The saber was rarely used, except to torture or kill the wounded. The method of handling machine-guns, while as a novelty it had a great advantage against the enemy whose morale was shaken, would have been useless against good troops. After the Polish morale had been restored, the large target offered by the enemy's machine-guns frequently resulted in their elimination, either by direct fire of artillery, by hidden machine-guns, or often by a bold mounted charge. There were, however, numerous examples of excellent and effective work of machine-guns, especially in covering

a withdrawal. The carbine was used but little dismounted. The Bolshevik cavalry usually fired from horseback—mostly in the air. While at times this had a great moral effect on retreating and demoralized troops, it did not pay for the expenditure of ammunition. The trooper was rarely dismounted to fire. There is no authentic example of a properly carried out dismounted action.

When the enemy was met the foragers did not charge. They usually fired from horseback, remaining at a safe distance. If the enemy attacked or his fire was serious, the foragers withdrew behind the machine-guns. The mounted charge occurred very rarely and was never pushed home. On one typical occasion a large force, a division, emerged from a wood in a comparatively compact mass, vaguely resembling a line of platoon columns, and advanced at a slow gallop toward a much smaller force of Polish cavalry which was assembled in close order in the open. The Bolsheviks, yelling and firing in the air, stopped at some distance from the Poles. When the latter appeared about to charge, the whole mass of Bolsheviks turned and fled.

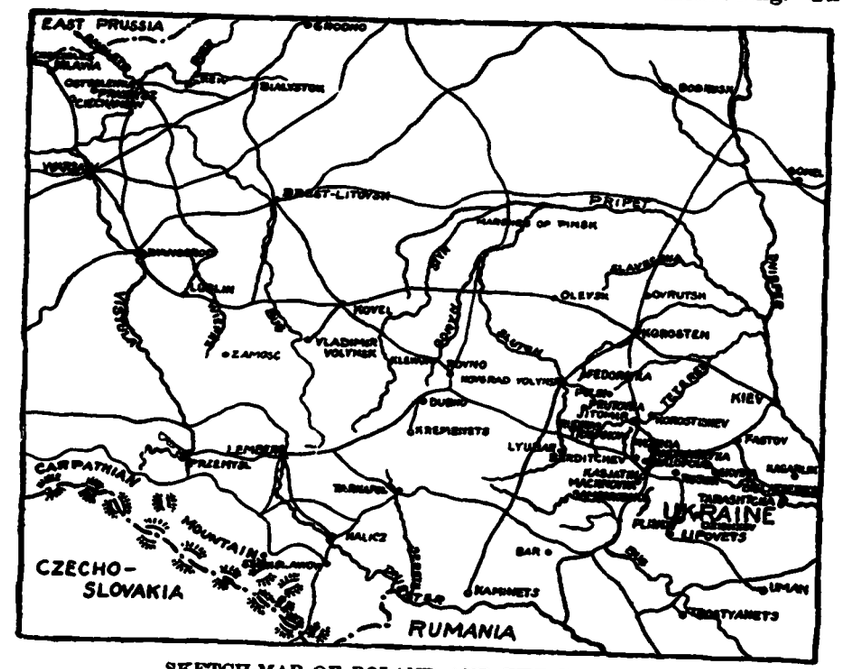
On reconnaissance and the service of information in the field, Budenny's cavalry was fairly good, especially his Cossacks. Their patrols covered the country well. They fully understood the principle that the duty of a patrol is to see and not to be seen; to reconnoiter and report, and not to fight. In the use of the terrain and the taking of shelter, the Bolshevik cavalry was excellent—in marked contrast to the Poles. Service of security hardly existed. Both sides relied on the other's not attacking during certain hours of the day and night. Frequently troops were surprised in their billets.

At the commencement of operations in April, 1920, the Bolshevik-Polish front in the southern sector was about as follows: From the Pripet River along the Slavechna River; thence across to Olevsk (80 kilometers west of the railroad junction of Korosten); thence south to and up the Slutch to near Lyubar; thence a line running generally south, passing about 10 kilometers west of Bar.

The Polish general plan of operations was to have cavalry forces make long, rapid marches through the difficult country between the railways and main roads and reach important strategic points in the rear of the enemy. As the cavalry reached its objectives the Poles were to advance on the whole front from the Pripet to the Dniester. There were three main forces of Polish cavalry. The cavalry division, starting from near Novgrad Volinsk, was to pass south of Jitomir and reach the important railway junction of Kasjatin. A cavalry brigade (the third), starting from near the same place and advancing north of the Novgrad Volinsk-Kiev highway, was to place itself across this highway east of Jitomir. Another cavalry brigade, starting from near the Slavechna River north of Ovrutsh, was to reach the important railway bridges over the Teterev on the line from Korosten to Kiev.

The cavalry division had been organized only a short time and had a mounted combatant strength of about 3,000 men, with 50 machine-guns and 16 field guns. General Romer, who had previously been commanding an infantry

division, took command just before the operation. The division was concentrated for the first time on the evening of April 24, in the region south of Novgrad Volinsk. At 3 a. m. on the morning of the 25th the division left camp, crossed the Slutch River, and marched toward Trayanov. The combat trains alone accompanied the troops. The trail was poor and narrow, through forest and swamp, with many streams to cross. The troops could march only in columns of twos, and with the trains formed a column 15 kilometers long. The



SKETCH-MAP OF POLAND AND THE UKRAINE
Scale: 160 kilometers to one inch

NOTE.—The relative large amount of detail shown in theater of principal operation treated in this account does not mean that this region is a center of population. Relatively unimportant places are indicated in this region to assist in following the narrative of events.

division was preceded by a small advance guard about a kilometer in advance of the main body. Patrols covered the country thoroughly for 5 kilometers on each flank. The division commander and staff marched at the head of the main body. Ten-minute halts were made each hour.

The first encounter was east of Prutovka, where two regiments of Bolshevik cavalry were met. They tried to hold the village. A half regiment was at once

sent to outflank them on the north and an equal force to outflank them on the south. These movements were rapidly executed mounted. The Bolshevik cavalry, fearing apparently to be cut off, retired eastward toward Jitomir. They were followed for a distance by a few squadrons. The column reached Rudnia at 2.30 p. m., having covered 52 kilometers. The first long rest was made here and the horses were fed. At 4.30 the march was continued to a point southwest of Trayanov, a distance of 24 kilometers. A regiment of Bolshevik cavalry was encountered here, which retired toward Kodnia. The division halted at 11 p. m., after a march of 76 kilometers.

On the morning of the 26th the march was resumed at 4 a. m. At 1 o'clock in the afternoon, after a march of 66 kilometers, the division halted. As the rear guard and carts were crossing the railway, a Bolshevik armored train came up and opened fire with machine-guns and artillery. The Polish artillery opened upon the train, which withdrew. The Poles had two killed and seven wounded, with casualties among the horses. The railway was cut in two places by explosives. The march was resumed at 3 p. m., over bad trails, toward the south, to Kasjatin, which was reached at 7 o'clock in the evening. Kasjatin Junction had been reconnoitered and patrols had cut the railways in all directions. As Kasjatin was occupied by the enemy, the division prepared at once to attack. Four regiments were designated to make an attack, with two batteries of artillery. The other two regiments and one battery were held in reserve.

The Bolshevik forces consisted of five train-loads of troops on their way to Berditchev, together with some garrison troops, in all several thousand. There were two armored trains and artillery at the freight station. The large railway yards and stations were filled with trains. The Poles entered the town mounted, in two columns. The few Bolsheviks, surprised, offered very little resistance, and the Poles continued rapidly to the railway station. The attack there began at 8 p. m. and the fighting continued until 6 o'clock on the morning of the 27th. The Bolsheviks fought well, placing machine-guns on the tops of the railroad cars and in the windows of buildings. The many trains in the station and the buildings around made the attack difficult. The Bolsheviks had three hundred killed and many wounded. Many prisoners and much material were taken. A train containing Bolshevik commissaires trying to escape to Kiev derailed at the place where the Polish patrol had cut the track. The next morning a Polish regiment was sent back toward Bialopol to intercept Bolshevik detachments.

On the morning of the 25th the Poles launched their general attack from the Dniester almost to the Pripet. This advanced satisfactorily. The news of the presence of the Polish cavalry in the rear of the enemy line caused a general retreat, which soon turned into a rout. On the 27th and 28th the cavalry division attacked the 44th Bolshevik division, retiring from the west, and took 3,000 prisoners, 27 field guns and 80 machine-guns. The regiment which was sent

back to Bialopol similarly took 2,000 prisoners from Bolshevik units retiring from Berditchev. Near Machnovka a brigade of the cavalry division took large numbers of prisoners. In all, the cavalry division, with a combatant strength of 3,000 men and 16 guns took over 8,500 prisoners. Its losses were very small, amounting to 3 officers and 15 men killed and 70 seriously wounded.

The division remained in the vicinity of Kasjatin for several days, awaiting the general advance of the whole line. On May 2 it resumed the advance at 4 a. m. through Rushin. Only enemy patrols were encountered. One squadron took Skvira the same night. On May 3 the division reached Bielatserkov, and the same day one regiment continued to Pakitno, which was reached at 8 p. m. Patrols that same night continued 10 kilometers to the west and south. Tarashtcha and Kagarlik were occupied by squadrons the next day.

The third cavalry brigade, less one regiment which was attached to a neighboring infantry division, was concentrated April 24, south of Novgrad Volinsk. On this day the brigade marched 40 kilometers toward the northeast, to Fedorovka. The next day the march was resumed at 5 a. m. and 90 kilometers were made. The first Bolsheviks were met west of Pulin, and from there on small skirmishes took place continually. At one place the Bolsheviks made a stand. It was broken by a mounted charge of several squadrons against rifle and machine-gun fire. The losses of the Poles were slight in men, though fairly heavy among the horses. The Poles continued on to Korostishev. There they met a force of about 400 Bolshevik infantry, 50 cavalry, and 4 guns. The Poles had only 6 squadrons, numbering about 360 combatants, the remainder of the forces being detached on scouting or in pursuing small enemy groups. After a short fight, the Bolsheviks were driven back. On the 29th the brigade marched to Leshchin, a distance of 60 kilometers. No enemy was encountered. On May 1, in conjunction with infantry, this cavalry brigade took Fastov. Here it was joined by the third regiment. On May 3 the advance of this brigade had reached to within about 15 kilometers of Kiev.

The northern cavalry brigade started on April 25 from the region north of Ovrutsh. In two days it reached, through very difficult country, the railway bridge over the Teterev, a distance of about 130 kilometers. Instructions to this brigade were to cut off the Bolshevik forces at Korosten and also to prevent the destruction of the railroad, especially the large bridges over the Teterev. Two Bolshevik divisions and five armored trains coming from Korosten attacked this cavalry brigade repeatedly. The first attacks were driven off, but the Bolsheviks finally succeeded in outflanking the Poles on the south and pushing them to the north of the railway. As the Poles had, in accordance with orders, not destroyed the railroad, except for a small hasty destruction at the last moment, which was quickly repaired, the Bolshevik armored trains were able to accompany the rest of their troops, and retired toward Kiev.

Experience has shown that the small damage done to railroads with the explosives carried by cavalry is very rapidly repaired, unless a large bridge is

destroyed. The Bolsheviks and Poles both have become very adept at rapid repairs of the railway.

The Polish Army at the end of May was completely victorious. With insignificant losses, it had destroyed the Bolshevik forces south of the Pripet. A new front ran from north to south along the Dnieper, with a bridge-head of about 30 kilometers radius at Kiev; thence the line ran southwest, passing south of Skvira through Samgorodok, Dzionkov; Pliskov, Lipovetz; thence along the Sab and Bug to Trostyanets; thence southwest to the Dniester near Kamenka.

From the Pripet to the Dniester the Polish forces consisted of two armies under the Army Group commander at Jitomir. The Third Army, with a front from the Pripet to the neighborhood of Dzionkov, had four Polish and one Ukrainian divisions, the latter only partly organized, and one cavalry brigade. The Sixth Army, continuing the line to the Dniester, had two Polish divisions and several partly formed Ukrainian units. Army Group reserves consisted of three very weak cavalry brigades and one infantry regiment.

The Bolshevik forces, before the arrival of Budenny, consisted of inferior infantry of very poor morale and one cavalry brigade of Baskirs opposite Kiev. The arrival of Budenny had been expected for some time. An American aviator, flying over Uman, saw what was probably Budenny's whole force concentrated there, apparently for a review. On May 28 this force was reported near the railway junction west of Uman.

It was known by radios that Budenny intended to march northward toward Bielatserkov and force the Poles to evacuate Kiev. The general situation, due to operations in the north, required the Poles to remain on the defensive. To meet this move the Army Group reserves were disposed as follows: one regiment of infantry and the Third Cavalry Brigade near Bielatserkov; the other two cavalry brigades well in advance of the line at Tarashtcha; at the Kiev bridge-head two divisions were centered; all the remaining troops were spread out thinly, in small detachments, over the entire front. There was no depth to the line. There were only local reserves and often none at all. The troops thus spread out were completely out of control of their commanders. The cavalry division, with hardly 1,200 combatants left,* was far out in advance of the line. It was outnumbered at least five to one by the Bolshevik cavalry and had but little chance in a fight.

From the information furnished by peasants, spies, and intercepted radios, the Bolshevik movements were pretty well known. On May 28 intercepted radios showed that Budenny, instead of marching directly northward, was going to march northwestward. He spread three divisions out fanwise and held the fourth division in reserve about a day's march in the rear. He chose favorable

* Though losses were very slight during the first few days of the April operations, during May in many small patrol actions the losses totaled up to a large figure. The long and continued marches wore out the horses and many men were without mounts.

terrain by heading toward Pliskov and Lipovetz and avoiding the more difficult country farther south, in the valley of the Bug.

On the Polish side two infantry regiments held the front from Lipovetz to Andrushevka, and had excellent dispositions, with considerable depth. The regiment which held the front farther north, on the contrary, had every one in front line. Small detachments were scattered along the entire front. When headquarters heard of the change in Budenny's plans the cavalry brigade and the infantry regiment forming the reserve were ordered to the region of Rushin. The cavalry division remained at Tarashtcha until Budenny's force approached, when it withdrew somewhat.

On May 30 the 11th Bolshevik Cavalry Division, apparently well informed of the Polish disposition, marched straight toward the junction of the two Polish infantry regiments first mentioned. The Polish commander used good judgment. He maneuvered well with his reserve and was assisted by one battalion of the regiment in general reserve, which was hastily brought down from Rushin by rail. The 11th Bolshevik Cavalry Division was beaten back with losses. A little farther north the 6th Bolshevik Cavalry Division was also repulsed. The 14th Bolshevik Cavalry Division came against the Polish regiment which was disposed all in front line and attacked. This division broke through easily and passed through to the Polish rear; but its commander lacked energy and failed to exploit his success.

On May 31 the first two of the Bolshevik divisions rested, apparently not far from the Polish lines. The Poles, however, made no effort to keep in contact with them. The 14th Bolshevik Division, bivouacked near Starostinev, was attacked by the Polish cavalry brigade and infantry regiment in reserve, was badly beaten, and lost several guns. The Polish cavalry division received orders to move south and to attack Budenny in flank; whereupon Budenny sent his reserve division to protect the right flank and rear. These two cavalry divisions came in contact near Tatiev.* Neither dared risk battle, and after a little skirmishing both withdrew.

In spite of the timidity of the Polish cavalry commander, the first two days had been successful for the Poles. This success was further increased by the desertion of one brigade of Budenny's 14th Division, which went over to the Poles. Had the Polish cavalry commander shown more energy, it is likely that much larger forces would have gone over.

On June 1 Budenny's whole force could nowhere be found. The Polish cavalry had failed to keep contact. The Polish command was worried at the disappearance of Budenny and ordered a thorough search made by the aviation. The aviators reported that they saw large red flags on the edge of a small wood east of Samgorodok. The Polish Army Group commander at once decided that all Budenny's cavalry and one infantry division were in this forest. Both

* About half way between Lipovets and Tarashtcha.

Army Headquarters were therefore notified and ordered to countermand the advance which had been decided upon for the purpose of straightening the line. The Army Headquarters did not believe the reports of the aviators, but orders were given to suspend the operations. This order did not reach the commander of the 6th Battalion near Skvira.

On June 2 the Skvira group carried out the advance as orginally planned, passing within a very short distance of the forest in which lay Budenny's force. There appears to have been almost no reconnaissance, for his appearance was never reported. Budenny, on the other hand, undoubtedly observed the advance of the Poles. When the Polish infantry had passed, part of Budenny's force, preceded by armored cars, attacked the Polish forces at Osterna and Samgorodok and annihilated them. Then the main part of Budenny's forces came out of the forest, passed near Skvira, and attacked the Poles in the rear. Thus, without battle, Budenny's whole force was in rear of the Polish front.

The Bolsheviks that day marched about 50 kilometers toward the west. The Polish cavalry brigade kept in contact. The cavalry division was farther east. When informed of events, it tried to pursue. Budenny appears to have divided his forces. He sent detachments toward Jitomir, Berditchev, Fastov, and Korosten. The Polish Army Staff at Jitomir fled a few minutes before the arrival of the Bolsheviks. Where resistance was encountered, the Bolsheviks did not persist, but in general there was little resistance. The Bolshevik detachments spread terror among the line of communication troops, scattered in small detachments. Those who were caught were tortured and killed. The reports of this quickly spread and a panic ensued. General Headquarters at Warsaw was seized with fear, although the whole Polish line had easily withstood repeated Bolshevik attacks and was undefeated, and ordered a general withdrawal in the Ukraine.

Budenny seems to have wasted several days. He did nothing to interfere with the withdrawal. One of his divisions watched a column of over a hundred trucks on the Kiev-Jitomir road without attacking. The Polish 7th Infantry Division, meeting a Budenny cavalry division, quickly drove it off. The Bolsheviks evacuated Jitomir and Berditchev. They did not dare attack Kasjatin, the most important railway point. General Headquarters wished to hold Berditchev and Jitomir, but Budenny suddenly appeared west of the latter place, so a retreat was ordered to the Slutch. This stream runs through a deep, narrow valley and forms a real obstacle. While Budenny created the impression that his whole force was near Novgrad Volinsk, a part of his force crossed the Slutch to the south, and was quickly followed by the remainder; whereupon the Poles withdrew to the Gorin.

Upon the report that Budenny was approaching, a withdrawal was made to a line through Rovno. A few days later Budenny's cavalry appeared at Klevan, 25 kilometers behind the new line. They showed no energy, not even cutting the railway or seriously attacking trains; but a panic took place at Army Headquarters at Rovno and a withdrawal was ordered northward. This left a great gap in the Polish lines, and the main road and railway to Warsaw was left open.

Thus ended the second phase of operations about July 4. In one month a force of about 12,000 cavalry had caused the previously victorious Polish army of 10 divisions, a total force of about 200,000, to retreat a distance of 200 to 250 kilometers. This had been done without a serious battle. Polish morale was destroyed and the Polish army had suffered great loss and disorganization. The Polish cavalry had barely 600 effectives left and had to be withdrawn to be reformed. During all these operations the Bolshevik infantry took no important part, but the very name of Budenny caused a panic. This defeat in the Ukraine had far-reaching effects. It completely demoralized the high command and caused the sending of two infantry divisions from the north front when that many should have been spared from the Ukraine for the northern operations. The result was disastrous in the great action which began in the north on July 4, and Budenny is probably responsible for the subsequent events which almost upset central Europe.

REMARKS ON POLISH-BOLSHEVIK CAMPAIGN

Excerpted from a Letter from a Polish Captain of Cavalry Who Participated

The "right to vote" is a right belonging to about 18 regiments in Poland. After an officer has served six months with us the officers present with the regiment meet and vote on him. He either receives the "Order of the Regiment" (a cross) or is sent away. Colonel Rommel (soon to be General) believes in the lance. My brother officers, being of the old Austrian Cavalry, do not like it. The recruits lose faith in it after the first charges and drop the lance to draw saber. The Kozaks, whom we fought from Kiev to Livow and back to Korosten, never stood when we charged. They ran and we could clear all ground not swept by machine-guns.

The machine-gun mounted on a spring cart drawn by three horses was a new and very fine machine in the high wheat of the East. Like our western land, the fields are large and machine-guns placed on the ground were of no use. Cavalry in retreat can keep up a steady trot and never turn if followed by such a machine-gun cart. Only very determined men will come too close and your speed makes outflanking very hard. Any cart hinders cavalry. Our guns (Russian model) were too heavy and were a drag on us.

The Ecole Supérieure de Guerre

BY

Lieutenant-Colonel CHARLES F. MARTIN, Cavalry*

MOST OF THE French officers whose names are written highest in the annals of the World War are products of the Ecole Supérieure de Guerre, which was established after the Franco-Prussian War of 1870, and which since about 1900, under the influence and guidance of such leaders as Marshals Foch and Pétain and Generals Debeney, Fayolle, and Maîstre, has been recognized as the foremost military school of Europe.

With the lessons of the World War before it, the school has been reorganized and equipped with the best personnel obtainable in the French Army, with a view to making it the highest center of military training and culture possible to realize.

In his greeting to the assembled student officers at the reopening in November, General Debeney, the President of the Ecole de Guerre, said:

> "A war college does not cease its functions in time of war; quite the contrary, in fact. Yet it is after more than four years of practical study and experience that you have come here to continue your education. Why are you here? Because you know that what you have learned from even this victorious war is not sufficient. You are reflecting already that France may need your services at another time, and that when that moment comes you must be soldiers of the time and not the victors of yesterday."

Admittance to the school is competitive and is eagerly sought throughout the French Army. The candidates are carefully selected by the corps com-

* This article on the Ecole de Guerre was submitted for approval to the President of the school, General Debeney, who returned it with the letter hereto attached.

ECOLE SUPÉRIEURE DE GUERRE

THE GENERAL

PARIS, *February* 19, 1921.

MY DEAR MARTIN: I have no objection to your making our comrades of the United States acquainted with the French Ecole de Guerre. . . .

Add merely that American officers are received here as good and faithful comrades of the battlefields.

The former Commander of the First French Army has not forgotten that he had the honor of commanding the First American Division at Cantigny, and all our officers assembled at the Ecole de Guerre welcome with pleasure their brothers-in-arms of the Aisne, Champagne, and the Meuse.

Cordially yours,

(Sgd.) DEBENEY.

manders, and then undergo an entrance examination, as a result of which a limited number is chosen from among those making the highest marks. Of the present class General Debeney said:

> "It is composed of officers fresh from the battlefields. Your wounds, your decorations, your citations, your records of service, testify to a treasure of experience such as never before has been assembled here. Naturally and primarily, I look upon this treasure with the emotion of a commander who knows what sacrifices, what ardor, what endurance, what passionate love of country, enter into the composition of this wealth of experience. Yet I wish to use it for the benefit of all; we shall therefore give to the instruction here an atmosphere of mutuality which will be profitable to every one. Let me make clear the essential characteristic of this mutual effort.
>
> "You bring a personal experience which will be utilized, but as you must well understand this experience has been gained in a restricted field, and the strong impression it has made upon you will tend to lead you to the danger of making hasty generalizations.
>
> "It will be the rôle of the instructors to place this experience rightly in the ensemble, and to point out its relative value. Thus oriented, you and every one will derive from it the greatest possible benefit."

For many years representation at the Ecole de Guerre has been eagerly sought by the leading military powers, and this year's class contains a considerable number of foreign officers, representing some fifteen nations.

The course lasts for two years, with a vacation of two months (during September and October). A new class starts the first of each November. Last year there was a special class with a one-year course, but that will not occur again.

The curriculum includes a course in the applied tactics of each combattant arm and in the functioning of the various staff corps and services, the whole being co-ordinated by the course called "General Tactics and General Staff," which operates as a general unifying element throughout the two years. Then there is a comprehensive course of lectures covering not only the matériel, capacities, tactics or modes of functioning of the various arms or corps in all the different situations that arise in war, but covering subjects of a general nature, such as the manufacture of war material of all kinds; industrial organization and mobilization; social, political, geographic conditions and problems, etc.

Among the underlying basic ideas which are emphasized in all the departments may be classified the following:

1. DIFFERENTIATION BETWEEN PRINCIPLES AND PARTICULAR METHODS

There are certain well established general principles governing the science of war; these may be accepted as true and permanent. Among these, for example, are the preponderant importance of fire-power; the necessity of careful preparation for every operation; the immense influence of moral factors.

On the other hand, there are particular methods of application or of procedure that vary with the armaments, the time, the places, and the morale of the opponents. These methods or procedures must not be confused with the general principles; as, for example, the methods of trench warfare, as it has been called, are regarded as nothing more than procedures applied to a particular phase and special conditions, the influence of which must be eliminated.

The next war is, in fact, contemplated as one in which, due to political situations that can now be foreseen, the beginning will be a war of movement between relatively small forces, followed by the gradual absorption into the conflict of all the military and industrial powers of the nations or groups of nations involved, and terminating in a colossal struggle of entire peoples or races. It will be a war characterized by new armaments and inventions and new methods, suited to the existing conditions and situations; and, in the words of General Debeney, "we must then be soldiers of our times."

2. APPLICATION OF GENERAL PRINCIPLES TO CONCRETE CASES

> "It is based upon the analysis of realities, passing thence slowly and with care into synthesis; verifying the synthesis by specific applications, which lead back always to realities as a criterion. For more than four years the war has furnished us with decisive realities."

General Debeney warns against brilliant theoretical deductions which lead to specious systems, and all problems are tested for application of the general principles—feasibility of execution in solutions arrived at, co-ordination, and unity of effort, etc.

3. UNITY OF EFFORT AND EFFECTIVE USE OF AVAILABLE MEANS

It is not sufficient for a commander or a general staff officer to think only in the terms of his original arm. It is only by the power of organization, the understanding of the capacities and limitations of all the elements, and the power to combine and effectually use all available means that unity of effort toward the common goal can be secured and maximum results be achieved.

4. THE NECESSITY FOR GENERAL CULTURE

Modern war requires in a commander not only the usually recognized qualities, but a broad general culture and information embracing industrial, social, political, and economic conditions and problems; not alone those of one's own country but of all other important countries as well.

> "An officer should live with his times, keep abreast of the great currents of ideas and the great problems that concern his period. . . . The lecturers have been chosen from the most competent authorities; you could have no better guides. . . . Five years of a cataclysm that has shaken the whole world have liberated forces of every nature. We can see plainly enough the points of application of these forces, but we have yet to determine their direction and to measure their intensity. Officers should be acquainted with these forces and should follow their evolution; for they bear within them the germs of peace or of war for tomorrow, and they will enter decisively into conflicts in which military science will be called upon to intervene. Unquestionably these are studies of the whole of life; hence the purpose of these lectures is simply to set before you the problems and to give you the data concerning them. It will be for you to pursue them throughout your career. The lecturers will have rendered you the immense service of outlining and orienting your work for you" (General Debeney).

The Ecole de Guerre, being situated in Paris, enjoys the privilege of securing the services of the most eminent authorities, and the comprehensive course of lectures of these men forms a most valuable part of the instruction.

The practical work of the students consist in:

Home problems (travaux à domicile), for which periods of from seven to ten days, or longer, are allowed. During these periods a maximum of freedom is provided in the work programs. These are regarded as the most effective means for developing the power of deep co-ordinated thinking.

Written class-room problems (travaux en salles); time, three or four hours; purpose, to stimulate the rapidity of the thinking powers—an offset or counterbalance to the home problems, which call for deliberate, sustained, profound thinking.

Map exercises, all collective the first year and a half; purpose, to stimulate ideas through the contact of minds, to bring out by immediate discussion the real value of tactical methods. They are solved by "groupes," or sections of 12 to 15 officers, which are permanent throughout the course. Bringing together officers differing in age, rank, branch of service, they constitute an excellent means of developing mutual understanding and the spirit of teamwork. The greatest liberty of discussion is allowed the students, and these, with the individual corrections of written work (discussed later on), afford the opportunity for the mutuality of effort, the utilization and co-ordination of experience mentioned by General Debeney.

Terrain exercises, solved also by groupes, "serve the purpose of getting away from the map, of which the exclusive use would, in the long run, develop unprofitable tendencies, and to regain contact with at least one reality—the ground."

These exercises cover a wide range of problems in the tactics and functioning of the different arms and are worked out with the greatest precision.

Tactical and staff rides and walks, by groups or combinations of two groups. This work covers, with intervals for groups between trips, a period of about two months each year, and includes trips to various parts of the front and over ground offering particularly interesting tactical features of a varied nature.

Visits to military and industrial plants and factories; practical demonstrations; equitation and automobiling.—Every important problem is preceded by a preparatory lecture and each written problem is followed by a *correction d'ensemble,* consisting of a lecture given to the entire class, in which the head

of the department concerned discusses in general terms the solution of the problem, illustrating his points upon a huge map reproduced especially for the lecture upon a blackboard (or rather black cloth prepared for the purpose). He also uses diagrams, tables, etc., when these seem necessary.

Then each group has its *correction individuelle*, in which the papers of the students (which have been returned to them with instructors' notes and comments) are taken up point by point for discussion.

Usually no written solution is given out, only one, as I remember, having been issued last year. The idea is that the course should develop to the highest degree the individuality and initiative of the student, and it is believed that written solutions by instructors tend to induce imitation and a consequent loss of individuality. From the point of view of new students, who have no models or guides to refer to, this system has obvious disadvantages. It presupposes a thorough knowledge of the French organization, methods of functioning, forms of orders, etc.

A feature worthy of note, which serves as a compensation to the lack of "approved solutions" and which is also, in the opinion of the writer, a very valuable method of orientation, is the furnishing with the theme of every problem, the order of the next higher unit for the operation to be studied. Thus, the first division problem given out contained the complete order of the army corps in which the division was operating. This year, in studying corps problems, army orders or extracts affecting the corps concerned are furnished.

The student thus, from the first, sees the situation as a whole, so to speak, and from the beginning of the course is absorbing gradually the methods of the higher unit whose work he is later to study in detail. A distinguished scientist has recently, in the exposition of a new theory upon an important subject, said something which seems to confirm the wisdom of viewing things as a whole and working downward. He states that heretofore scientific theories have been evolved by starting from details or fragments of the whole and working upward, with the result that science has been much in the situation of people of another age, who, knowing nothing whatever of steam, machinery, etc., might try to conceive the form and laws of operation of a powerful locomotive of today by beginning with its separate details, valves, rods, bolts, etc. Another group of people, no better equipped, but furnished with a complete locomotive, would arrive more quickly at an understanding of the problem.

At the very beginning of the course, this class was required to write both parts* of a division operation order in a particular situation. Besides the complete corps order (minus certain annexes or appendices), it was furnished with a theme containing the usual general and special situation, information, etc. This was in a *travail à domicile*. Subsequently the class had to follow out in

* The French "operation order" consists of two parts, the first part corresponding to our "field order," the second part to the "administrative order" of our division or higher unit.

full detail, on the map, the operation of the elements of the division down to the handling of small units.

As an example of the thoroughness of a particular course may be cited that of the artillery, in which the subjects of artillery matériel, capacities, methods, tactics, ammunition supply, etc., have been studied (in great detail in every ordinary situation that may be expected in campaign) in numerous lectures, home problems, written class problems, map exercises, terrain exercises, tactical rides, and practical demonstrations. Besides this study, pertaining directly to the artillery course, the part played by the artillery is considered in every infantry problem and, of course, in all the "general tactics and general staff" problems.

The practical demonstrations last year at the great camp of Bitche, in Lorraine, included a week's work in reconnaissance, emplacement, fire adjustment of different calibers, and the firing of thousands of rounds of ammunition, demonstrating the grouping of points of fall, the deviations to be expected, rolling barrage with deepening by raking and protective fire, protective stationary barrage (these with examples of correct or effective density and with insufficient density), the fitness of the several kinds of matériel to the execution of different missions of battle, blinding of observatories, the tracing of trajectories in the air, etc.

Of particular interest to cavalry officers may be the view taken of the future of cavalry. It is considered as having a most important rôle in future wars, based upon its capacity for *mobility;* for *fire-power,* due to the weight-carrying possibilities of the horse; its capacity for *absorption and utilization of swiftly moving elements,* like tanks and armored cars (carrying machine-guns and small-caliber cannon).

Airplanes have not replaced cavalry in reconnaissance, but have supplemented it. Airplanes cannot report upon the absence of the enemy in woods, villages, growing crops; cannot operate at night or in unsuitable weather; cannot determine the contour or outline of the enemy, nor cover mobilizations of other troops.

All of these will be purely cavalry functions, as will be the duties of seizing important advanced points, covering movements, filling or closing a breech, exploiting a rupture, etc. Cavalry is the arm for a mobile reserve.

For all these duties, cavalry needs increased fire-power and the highest training in dismounted action. The French have steadily increased the fire-power of their cavalry by automatic weapons (auto-rifles and machine-guns) and armored cars. They recognize its capacity for utilizing airplanes, tanks, etc. Its future training is to be developed for the accomplishment of the missions above indicated.

The instructors are the best the French Army could produce. In his opening address General Debeney said that they represent an "Elite de Guerre," and he spoke truly. They are remarkable not only for the thoroughness and

sureness of their knowledge of their own arm or corps, but for their understanding and appreciation of the rôle of the other arms, their freedom from prejudices and hobbies, their breadth of vision, keen minds, and sound judgment.

The writer feels that the course of the Ecole Supérieure de Guerre offers invaluable training to officers qualified to follow it. Further, we should keep in touch with this important center of military study, and through it with other important countries whose conditions and progress are closely followed here.

Qualification naturally includes, first and foremost, a thorough knowledge of the French language. It is not by any means sufficient to be able to read it, or even to speak it with reasonable fluency. One must have a thoroughly trained ear. To acquire a trained ear it will be necessary for a man (without it, but already well grounded in French) to devote two or three months to the task of securing it. It would, therefore, be advisable, even essential, for an officer detailed to take the course to reach France two or three months ahead of the opening of the course.

As to professional qualifications, the officer should be a graduate of the School of the Line or have otherwise acquired a general fund of tactical and staff experience or knowledge equivalent thereto. Without such an equipment he will find himself at a great disadvantage.

Cavalry Tanks

BY

Major BRADFORD G. CHYNOWETH, Infantry, Tanks

THE WORLD WAR brought forth many changes in the tactics and equipment of armies. So broad is the scope of these changes that it seems almost as though the art of war had been completely revolutionized, in principles as well as in details of application. It is with the greatest of difficulty that one attempts to reconcile the pamphlets and books that appeared during the war with those that were complacently accepted before 1914; yet we have been so conservatively trained to believe in the eternal principles of our art that we are today patiently endeavoring to adjust the newly acquired technique to the framework of pre-war principles. It is fortunate that this conservatism prevails. Only when we succeed in proving the new developments to be the merely logical growth of previous principles will their true significance be understood.

Of the new technical developments there is none that has introduced greater confusion into scholastic ranks than has the tank. The technique of the tank is certainly new. There are some who believe that its very principles are not to be met with in the history of war. It combines mobility, fire power, shock, and protection. It has been called "the battleship on land." What is its rôle and how must it be organized? Should it have its own organization, a separate corps, directing its action in co-operation with other arms, or should it be assigned to existing arms? These are its questions. Since we so conservatively hold to previous ideas of organization and refuse to create a new arm whose very existence contradicts our accepted tactical principles, it has been decided to assign the tanks to the arm which they supported during the war. Hence we have today the infantry tanks.

The tanks used in the past war were indeed infantry tanks. Whether by breaking organized resistance by fire, crushing material obstacles, or merely opening paths by demoralization, their function was to enable the infantry to assault. Their purpose was accomplished by close co-operation and support. When they failed the reason was usually either mechanical breakdown, resulting from mechanical youth, or to lack of intelligent co-operation with infantry. The best manner of insuring close co-operation is through consolidation of command and association in training. For this reason tanks were assigned to infantry. The infantry can thus provide for the proper training of tank personnel in the tactics of infantry, and infantry officers in the tactics of tanks. The tactical training and doctrines of both can be prescribed together,

to achieve the necessary unity of ideals. In each infantry division the former machine-gun battalion has been replaced by a company of light tanks. It is not too radical to suggest that in a year or two all infantry machine-guns might well be carried in tanks for offensive purposes, while being dismountable in defense.

In making predictions, one must explain, and thus meet arguments in advance. The tank of next year is not the tank of the past war. Those who saw these blind, dumb, deaf monsters, lumbering across the trenches slowly, if not indeed halted in rear for repairs, might exclaim that their day is over, their work accomplished. However, the tanks of the future will be rapid, communicable, and wide-eyed. They will negotiate open ground at the speed of a horse, trotting over the rough and galloping over the smooth. They will follow good roads on wheels at twenty-five to thirty miles per hour. They will endure the strains of battle. To judge them by the first tanks developed would be no more just than to compare the earliest locomotives with those of today. The tank is here to stay, not as a single type, but as the principle of cross-country transportation, developing with the advance of human knowledge.

The advance of human technique in either peace or war is always toward greater concentration of energies. The tank came to fill the needs for more power in the close attack. The deadlock of 1914 found the infantry of assault unable to break the strength of resistance. No gathering of masses of men would suffice, although countless lives were lost in the proof. Distant artillery support seemed to give promise, but distant support was easily countered by organization in depth. Both the accompanying gun and cavalry were forbidden by the defensive development of fire and by the immobility of flanks. What was needed was a machine that would accompany infantry and, affording protection for its operators, provide a destructive energy of a highly concentrated sort. This need brought the tank, which is a substitution of machinery for manual labor in war.

Although we have today only the infantry tank, one cannot study its history in war without comparing its future, in some sense, with the past of cavalry. Here when it envelops the foreground, raking the flanks of strong points with fire or shock, and there when it disrupts by shock alone in frontal assault, this slow, infantile machine strongly resembles a giant iron horseman. Is it an elephant or an armored knight? It brought success to infantry. What will it bring to the cavalry? It must not be scorned because in its youth it was slow and heavy. On the contrary, it must be studied by cavalry as well as by infantry, to determine if it might not bring new life to the former as it brought hopes of success to the latter. One need not draw back in fear that the tank will replace the horse. On the contrary, it is likely to enhance the value of the horseman as it has strengthened the infantryman on foot.

For all its glamor, war must be reduced to economics for technical study.

Morale is supreme, but morale must subsist on matter. The soldier's spirit is one of the eternal things, but in the soldier's hands we must place the increasingly powerful weapons that the increased wealth and knowledge of nations can provide. As the man is the unit of courage and spirit, the dollar is unit of equipment. It is necessary only to so adjust our equipment that in war, when our resources of men and of money are taxed to the utmost, the critical moment will find us with sufficient reserves of both. Napoleon with muskets would suffer before the veriest mob of today equipped with machine-guns. Nations entered the World War with too many men and not enough machinery. In a mechanical age we must devise machinery to increase the concentration of power for our troops. Such is the tank, a machine which can intensify the energies of combat or increase the mobility of supply.

Nevertheless, in the most mechanical age, we must base our hopes upon living units. Man is the unit of combat. The horse remains the unit of mobility. Cavalry is a compounded arm—mobile, yet effective in combat. In its ideal performance it must be characterized by concentration for the attack as well as by dispersion for observation and security. Hence it follows that the tank cannot yet replace the horse. Economically, as well as in concentrated power, the tank is the equivalent of many horsemen; yet it has no dispersive ability. Economics forbid the replacement of one tank per one horse, even though the single tank could equal the performance of the trooper. Tactics demand the dispersion that only the cavalry unit possesses. Therefore the cavalry screen and the "independent" cavalry patrol are elements of future war as they were of the past. It remains only to decide if cavalry can fully perform their functions without the introduction of mechanical aids. Can they develop resistance or execute an attack? Can they raid, or harass and disrupt a retreat? Have they the close power needed for these? Do they not, like the infantry, need machines to increase their power concentration?

There is no doubt that many of the functions of cavalry can be fulfilled with their present equipment. Mobility is theirs and it always bears fruits. Yet with mobility there must be power. Even though we reduce cavalry to an organ of sight, it must have penetration to gain more than superficial views. And surely cavalry is to be more than an organ of sight. In former days, by the surprise of its charge in favorable situations or by its enveloping dismounted fire action, it was able to accomplish its offensive purposes, retaining security by superior mobility. The machine-gun and the automatic rifle make the charge seem a thing of the past, except in most unusual circumstances, against mounted opponents or against totally disorganized and demoralized infantry. The superior development of the defense with machine-guns and automatic rifles is likely to present to the dismounted fire action of cavalry, as it does to infantry unsupported by tanks, a capital obstacle. Must the cavalry, then, accept the inferior rôles of superficial observation or action against uncivilized forces? Are the days gone by when an active cavalry could

demobilize and contain an opposing force, or crown success with the demoralization of the vanquished? This seems an imminent condition, unless cavalry add to their employment some mechanical support, an offensive concentration.

The problem before the cavalry is still the balance of mobility and power. They retain their relative superiority in movement, but they must study their power. They should retain their screen formations and their enveloping actions, but when contact is made they must be able to crush through. They must, therefore, carry a punch in support that will tear the modern resistance. They must crush, not infantryman with rifles, but the hasty security of tomorrow. This hasty security will indeed not be an organized system of trenches, but it will include automatic rifles, machine-guns, and *tanks*. It is useless to dream of the charge against any of these. It is unpleasant to think of the dismounted attack. The automatic rifle alone is defective in power for determined attack. The machine-gun is defective in mobility. There will not be sufficient artillery to open the paths. Cavalry should always have a close power second only to that of the infantry. With their present equipment, there is danger that the benefits of their superior mobility will be lost by inability to strike. Any offensive efforts against a modern foe will be so costly that, without some superior mobile concentration, such as is afforded by tanks, the arm must be reduced to defensive observation.

In the warfare of the future, cavalry must retain its importance. The infantry is learning the laws of machine production with the purpose of increasing its concentration of power. Airplanes will serve to gain much general information and to do much in the way of harassing; but one would like also to think of a mobile *and powerful* cavalry, screening the front, protecting the flanks, or out on separate missions of envelopment. These employments are necessary before the engagement is joined, in order to gain the initial advantages of disposition. They must continually harass the flanks during action. Finally, they must be prepared to exploit success. These require not only mobility, but also power. With the employment of tanks, why cannot cavalry perform all of these vital services? Tanks will be able to accompany cavalry in the most rapid movement. On caterpillar tracks, moving at eight to twelve miles per hour over the ground, or on wheels at twenty-five to thirty miles per hour over good roads, they will have mobility to respond in support of any phase of cavalry action in average terrain. At critical moments they will have sufficient power to break any hasty resistance that the mounted troops may encounter. It will be necessary only for the troopers to gain contact and locate the resistance, and later to hold or exploit the advantages gained by the great power of the cavalry tanks.

It is, indeed, much to be hoped, therefore, that the cavalry come to the use of tanks. They should look upon the tank, not as a special weapon devised for unusual conditions, but as a natural and normal auxiliary to the horse. From the cavalry viewpoint, the tank is truly no more than a great iron horse. It

should be welcomed in support of horses of flesh and blood. Its traditions are sound. The dash and esprit of the charge of the tanks are not to be excelled by the most famous charges of history. The tanks, indeed, will provide the additional impetus that will make the charge a thing of the future as well as a tradition of the past. There were countless occasions during the World War when the presence of a few rapid tanks would have made the employment of cavalry of critical value. One need only remember the excessive losses incurred during that war in the use of cavalry unsupported by tanks to appreciate the fact that the tanks have appeared to renovate and not to eliminate the mounted service.

The growing demand for the introduction of machinery in war cannot be overlooked. We are just beginning to open the fields of mechanical exploitation. If we would play our parts in the wars of the future and attain success, we must become modern and employ the forces made available by the advance of human knowledge. There must be continual concentration; there must be machines; there must be weapons of a sort that neither man nor beast can transport; there must be tanks. If these serve to complicate the problems of supply and tactics, we can only realize that the entire trend of modern activity is toward complication, and must understand that we in the army cannot escape the general law. Tanks were developed by no one arm or service. Cavalry officers played a huge part in our own tank development. It is highly appropriate that the cavalry keep abreast of the future development and learn to employ these machines that hold out the promise of maintaining for them the honorable cavalry rôle in war.

Comments on "Cavalry Tanks"

BY

Major GEORGE S. PATTON, Jr., Cavalry

(These comments are made at the request of the writer of the preceding article)

In response to a request for remarks on the foregoing article, I must begin by a most vigorous dissent from the writer's picture of a senile and impotent cavalry, futilely butting its head against impregnable strong points. I can agree only to the extent of admitting that a cavalry which so deported itself would certainly have no future; nor has it, when well led, had any such past in history.

Cavalry, now as always, must advance by enveloping. When the ground, as in France, was so limited as to prevent this, cavalry must await the break through made by the tanks. However, western Europe is the only country

small enough and with sufficient population and roads to render such a state of things possible. In other theaters of war, the constant power of envelopment which the mobility of cavalry makes possible will render strong points nothing but asylums for the safe-keeping of the hostile idiots who infest them.

There are many cases, such as in raids, long turning movements, screening, etc., where cavalry is and ever will be wholly self-sufficient and where the addition of mechanical devices will be more of a hindrance than otherwise. Cavalry has lived off the country and can yet do so. To it, lines of supply are unnecessary. Tanks, on the other hand, depend wholly on lines of supply for the vast tonnage of gas, oil, and spares. Without these they become merely inferior pill-boxes. Hence, to attach them to cavalry on lengthy operations is to seriously demobilize the latter.

In other cases, however, such as in short turning movements, advance and rear guard work of mixed commands, counter-attacks, etc., where lines of supply are not needed or already exist, tanks will be of great assistance to cavalry, combining, as they do, great mobility with concentrated fire power.

The point as to the economic impossibility of building enough tanks to constitute a mechanical army is well taken. In addition, however, to this vital objection to the ubiquitous use of tanks should be mentioned the restrictions due to unsuitable terrain and the difficulty of oversea transport. I was, and believe that I still am, as enthusiastic a tanker as ever caterpillared, yet I cannot bring myself to the point of picturing tanks, present or future, real or imaginary, as ever operating in the mountains of Mexico, the rice paddies of the Philippines, the forests of Canada, or, in face of competent artillery, on the sandy and gully-infested plains of Texas. I cannot picture a large oversea force giving up that priceless commodity, deck space, to large shipments of tanks; nor can I imagine a sea-borne invasion so transporting them to our shores.

Tanks are a new and special weapon—newer than, as special, and certainly as valuable as the airplane. Can one imagine infantry airplanes manned by detailed doughboys; or artillery airplanes manned by wagon soldiers or cosmoline kids; or yet cavalry airplanes ridden by sturdy troopers with the use of "lateral aids"? Hardly!

The tank is a special, technical, and vastly powerful weapon. It certainly is neither a cavalryman nor an infantryman. Yet, give it half a chance, over suitable terrain and on proper missions, and it will mean the difference between defeat and victory to the infantry or cavalry with which it is co-operating.

What is wanted, then, is neither infantry tanks nor cavalry tanks, but a *Tank Corps*—a special mobile general headquarters reserve, to be detailed, as circumstances demand, with whichever arm it can best co-operate.

Eyes for Tanks

(Reprinted from "Army Ordnance," March-April, 1921)

During the World War tanks were not always able to render maximum assistance, due to the poor facilities for observation afforded the tank operators. Effort has been and is being directed toward providing something which will not only give better observation, but will also provide protection to the observer at the same time.

In the first tanks used during the war, observation was obtained by looking out of port-holes, which meant that the observer was in great danger of being injured or possibly killed by enemy fire. Later these observation slits were protected by means of a movable shutter, so that varying degrees of opening could be obtained, the smaller opening affording the greater degree of protection to the observer.

Some of the British tanks were equipped with a periscope device for the driver, which was so arranged that he had good observation directly ahead. The objection to this form of periscope was that it was easily broken, became dirty very quickly, and permitted observation only in a very narrow range directly in front of the tank.

Practically all of the later British tanks, as well as the Anglo-American Mark VIII tank, obtained their observation through the use of observation slits and small hand periscopes. Several of these periscopes were provided for each tank, and openings made in the roof of the tank, so that if enemy fire was too severe the periscope could be pushed up through a hole in the roof, giving protection to the observer; otherwise the observation slits were used.

In general, the facilities for observation used in tanks during the war were wholly inadequate; if tanks had been given better eyes, they would undoubtedly have rendered better service.

One solution to this difficult problem, which is now receiving careful study and consideration, is based upon the stroboscopic principle. The principle of the stroboscope is very simple. Almost every one has observed, when walking rapidly beside a picket fence, that the pickets seem to have little effect in obscuring objects beyond the fence. The stroboscope operates on almost exactly the same principle, and consists of a revolving plate, or cylinder, with slits cut in it. The retina of the eye will hold an image for approximately one-tenth of a second, and in this revolving plate, or cylinder, the slits are so arranged and the speed is governed so that a new slit will be presented to the line of vision within this time interval, giving the effect of practically continuous vision. In the use of this principle for observation and protection in tanks, it is proposed to make the slits sufficiently narrow to keep out the cores of armor-

piercing bullets and to reinforce these slits with the backing of non-shatterable glass, so that the moulten lead, or splash resulting from the impact of the bullet on the revolving screen, will not get through and injure the observer.

This form of observation and protection seems to have tremendous possibilities, and it is hoped that in the near future the tank gunner will be able to have all-around vision, at the same time being entirely protected against enemy fire.

Combat: Revolver Against Lance

By Colonel LOIR

(Translated from "Revue de Cavalerie," May-June, 1921)

I REQUEST permission to relate a curious incident of the war which deserves to be known, especially on account of a method of revolver-firing which it describes and which may be recommended.

On August 4, 1914, one of my non-commissioned officers was on reconnaissance in the region of Leintrey with six troopers when he perceived at a distance of three kilometers an enemy cavalry patrol. He proceeded toward them, utilizing the terrain to advantage, and approached to within 100 meters of a group of six German cavalrymen. Five were mounted; the sixth, their officer, was dismounted at several meters from the group, his horse held by one of the mounted men. At sight of them the French charged at once. The group of mounted men scattered, abandoning without hesitation their officer.

The latter took his revolver (automatic, 8 millimeters) and placed it in the bend of his left elbow, the right arm bent, the left hand supported on the right elbow. In this manner the revolver is fixed as firmly as possible and the fire is delivered accurately, as we are about to discover.

The French patrol following in pursuit after the Boche patrol passed in file at a gallop in front of the German officer. The latter fired and hit three horses with three shots at a distance of 30 paces.

The French non-commissioned officer, armed with his lance, galloped down upon him and charged him. The officer fired a fourth round, which left a very visible mark on the leather leggin of the non-commissioned officer, and springing aside he avoided the lance. The non-commissioned officer threw his horse about and charged the second time. The officer fired a fifth round, which glanced along the thumb of the lancer's bridle hand, again bounded back, and a second time avoided the shock. With admirable obstinacy, the non-commissioned officer a third time came back to the charge. The officer fired a sixth ball, which, like the five others, found its mark and hit the horse in the point of the shoulder, passed under the skin, and lodged under the saddle, where we found it some days later. A third time he avoided the shot.

Undaunted, always master of his horse, and retaining his presence of mind, the non-commissioned officer again made an about and charged for the fourth time. The German then lost his head, believed that he had no more cartridges (he had two more), turned and bolted. Naturally he was struck at once to the ground by a blow of the lance in the back.

Without dwelling further upon this episode, worthy of the heroes of Homer, which might serve for a theme in defense of the lance and would well illustrate the famous adage, "Victory to him who perseveres," we observe this: that this German officer in the course of the duel fired six times and made six hits. If the last ones failed to account for his adversary, it was only a bit of bad luck. We do not hesitate to attribute the merit of this beautiful performance, rare enough, to the unique position which he adopted and which permitted him to fire with this uncertain weapon with precision. The confidence which he must have had in this method of firing contributed largely, without doubt, to the admirable calm which he displayed throughout the course of the combat. The regulations should include this method of firing and recommend it when it is appropriate.

Cavalry on the Front

BY

General N. N. GOLOVINE

Translated by Colonel A. M. Nikolaieff

"CAVALRY STRIKES not with the force of the shock, but through the quickness of its maneuvering."* It is easy to draw the inference that without cavalry no maneuver of larger units can bear complete results.

The power of modern cavalry is based on the nature of fire-action in battle. The development of fire, having increased the strength of the defense from the front, has made the flanks extremely vulnerable, because the modern rifle and machine-gun can reach a distance of over a mile and the modern field gun over four miles. On account of that, the sphere of action of even a small group of men armed with rifles and field guns becomes very wide; simultaneously their "power" of action is also increased. In former epochs the "power" of such a group of men was limited to the power of their "shock," while nowadays when making an attack they work with the aid of machines, the effectiveness of which depends primarily on the supply of munitions.

The cavalry, being an arm of mobility, has in a war of maneuvering all the advantages on its side.

The subject of this article is the work of the cavalry on the front of the armies—that is, its work under conditions strategically less favorable than those of a cavalry deployed on the flank of the armies.

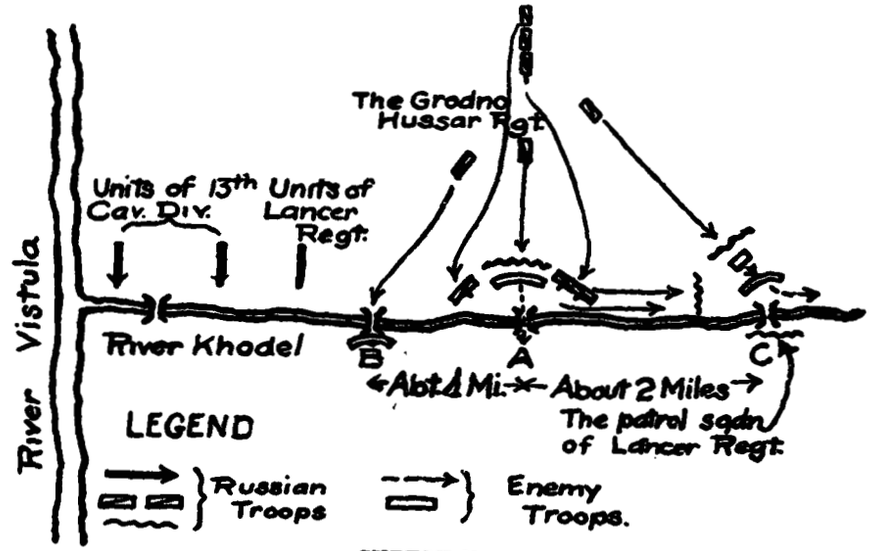
We shall see that in a war of maneuvering cavalry has a wide sphere of action, also, on the front. It has to be remembered that at the time when a "march maneuver" is being executed there does not exist any uninterrupted front, as is the case in a war of positions (trench warfare). The flanks of the advancing columns, before the latter will complete their deployment and link up with each other, remain unprotected; therefore there arise many opportunities of which advantage can be taken by a maneuvering cavalry. Furthermore, it should be borne in mind that all the engagements of advance units are always of the nature of battles "de rencontre." In view of the fact that in such battles the one who takes the initiative becomes the master of the situation, the position of the cavalry, thanks to its mobility, becomes in such engagements a most advantageous one.

To illustrate what is said about cavalry action in the engagements of advance units, I will relate the work of the Grodno Hussars in the fight on the river Khodel in the end of August, 1914.

* See "The Cavalry Action at Yanoff," CAVALRY JOURNAL, April, 1921.

As stated in the article "Cavalry Charge,"* the task of General T.'s cavalry, made up of the 13th Cavalry Division and of the Guards Cavalry Brigade (H. M. Lancers and Grodno Hussars), consisted in the following: To hold up the advance of the enemy as long as possible, in order to enable our infantry which was being transported by rail to concentrate and to deploy for the delivery of a general attack. The small river Khodel, embedded in swampy banks and flowing across a wooded country, was selected, on account of its several advantages, as our first position.

Having received an order from the general commanding the Guard Brigade to advance quickly with the hussar regiment and to take possession of the



SKETCH No. 1

Encounter of the Grodno Hussars with the Advance Units of the Enemy, End of August, 1914

bridges (see Sketch No. 1), I decided to send out simultaneously three squadrons, each toward one of the three bridges, and with the three remaining squadrons to follow at a distance of about a mile the squadron that had been sent out along the main road toward the middle bridge. Part of the lancer regiment was sent out to our right, in the direction of other bridges, while farther still to the right were sent out units of the 13th Cavalry Division. In front of that whole line there had been scattered patroling squadrons of the lancer regiment and of the 13th Cavalry Division.

The main body of the Grodno hussars scarcely began to advance when a dispatch rider sent out from the squadron that was advancing along the main

* See CAVALRY JOURNAL, October, 1920.

road came at full speed, carrying a report to the effect that the enemy advance units had crossed the river Khodel and were holding the edge of the wood to the west of the bridge "A."

The beginning of a fight by advance units, moving against each other, always assumes the character of a certain surprise. It is the period of laconic verbal information coming in from the patrols and dispatch riders, of reports for the greatest part disconnected because they are made in a nervous, hasty way. To all that is to be added the confusion due to the fact that the illiterate or partly illiterate soldiers cannot express clearly their thoughts. In short, the situation in such circumstances is, as a rule, enveloped in a fog. However, he who will wait for the clearing up of the situation will lose, because the conditions are the same on the opposite side.

I decided to take advantage of the fact that my regiment had been deployed on a wide front and sent out to all my advance squadrons an order to attack boldly the enemy advance units which they would come across, so as to take possession of the bridges without delay. As to the three squadrons of the main body, I decided to lead them forward to reinforce the advance squadron operating on the main road. That squadron dismounted and took up a position on both sides of the road. One squadron of the main body was sent out by me to envelop mounted the left flank of the enemy, while with the remaining two I rode to envelop the enemy's right flank. Having noticed our flanking movement, the enemy began immediately to retreat, and we, following them on their heels, took possession of the bridge "A." The advance squadron, sent to the right, succeeded in reaching the bridge "B" before the enemy came up and took it without fighting.

But the bridge "C" had been occupied by the enemy, and the hussar squadron was held up in a wood in front of the bridge. From that squadron I got a report that they were opposed by infantry, about one company strong. It was necessary to drive that infantry out before it would have time to link up with its neighbors and to entrench itself. I reported to the commander of our cavalry brigade that I would leave one squadron only at the bridge "A" and with the three others would proceed to the left to reinforce my squadron there. However, as the bridge "A," being on the main road, had a great importance, I requested to have the defense of that bridge strengthened by two lancer squadrons from the reserve.

With two of the hussar squadrons that had taken part in the fighting for the bridge "A" I took the shortest way to the bridge "C," directing the third of those squadrons to follow the bank of the river Khodel with the object of driving across the river small enemy groups that had come over to our side of the river, and also to get in touch with the hussar squadron which had been left to hold the bridge "A."

Through the woods we came to the village at the bridge "C," where we joined the squadron that had been sent here. We dismounted and took the offensive, enveloping the left flank of the enemy deployed near the village.

Simultaneously our horse battery opened fire with effect. We could notice that the enemy was showing great nervousness. All of a sudden we heard a fierce machine-gun rattle directed from behind the village, from the opposite bank of the river. Our first impression was that reinforcements had come up to the enemy, although it was not clear against whom the firing was directed. Soon we noticed that the enemy were hastily leaving the village and fleeing into the wood. It turned out that one of the lancer patrol squadrons sent out across the river, seeing on its way back that it had been cut off by the enemy advance units, decided to attack the enemy from the rear. Thereupon the bridge "C" was seized by us immediately.

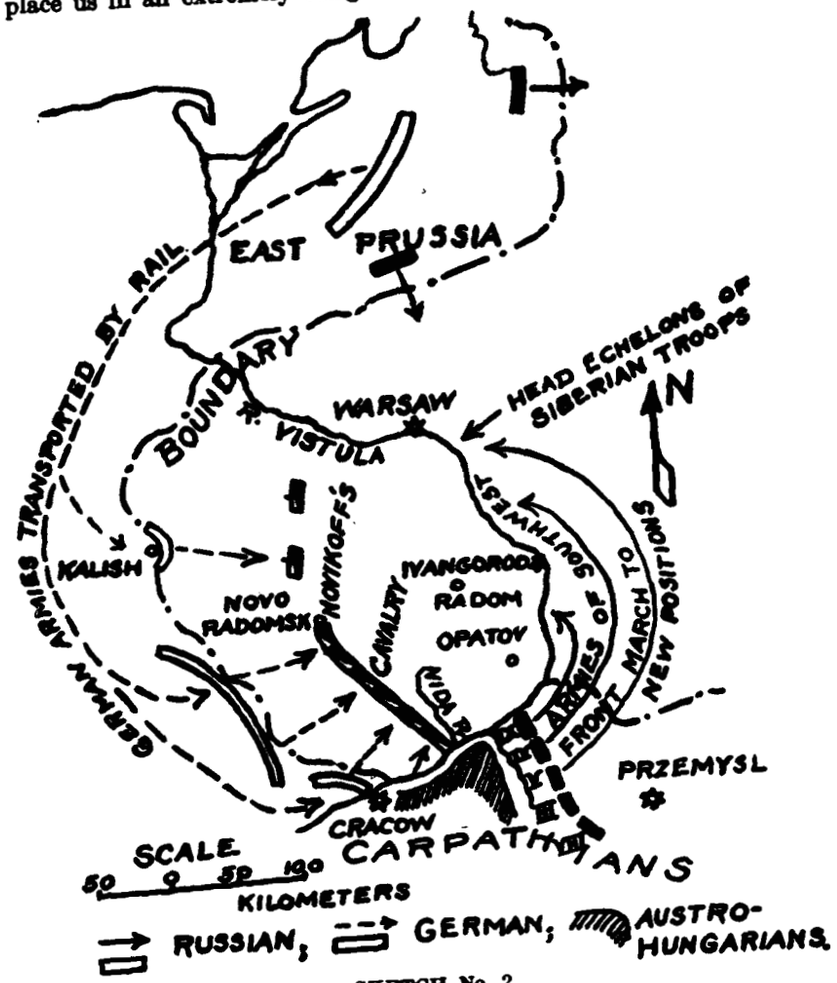
Thus, on the left side of the river Khodel the whole section assigned to us was cleared of enemy—a matter of a great importance, because we were now in a position, sticking to the river as a defense line, to hold up the enemy for a few days more and to enable our infantry to come up.

Now let us take up the strategic importance of the cavalry covering the maneuver of an army. In the middle of September, 1914, the general strategic situation on the Russian front was as follows: We had suffered severe reverses in East Prussia; Samsonoff's Army had been almost annihilated; Rennenkampf's Army had to withdraw from Germany. On the other hand, in Galicia we had won a great victory; the Austro-Hungarian armies had been defeated and driven into a narrow space between the Carpathians and the Vistula, in the neighborhood of Cracow. The empire of the Hapsburgs was on the eve of a complete collapse. To save it, immediate and energetic help from Germany was required. In such circumstances the German High Command decided to take advantage of its highly developed net of railways, encircling our frontier like a cobweb, and to transport from East Prussia the greater part of German troops to help out their ally. The deployment of those troops was to take place on the front (see sketch No. 2) Cracow-Kalish with the object of starting a rapid advance toward the Vistula in the direction of Ivangorod and other bridges on the Vistula to the south of Ivangorod as far as Sandomir. Their linking up with the Austro-Hungarian Army had for its object to restore the weakened morale of the latter and to enable it to get out of the crowded position into which it had been driven.

At that time, on the western side of the Vistula, there was only the Russian cavalry, while in the neighborhood of Warsaw and Ivangorod there were only a few Russian infantry divisions. The Russian High Command was in a very difficult position. The four Russian armies that had won victory over the Austro-Hungarians followed them into Galicia. To bring up those Russian armies and orient them in new directions, we had not at our disposal such a net of railways as the Germans had. Moreover, our railway lines were already overburdened with transportation of troops, because our concentration had not yet been finished, and besides with transportation of reinforcements and supplies designated for our armies that had been already in action. Only the

leading echelons of the Siberian troops coming up from the east could be brought up to Warsaw; but that was not enough.

The taking by the Germans of the Transvistula region (west of the Vistula) could place us in an extremely dangerous strategic situation, because in such



SKETCH No. 2

General Strategic Situation, End of September, 1914

case they would separate our armies operating against East Prussia (our northwestern front) from our armies operating in Galicia (our southwestern front). Therefore the Russian High Command decided to carry out a general regroup-

ing of the armies of the southwestern front, giving up for the time being the further advance into Galicia and the invasion of Hungary. That regrouping had to be carried out by marching. In rainy autumn days our infantry, sinking up to their knees in the mud of highways that had become soft and torn up, marched twenty to thirty-five miles a day. The road behind the marching columns was scattered all along with the corpses of fallen horses, while our ambulances were filled with men that had become tired out. At the very same time the Germans, comfortably seated in their railroad cars, were resting before their future offensive.

With the object of reconnoitering the zone of concentration of the enemy forces and also to cover our regrouping, the Commander-in-Chief of the southwestern front decided to move forward General Novikoff's mixed cavalry corps to take up the line Chenstohovo-Kattovitz-Cracow. That mixed cavalry corps had been successively built up of the following units: three regular cavalry divisions (5th, 8th, and 14th), two Don Cossack divisions (3d and 5th), the Turkestan Cossack Brigade, to which units at the end of the operation was added the Ural Cossack Division. On September 27 the Cavalry Corps commander, with a view to taking up without delay a wide front, deployed all his divisions on the line from Novo-Radomsk south to a point on the Vistula just west of the river Nida. Thanks to that deployment on an extended line, our cavalry was in a position to establish contact with the enemy on their entire front.

Having established that contact, General Novikoff's cavalry held up, step by step, the advance of enemy columns by forcing them to deploy and to change into combat formations. Our cavalry took advantage of every interval unoccupied by the enemy and either, slipping into the intervals, penetrated into the rear of enemy columns or operated against the flanks of enemy advance units. To what extent our cavalry units were able to penetrate between the enemy columns is best shown by the fact that we were getting from them information not only of what was taking place on the front, but also of what was going on in the rear of the enemy. It will be of interest if I mention here that after General Novikoff's cavalry had been moved to another direction, three of our patrol squadrons remained in the enemy rear, and not until a month elapsed, during which time we had finished our regrouping, resumed the offensive, and had driven away the Germans, did those squadrons join the Russian troops. Of course, it should be borne in mind that the success of such a deep penetration into the enemy rear was made possible by the friendly attitude toward us of the Polish population. That continual penetration of our cavalry behind the enemy lines made them very careful and often forced them to deploy unnecessarily. In the meantime *we were gaining time*. That fact was of the greatest importance to us, because the success of the German plan, the object of which was to attack us while we were in an extremely difficult strategic situation, depended wholly on the quickness of its execution.

The fighting that took place at the end of September and the beginning of October, 1914, on the left bank of the Vistula, is of interest not only because it shows the rôle that can be played by the cavalry covering an army maneuver, but it is of interest also because it proves that in that respect cavalry is the only means available. Right here it will be timely to take up the question of the so-called strategic vanguards.

The French military literature defended for a long time the theory of strategic vanguards, which theory had originated with the French General Bonnal. General Bonnal based his conclusions on the study of Napoleonic campaigns. But an idea that had been right in an epoch when cold steel was all important became entirely obsolete in an epoch of fire tactics. The German military literature rightly pronounced its verdict when it called the strategic vanguards an archaic idea. The German writers maintained that in the modern epoch of mass armies, when the flanks are specially vulnerable from the tactical point of view, a strategic vanguard cannot be of any use, because such vanguards can be easily flanked by a mere continuation of the advance by such enemy columns as have not come up against the front of the strategic vanguards. The latter, under such circumstances, would be faced with the following dilemma: either to stay and risk being encircled or to withdraw even without beginning any resistance on the front. In either case the strategic vanguard would run the risk of remaining too long, because for the vanguard infantry, opposed by an enemy that try to get it engaged, it will be difficult to break away from the enemy in order to carry out a timely withdrawal. Therefore the following question arose involuntarily: What is the use of stragetic vanguards, if the same task can be accomplished with a far greater success by cavalry divisions, thanks to their ability to fight on wider fronts with a far smaller risk and to withdraw easily from the fighting, breaking away from the enemy?

It is a remarkable thing that in the art of warfare even the most obvious idea has to be paid for in blood before it is adopted in practice. We have not escaped that general rule, and we paid in blood before we gave up the obsolete idea of strategic vanguards. In this connection particularly, the second part of our cavalry action on the left bank of the Vistula is interesting.

The Commanding General of the 9th Russian Army, which had to swing its front 180 degrees and to deploy on the line Ivangorod-Sandomir, did not deem it sufficient that an immediate covering of his maneuver was effected by the Vistula and a more advanced one was taken care of by General Novikoff's cavalry; therefore he decided to send out to Opatov, which town was the crossing point of highways on the left side of the Vistula, two sharpshooter brigades (the Guard Sharpshooter and the 2d Sharpshooter Brigades) and the Guard Cavalry Brigade. On October 1, after tiresome marches, carried out on muddy roads, we came up to Opatov. Here General D., who was made commander of the two sharpshooter and our cavalry brigades, acquainted us with the order received by him from the general commanding the 9th Army. According to

that order, the group of General D. was to "serve as a support for General Novikoff's cavalry and to cover the strategic deployment of the 9th Army."

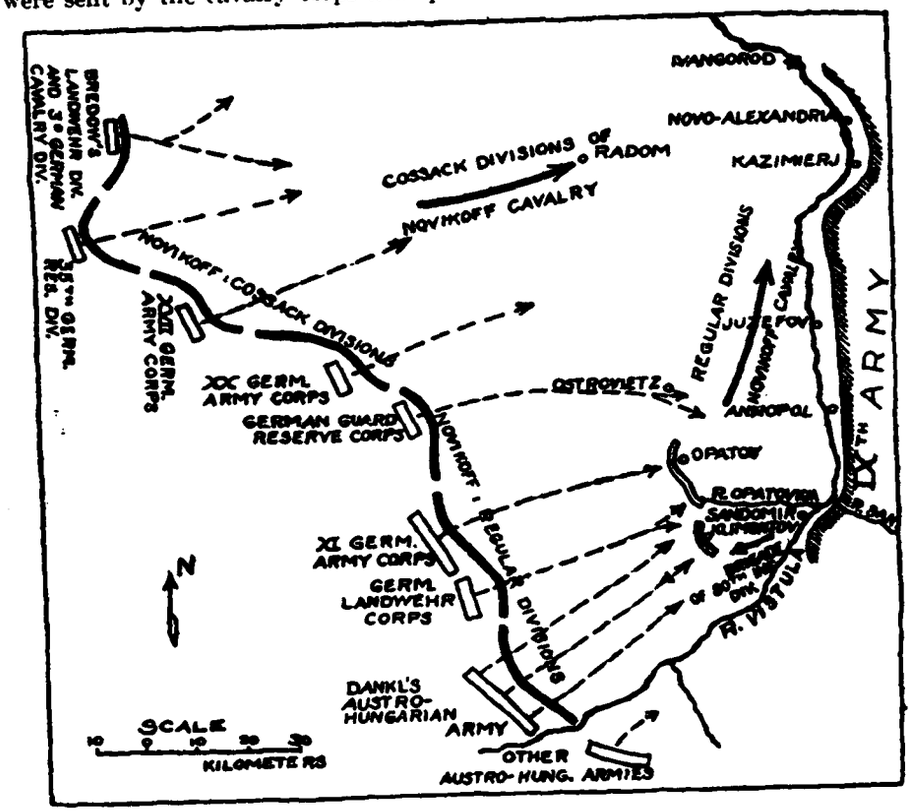
The first part of that task was a quite reasonable one; infantry units added to cavalry increase its power of resistance; but in such a case the method of the infantry's work differs very much from the work of infantry making part of the strategic vanguard. In the first case the infantry should be scattered all along the cavalry's front in order to form small "points d'appui." Those infantry groups, being widely scattered, cannot keep up contact between themselves, as for this a great mobility is required. On the other hand, the tasks assigned to those groups depend directly on the work of the cavalry itself; therefore they must be put under the control of the chiefs of the cavalry divisions.

But General D. could not solve the question in such a way, because he was hampered by the second part of the army commander's order, "to cover the strategic deployment of the 9th Army." That part of the order was a foggy one. Taken at its face value, it clearly assigned to General D.'s group the rôle of a strategic vanguard. To that must be added that the general situation got complicated by the fact that Novikoff's cavalry was receiving its orders directly from the Commander-in-Chief of the southwestern group of armies (Russian southwestern front), whereas the 9th Army headquarters, considering General D.'s group as its strategic vanguard, had not placed it under General Novikoff's command and kept it under the command of the 9th Army commander.

General D. decided, after getting into close touch with General Novikoff's cavalry, to take up, with his two sharpshooter brigades, a fortified position in the neighborhood of Opatov. As to the Guard cavalry brigade, he placed it in the neighborhood of the village Klimontov to protect his line of communication passing through Sandomir. While he was fortifying his position near Opatov, General Novikoff's cavalry was carrying out its task of holding up the enemy's advance. General D. was getting from Novikoff's headquarters full information, from which it became quite clear that the advance of six enemy columns had been established by our cavalry. By the way, it was on the strength of that information that the Russian High Command took the decision to concentrate near Warsaw a group of several army corps and cavalry units and to direct that group to deal a blow on the flank of the German Army advancing on Ivangorod.

On October 2 General Novikoff received from the Commander-in-Chief of the southwestern front an order to leave the Cossack divisions (the 3d and 5th Don Cossack divisions, the Ural division, and the Turkestan brigade) in the region Ivangorod-Radom in order to cover the Ivangorod region, and to proceed immediately with the three regular cavalry divisions (5th, 8th, and 14th) toward Warsaw, following the eastern bank of the Vistula through Kazimierj and Novo-Alexandria. The covering of the deployment of the 9th Army was to be handed over to the vanguards of that army (see sketch No. 3). On account of this change, the rôle of General D.'s group "as a support of General

Novikoff's cavalry" was coming to an end. The further presence of that group in the region of Opatov was getting dangerous, because the enemy, advancing on a wide front, could outflank the sharpshooters, should they linger, in a short time. Immediately upon receipt of the new order General Novikoff sent his chief of staff to General D. to inform the latter of the withdrawal of the cavalry and also to advise him not to remain at Opatov. Simultaneously telegrams were sent by the cavalry corps headquarters, addressed to the headquarters of



SKETCH No. 3

Strategic Situation, Period October 1-4, 1914

the Southwestern Front and to the headquarters of the 9th Army, to the effect that it had become dangerous for the sharpshooter brigades to stay longer at Opatov because they were faced by an enemy far superior in numbers. In spite of this warning General D., acting on the strength of the orders received from the army headquarters, assigning him the rôle of a strategic vanguard, decided to continue at Opatov. On October 3 General Novikoff confirmed,

first through General Staff officers and later, on his way through Opatov, personally, his warning to General D. as to the necessity of withdrawing the sharpshooter brigades in the night of October 3-4, because otherwise the brigades would be forced to accept a fight at Opatov with an enemy far superior in numbers.

On the evening of October 3 the Germans got into immediate contact with the front of the sharpshooter brigades and limited themselves to a weak artillery fire. On the same day the Guard Cavalry Brigade also had an encounter with the enemy infantry. In view of the fact that the enemy's advance threatened *to envelop our left flank, where passed the line of communication Klimontov-*Sandomir, one brigade of the 80th Infantry Division was sent out from Sandomir, on the request of the commander of the Guard Cavalry Brigade, to prevent the enemy from penetrating between Sandomir and Klimontov.

Now, from the strategic point of view, the critical situation of General D.'s group was quite clear. Only very late in the night of October 3-4 a dispatch rider arrived at General D.'s headquarters carrying an order from the commander of the 9th Army that General D. should withdraw. In view of the fact that several hours would elapse before the orders for the retreat could reach the troops, and in order not to start the retreat at daylight, when the enemy could see it, General D., not fully realizing the danger of his situation, decided to start the retreat in the evening of October 4.

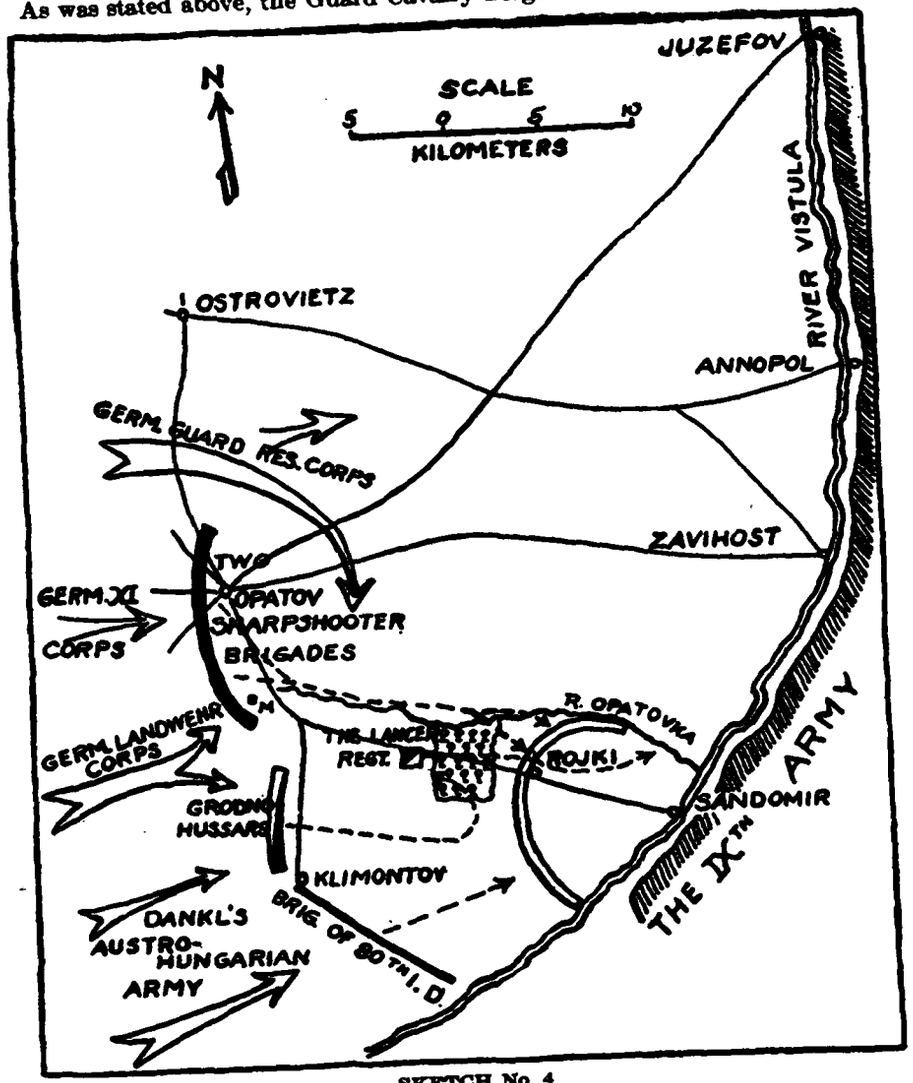
On the morning of October 4 the Germans opened a most violent fire against the front of the sharpshooter brigades and enveloped their flanks. On account of the stupendous superiority in numbers on the enemy side, the flanking movement developed very quickly on General D.'s right. At 11 a. m. the retreat in the direction of Annopol was already cut off (see sketch No. 4). General D.'s troops were threatened with a complete encircling. They had to begin their retreat under the enemy artillery and machine-gun fire, directed from the rear. Having suffered tremendous losses (some regiments lost about 80 per cent of their personnel), having abandoned 18 guns to the enemy and about 3,000 prisoners, the troops of General D. were only able to get out by following the river Opatovka and to assemble late at night near the village Rojki.

The Opatov reverse made a painful impression on the Russian Army. As is always the case in such circumstances, everybody was looking for the guilty ones, and, as often happens, the guilty were being sought where they were not. First of all, General Novikoff's cavalry was blamed, on the ground that it had abandoned the sharpshooters. But the true reason lay in the flaw of the strategic idea, on which had been based the task given to General D. At Opatov the 9th Army commander made an experiment, how to hold up an enemy army advancing on a wide front by means of a strategic vanguard sent out to oppose that advance. That experiment cost the Russian Army dear.

With the object of illustrating what an important rôle in slowing down the enemy maneuver under certain circumstances can be played by the cavalry, it

is of interest to relate an episode from the same Opatov operation, in which episode the Grodno Hussar Regiment took part.

As was stated above, the Guard Cavalry Brigade was sent by General D. to



SKETCH No. 4
The Fight at Opatov, October 4, 1914

Klimontov with the task of covering the line of communication of the sharpshooter brigades, which line ran through Sandomir. On October 3 the flank

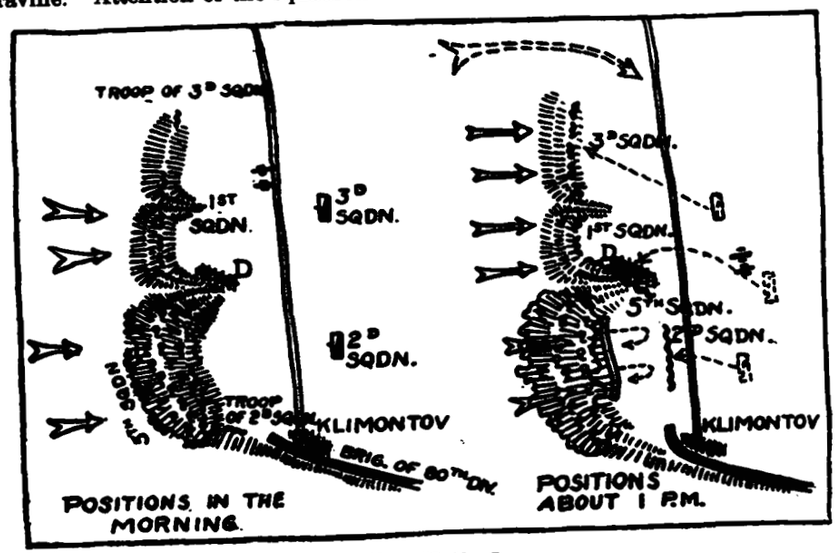
of the brigade of the 80th Infantry Division, that had been given the task of covering the front Klimontov-Sandomir, came up to Klimontov. The Guard Cavalry Brigade had to take charge of the section westward of Klimontov. To the south of the Opatov-Sandomir highway, in the direction of Klimontov, there runs out a stretch of rising ground. Not far away from Klimontov the borders of that rising ground form a right angle; one side of it runs east and west, the other north and south (see sketches Nos. 4 and 5). The western border of the rising ground presented very good conditions for defense. The country in front of it—field, woods, villages—could be seen distinctly. The slopes of the ground were not so steep as to hamper the movements of infantry and cavalry, but, on the other hand, they did not form considerable "dead areas" (defiladed areas). On account of the elevation of the ground, the enemy was prevented from seeing what was going on in the defensive position. In that respect even the aviation could not be of much use to the enemy, because the hilly surface of the rising ground, with its thickets and villages scattered here and there, enabled the troops that were on it to mask themselves during the air reconnaissances, which under the circumstances of a battle "de rencontre" would be of short duration.

The task given by the Commander of the Guard Cavalry Brigade to the Grodno Hussar Regiment, to which regiment were added two guns and all the machine-guns of the brigade, consisted in preventing the enemy from getting onto the western border of the rising ground. He himself, with the lancer regiment and the remaining four guns, took up a position behind and outside of the right flank of the hussars, on the highway Opatov-Sandomir, with the object of preventing the enemy from breaking through between the hussars and the left flank of the left sharpshooter regiment of General D.'s group, which was holding a defensive position in the neighborhood of the country house M. The front of the sector allotted to the Grodno Hussars was about two and a half miles long. I had with me only four squadrons (two having been detached for special duty); they could yield only 300 rifles.

From the tactical point of view, the western slope of the rising ground could be divided into two sections: the left one, which was covered by a wood coming up to the top of the rising ground, and the right one, which was an open country, separated from the first section by a ravine running in a direction perpendicular to the slope. The enemy might use the wood on the left section as an approach in order to get onto the rising ground. Therefore I decided to send forward one squadron (5th) and to place it down below, on the edge of the wood, while another squadron took up a wide front on the top of the slope of the right section. Both squadrons had machine-guns. To the left of the 5th squadron I sent out one troop of the 2d squadron, while the remaining part of the latter squadron was designated as reserve. I ordered the chief of that squadron to make a reconnaissance of positions in case the whole squadron should be sent out to the left of the 5th, as well as the reconnaissance of a firing line to the east of the wood; that firing line was to be occupied by the 2d squad-

ron, should the 5th squadron be forced to withdraw and should it become necessary to hold up the enemy coming out of the wood.

One troop of the 3d squadron was sent out to the right of the 1st squadron with the mission to establish contact with the lancers and the sharpshooters in the neighborhood of the country house M. The remaining three troops of the 3d squadron were designated as reserve. The commander of the machine-gun company was ordered to select and prepare a position for taking under flanking fire the right section of approaches from the west of the wood and also a position near the village D for taking under fire the whole length of the ravine. Attention of the squadrons commanders was drawn by me to the fact



SKETCH No. 5

The Fight of the Grodno Hussars, October 4, 1914

that the nature of our task required that full advantages should be derived from long-range machine-gun fire.

An inadequate task confronted my two field guns—to hamper by long-range artillery fire the action of the enemy operating against the country house M and to compel the enemy advancing against our position to deploy their forces prematurely. There could be no question, of course, of "inflicting serious losses"; but the mystification of the enemy and some losses to exposed units could be achieved. Therefore I picked out a series of positions for our field guns to occupy in succession, so that they might accomplish the several tasks which should be given to an artillery defending our position. That shifting of guns had also for its object to deceive the enemy with regard

to the number of our guns; with that object in view also, I ordered fire by groups of shots—four or eight rounds in one turn. Thanks to the shifting of guns, we were subsequently saved from losses, because the enemy artillery, having detected our gun position, would open a "hurricane" fire against an empty position.

If the reader will remember what forces were at our disposal, it will be understood that there could be no question of occupying our position as infantry would occupy it. Our disposition was, if such expression can be used, a "dotted" one. Here and there groups of riflemen occupied advantageous points, such as salients of the wood and folds of the ground. They maintained liaison in front by means of a cross-fire and liaison in the rear by horsemen and reserves that would come up at a gallop as near as they could and would be taken back as soon as they were no longer needed. Such, in a nutshell, was the inner mechanism of our fighting near Klimontov.

Omitting the details of the progress of the fight, I shall limit my narrative to a general sketch of what took place. Upon coming up against our firing line, the enemy made a stop and began to reinforce their advance units. Owing to the effective fire of our two guns, the enemy's imagination greatly overestimated our forces. Waiting for more reinforcements, the enemy desisted from the deep enveloping movement of the left flank of General D.'s infantry and decided to limit themselves to a close envelopment directed against the country house M.

Our first task was accomplished. Next we had to hamper by our fire and by a threat of our flank attack the enemy's action against the country house M. He concentrated the fire of many batteries on the rising ground held by us; he set on fire the villages situated in our position; but our troops did not suffer much. The fact that we were not numerous helped us; the borders of the rising ground, not to mention our rear, were like a desert. The hurricane fire of the enemy was somewhat like shooting at sparrows with big guns.

Having wasted their fire until noon, the enemy saw the necessity of getting through with us. As they overestimated our strength, they would not take the decision to move forward into the interval between our position and the country house M.

The critical moment approached. Although the groups of hussar riflemen and the machine-guns were doing their work, as the enemy front became stronger and stronger it became more and more difficult to hold it up. In the thick of the fight, about noon, I received an order from the commander of our brigade to withdraw immediately to the rear and to join him, because he, in his turn, had received an order from General D. to move speedily to the north to cover the right flank of the sharpshooters and in particular the road Opatov-Annopol.

Although we, the hussar regiment, could see only what was occurring on the left flank of the sharpshooters, that of itself was sufficient to understand the inconsistency of General D.'s order. The group of General D. could in

no case hold out longer than until the evening (in fact, as has been said, the sharpshooters had to begin their retreat about noon). Consequently, after being withdrawn from the left flank of General D.'s group, we could not get to the right flank in time to be of service there. Moreover, if the hussars should withdraw from their position, the enemy would immediately overflow by an enveloping movement the country house M, and the sharpshooters would be cut off from the road Opatov-Sandomir. I had a presentiment, although I did not know the fact, that at that time the Opatov-Sandomir road was the only direction left in which the sharpshooters could make their retreat. Without delay I sent a liaison officer to report to the brigade commander that I considered General D.'s order inconsistent with the circumstances, and that as long as the sharpshooters were holding the country house M, I did not think I had the right to withdraw from my position.

Moreover, the immediate withdrawal of the hussars would operate to another disadvantage. We would uncover the right flank of the 80th Infantry Division. The withdrawal of cavalry from the infantry's flank is an extremely delicate operation. The cavalry breaks away from the infantry easily and quickly; to do the same is more difficult for the infantry and requires more time. Therefore such operation is to be regulated in accordance with the time required by the infantry (relief by other troops, retiring the flank, forming echelons, and so on). Many of the cavalry leaders used not to take this into account and therefore placed their infantry neighbors in a precarious position.

I decided to warn immediately my neighbors of the 80th Division in order that they might be prepared in case the hussars should withdraw. Such a warning was rendered even more important, owing to the fact that the pressure of the enemy on my front was becoming stronger and stronger, and every minute the thin thread of the hussar front might break. The infantry leaders, in their turn, usually made mistakes in their calculations with regard to the rôle of the cavalry that was on their flank. They would apply, when estimating the stability of the cavalry, the scale for the defense resistance of infantry. They were forgetful of the fact that a cavalry regiment can yield no more rifles than two companies of infantry; that all the strength of the cavalry lies in its mobility, and therefore the "defense of the flank" should be based on the defense by infantry units, the cavalry being able only to "guard the flank."

Knowing all that from the experience of previous fights, I sent out, simultaneously with my report addressed to the brigade commander, the following communications—one to the commander of the brigade of the 80th Division and one each to the commanders of the right flank battalion and right flank company—to the effect that, as my hussars were ordered to withdraw, the infantry would have from now on to secure its own right flank. I also sent the three troops of the 3d squadron in reserve, directing them to prolong the

right flank of the hussar position, as I feared that the lancers would withdraw immediately and leave my right flank exposed.

In the meantime the pressure of the enemy became much stronger, especially on the front of the 5th squadron. Shortly I received a report to the effect that the 5th squadron had been compelled to start clearing the western edge of the wood. The 2d squadron was brought up at a gallop to a position which had been chosen to the east of the wood and dismounted. The horseholders were hidden not far away from the hussar firing line, in an excavated road that resembled a dugout. The 1st squadron was ordered to bend back its left flank along the ravine and to establish contact by fire with the 2d squadron. The 5th squadron, having withdrawn from the edge, retired through the wood quietly and formed my reserve. All along the remaining front the strain of the fight was getting heavier. The enemy infantry was advancing carefully through the wood and began to assemble on its eastern edge. Here they were taken under the rapid fire of our two field pieces. The fact that the contour of the edge was distinctly outlined contributed to the exactness of aim.

About 1 p. m. I received from the brigade commander a second order to withdraw the hussars immediately. To that I reported that I could do it no sooner than in three or four hours. Such a period was necessary to give my neighbors, the 80th Division, time to take measures for the protection of their right flank. Meanwhile the enemy infantry, regardless of losses, began its attempts to come out of the wood.

In no case could we allow them to do it; the topographical conditions were of such nature that, should the enemy's firing line succeed in coming forward some 400 paces, it would subject the rear of the 2d squadron to a fire at close range, and the horseholders of that squadron would not be able to get out of their covered position. I decided to bring my reserve into action and ordered the 5th squadron, with a machine-gun section, to deploy on the left flank of the 1st squadron and take under flanking fire the enemy infantry coming out from the wood. That measure proved to be a timely one. Dense lines of the enemy infantry got out of the wood and, boldly advancing by "leaps," were coming nearer and nearer to the 2d squadron. The 5th squadron and the machine-guns opened fire when the enemy had advanced some 300 paces from the wood. It could be seen distinctly what were the results of that fire, unexpected by the enemy. The men in the enemy line were being mown down, several at a time. In a very short space of time the enemy were driven back into the wood.

Their new attempts to get out of the wood were also defeated immediately. Between 4 and 5 p. m. an officer, who had been charged to occupy an observation post on the roof of a house and to watch through field-glasses what was going on near the country house M, reported that our sharpshooters were retreating in an easterly direction and our former position near that house was now occupied by the Germans.

Then only I considered that I had the right to withdraw. But soon, from

the reports of the 3d squadron, I learned that the enemy pursuing the sharpshooters had enveloped my right flank and were gaining my rear. To withdraw toward the edge of the wood to the west of the village Rojki, where were the lancers, was already out of the question. I had therefore to lead straight eastward, and, after having gained some distance by quick marching, to turn to the north in order to join the lancers by a roundabout way.

In the course of our withdrawal there was a chance to see once more how much easier and "safer," by comparison with the infantry, the cavalry breaks away from the enemy. In certain places it was necessary for us to get out of the fight while under fire from close range, so that to some groups of the hussars the withdrawal was no longer a "getting out of the fight," but a regular "retreat." Nevertheless, that difficult operation was executed in good order and all the parts of the hussar regiment were able to assemble at a chosen point.

Darkness had come down already, when there was received an order from General D. giving the Grodno Hussars a new task: to stop by all means the enemy's pursuit in order to enable the remaining units of the sharpshooter brigades to assemble on the position near Rojki. In the darkness I deployed the regiment, having decided to oppose the enemy in the wood by a series of ambushes. Without delay, I directed that all roads be closed by small groups of hussars, and soon the regiment was distributed in an outpost formation. In the night there took place a few engagements with the enemy patrols and enemy infantry groups that advanced too far; soon they all fell back.

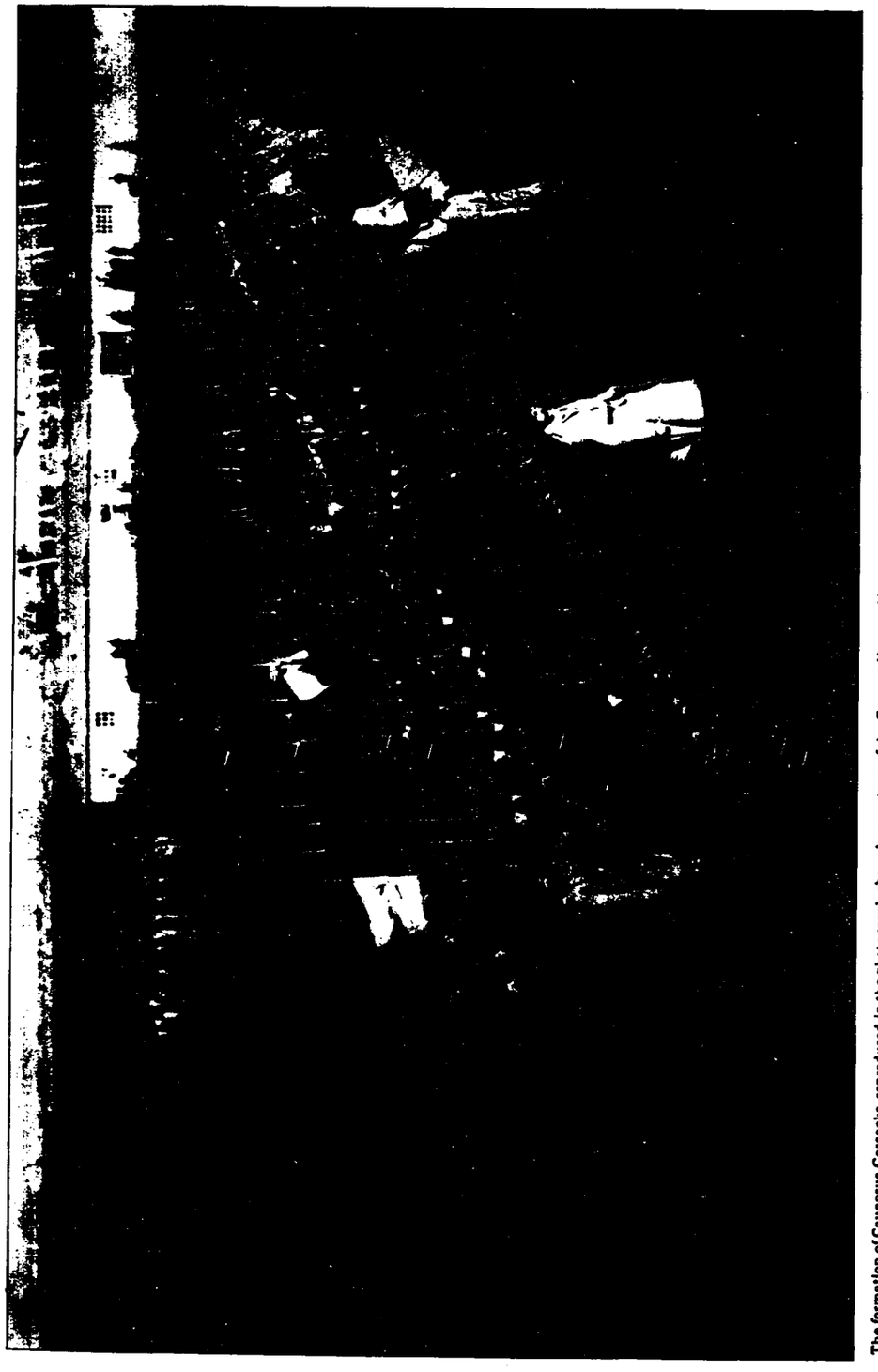
Just before dawn a liaison officer came up from General D. with the report that our infantry had succeeded in deploying and also with an order for the hussars to withdraw to the rear. Thus ended the episode of the Opatov drama, in which the Grodno Hussars had taken part.

Herman Stegemann, the Swiss military writer, compiled a brief history of the war based on German communiques and documents. As the above history was published in the course of the war, the military operations and the strength of the Russian forces are presented in accordance with the contemporary judgments of our enemy. In the preface to his history Stegemann states that in his work he is dealing only with engagements of larger units (not less than an army corps). On pages 173-175 we come across the following headline: "Die Treffen bei Opatow and Klimontow."

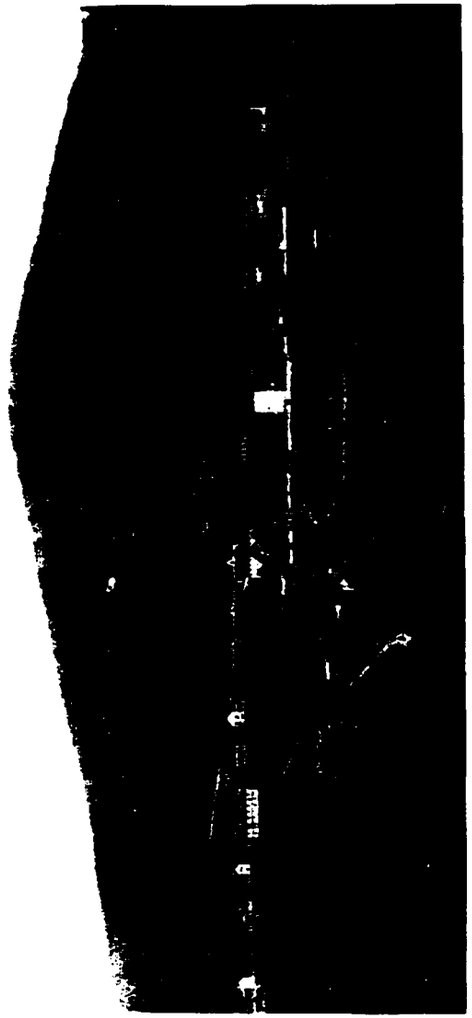
The author, reflecting the impressions of those who had taken part in that battle, speaks of the fight at Opatov and of the fight at Klimontov as if they both were engagements of the same scale. In General Ludendorff's book we find among the supplements map No. III, from which it is evident that a whole Austrian army corps was directed against Klimontov.

A handful of cavalry succeeded in holding up such strong forces! That could happen only because of the reason that in war the danger one imagines does not correspond to the existing one.

Thanks to its mobility, the cavalry serves as one of the best means of creating an effect on the enemy's imagination. In former epochs that effect



The formation of Caucasus Cossacks, reproduced in the photograph above by courtesy of the *Current History Magazine*, New York Times Company, is a squadron of four platoons and numbering about 100 men in the formation. It will be noted that the front rank of the double rank carry lances. All are armed with carbines slung on the back. Note also breast straps and cruppers and metal stirrups, and particularly the small, active, shaggy Russian ponies. The small formation in the background is the mounted band.



FRONT ROYAL REMOUNT DEPOT, VIRGINIA

Located in the foothills of the Blue Ridge Mountains, about three miles from the town of Front Royal. The Reservation has an area of about 5,000 acres and a grazing capacity for about 1,000 animals.

was achieved by charges on horseback, whereas nowadays cavalry does the same by its ability to draw in the face of the enemy, as at Klimontov, a long front line.

The fight at Klimontov can serve as one more example of the correctness of the conclusion which was drawn after the first cavalry encounters in the World War.

The cavalry should be trained principally to fight from long distances. The infantry's aim, too, will be to increase the range of its fire-arms. But the cavalry's fire should outrange the fire of the infantry. All problems that are solved by cavalry require primarily the use of fire at long range.

When reconnoitering cavalry has to establish the first points of contact with enemy's infantry and to feel out the "contour" of the enemy front—that requires the use of fire at long ranges ("reconnaissance by force").

The maintenance of contact all along that "contour," followed by the slowing down, should the circumstances demand, of the enemy's advance, that slowing down being achieved by forcing the enemy to deploy their forces frequently, also requires the use of long-distance firing.

The very defense of the "cavalry front" is based exclusively on the applying of "cross-fire."

The longer the range of the gun and of the machine-gun, the wider can be the intervals between individual small groups, of which the cavalry front on the defensive is composed.

In a raid against the flank or rear of the enemy, the cavalry's ability to fight from long distance will increase the zone of its action. Often we were tantalized by having to watch long supply columns of the enemy moving within our eyesight, but out of the range of our guns.

During the pursuit, a long-range fire will extend the zone of cavalry's pressure.

Finally, if the cavalry has the advantage of longer range, its withdrawal from action is facilitated and its maneuvering ability thereby increased.

The Aim of the Remount Service, Q. M. C.

BY

A. A. CEDERWALD

(Secretary American Remount Association)

PICTURE THE MARCH past of the animals of an Army division—smart cavalry mounts, trained artillery horses, persistent mules tugging heavy loads—and you visualize the chief aim of the Remount Service—the supply of fit animals for the Army. Other problems confront Remount officers—the care and feeding of animals, their housing in peace and war, the training of men in horsemastership—but the main problem will always be that of supply. And of the supply problem, the element which today looks largest is that of obtaining horses for the cavalry. Cavalry mounts are at this moment, and doubtless will be for many years to come, the principal concern of the Remount Service. Scarcity of riding horses answering to the exacting requirements of modern military service has forced the question of cavalry mounts to the front as a vital problem of Army supply. For more than twenty years it has been obvious to those officers who have given serious thought to the matter that the Army would eventually find it imperative to take an active part in production, or at any rate in the encouragement of production, if the supply of riding animals of required quality was to keep pace with the needs of the military service. The type of animal desired, displaying quality, speed, and endurance, is not now available for procurement in sufficient numbers. As frequently is the case, the problem of procurement is largely a problem of production.

With the prime necessity of increasing production in mind, the Remount Service this year has adopted the first national policy for the encouragement of breeding horses for the Army. The central idea of this policy is very simple. It is that of placing Government stallions capable of reproducing the desired type of riding horses within the reach of farmers and breeders willing to raise such horses. No elaborate machinery of organization is required to do this, no large expenditure of money, the major item of expense, in fact, being the purchase of stallions, their maintenance during the breeding season, and their shipment from winter quarters to breeding centers and back when the season is over. Over sixty stallions, of many breeds, have been donated to the Government to be employed in this work, and nearly one hundred have been purchased, some for a merely nominal price; so that over one hundred and fifty stallions are in service for the 1921 breeding season, at a conservatively estimated value of over one-half million dollars.

Of course, it will require time to reach anything like "quantity production" in horse-breeding, and the cavalry must patiently await results. In terms of industrial output, horse production is a matter of years; the product is difficult to standardize, and a large proportion thereof disappointingly unfit; but that the steps now being taken by the Remount Service to increase production of the general utility type of horse, suitable for riding or driving, will be a success is assured by the fact that never in the history of the country have civilian horsemen everywhere displayed so keen an interest in the efforts of the Army in this respect. They have given freely of their time, money, and experience to assist the Government in every way. Indeed, without their backing and encouragement, especially of organizations of horsemen such as the American Remount Association, the Horse Association of America, and other similar bodies, the Army breeding project could hardly have been launched with such assurance of accomplishment as now seems to attend it. So far as the American Remount Association is concerned, it stands squarely behind the Remount Service in all of its efforts to produce a suitable type of cavalry horse; it was organized for just that purpose; it has no selfish objects to serve; it has dedicated itself wholeheartedly to serving the Army in every way possible, and is therefore entitled, in return, to receive a generous measure of support from the Army itself. While the preponderance of the membership is now, and probably by force of circumstances always will be, civilian, the management of the Association has hopes that as individual officers of the Army realize the good work that the Association is doing for the Army, they will feel it their duty, in their own interest, to affiliate therewith. Certainly officers of the mounted branches, who will profit most from the efforts of the Association, should join it to a man, and thus demonstrate to the civilian membership that, while ready to accept assistance from outside sources, the Army is yet willing to help itself as occasion arises.

Pistol-Firing Tests in Mexico

The Pershing Expedition, 1916

BY

Major HOMER M. GRONINGER, Cavalry

Target.—A cloth screen 24 yards long and 8 feet high, suspended on a rope. The ends of the rope passed over uprights held by soldiers. On the rope, near and on the inside of the uprights, were placed oat sacks filled with rocks. When the soldiers released their hold on the ends of the rope, this weight caused the screen or target to fall to the ground. The silhouette of 24 mounted men in line was painted in black on the white screen.

Procedure.—A mounted platoon of 24 men in line charged this target with the pistol. The target dropped when the line was about eight yards distant and the platoon, without decreasing speed, passed over it.

Results.—(*a*) Approximately 65 per cent of the shots fired were on the target.

(*b*) The centers of the shot groups were along the line of junction of the horse's fore legs with his body.

(*c*) The horses kept a very good line during the firing—in fact, better than when there was no firing.

(*d*) During the firing the horses did quite a lot of blinking, which may have its advantages in a charge.

(*e*) It required a very short time for the horses to become accustomed to the fact that the target would fall when they approached near it. This may be good instruction for horses.

Remarks.—From experiments of this nature or by use of a moving target the following points may be determined:

(*a*) The time for opening fire.

(*b*) The reason for the low-shot groups. Many reasons have been given for this.

(*c*) The kind of sight best suited for mounted action. The present sight was constructed primarily for dismounted use. A groove or ridge along the top of the barrel, with the necessary additions for dismounted use, may be the solution.

Our enemy will usually be in front of us and our friends on our right and left.

PISTOL versus SABER

BY

Colonel JOHN P. WADE, Cavalry

There's much hot air writ these here days
Regardin' of the different ways
Of armin' cavalrymen.
Some thinks the pistol is hot stuff
When they is in a mix-up rough;
They proves it with their pen.

There's others who is just as sure
The only real true, Simon pure
Weepon with which to kill
Is found in keen-edged snickersnee
When one is in a close mê-lée;
They also shoves the quill.

I ain't right sure which is the best,
Cause I ain't never seen no test,
Yet I's a cavalryman;
An' so I just suggests this way
Of stoppin' this here inky fray
By usin' simple plan.

Let's form a troop of all them sports
Who thinks a pistol of some sorts
To charges adds a zest;
Then likewise take a equal bunch
Of them what entertains the hunch
For sabers as the best.

Now make them gents what loves the "gat"
Meet Saberites upon some flat,
Where all may stand an' see.
Methinks that this here great event
Might tend to quiet argument
An' solve this mystery.

Mounted Pistol Firing

BY

Major RICHARD D. NEWMAN, Cavalry

DURING THE WAR the course in pistol firing was more or less abandoned and cavalry officers in different parts of the United States were experimenting with mounted firing. On the Mexican border cavalry troops were trying out firing to the front with considerable success at targets suspended in the air above the mounted troopers. It immediately occurred to me that we would seldom, if ever, have targets in the air in that position, and that our targets would usually be on the ground and in our front, and if we could arrange targets on the ground and in such a position that we could fire at them to the front, between the horses' ears or above them, that we would be accomplishing something worth while. As squadron commander and with this in mind, the officers of the squadron were consulted and they were all very anxious to try it out.

In the dry season of 1917–1918, at Corozal, Canal Zone, the First Squadron of the 12th Cavalry, with Captain H. L. Flynn, in command of A Troop; Captain John L. Rice, B Troop; Roy O. Henry, C Troop; Captain John D. Kelly, in command of D Troop, set out to fire to the front mounted, with the targets on the ground. And, before going any further, I must give all the credit of our success to these troop commanders and, of course, to their subordinate officers and to the enlisted men of the squadron.

It was realized at the very first that, to be successful at this kind of firing, the horses as well as the men would have to be well trained, so that all of our mounted drills were preceded by thirty minutes of equitation by troop, and this turned out to be the very thing needed, as it trained the men and horses much better and quicker than ordinary drill. This equitation was followed by squad drill and the school of the trooper and platoon drill. Little or no attention was given to troop drill, and we passed almost directly to the squadron drill. The men and horses were taught to move in line thoroughly relaxed, at the gallop, over rough ground, and they could soon keep as good a line, if not better, at the fast gaits than they could at a walk.

Every squadron drill day all four troops were passed in review at the gallop several times, and the lines soon became so perfect that it was very difficult to pick out the best troop to publish to the squadron. Everything done was competitive, almost to the manner in which they laced their shoes. Each day the standing was published, and the troops were rated each week. This was the nature of the preliminary instruction of the horses and men in mounted work.

Mounted drill over, each day the dismounted pistol work was taken up from the very beginning and about one month was devoted to the care of the

pistol—its use, possibilities, and limitations—and the men were made thoroughly acquainted with the weapon. They were then given dismounted target practice up to fifty yards, with much rapid fire in the last stages. In my opinion, our success with the mounted firing was a direct result of this thorough dismounted training. No man was allowed to join his troop for mounted firing until he qualified dismounted and until he handled his pistol in such a way as to insure the safety of those near him. I have found that a great many enlisted men are more or less afraid of the pistol, and this because they are not thoroughly familiar with it.

With dismounted instruction completed, we were ready for firing to the front with the targets on the ground. Standing silhouette card-board targets were selected, with wooden stakes three feet long, the targets being placed on a line, three feet edge to edge, later changed to three and a half feet. Four of the best horsemen and shots of the squadron were selected for the first run at the targets. The line of targets looked pretty formidable, and we had our fears that the horses would stop or hesitate in front of the targets before going through, or that they would knock them all down. However, our fears were soon dispelled when the first four men lined up without pistols and rode at the targets and through them without any hesitation on the part of the horses. As soon as we found that this kind of target would work, we prepared enough targets to extend the entire length of the firing ground—about one hundred and twenty targets. While this was being done the troop commanders were training their men in the use of the pistol mounted without ammunition. The men were taught to ride in a line at a gallop, in squads, sections, platoons, and troops, snapping the pistols between the horses ears or above them, with horses and men thoroughly relaxed; this was found very simple after their previous training. They were taught to stand up in their stirrups and to lean well to the front. The small of the wrist was held between the horse's ears or above them, depending upon the conformation of the horse and trooper. Often a short man on a big horse would find it necessary to rest his left elbow on the horse's withers. In case a man could not keep his horse up to the line, he was taught to come immediately to the raise pistol. The horses were ridden through the targets.

In a short time both horses and troopers took all this as a matter of course, and they were then ready for ball ammunition at the targets. The four selected men were lined up boot to boot and loaded with one round of ball ammunition, pistols cocked and locked in the holster, two hundred yards from the line of targets. The men were instructed to walk their horses closed in on the center guide for ten yards; then trot thirty yards; collected gallop, seventy-five yards; then to take the extended gallop and draw pistol and move into the charge and commence firing at seventy-five yards from the targets, keeping closed on the center all the while. They were instructed to ride directly at one particular target and under no consideration to try to guide their horses

through the targets when they came up to them. The horses were to do their own picking. The four men were ordered forward and did as they were instructed and made two hits out of four shots and knocked no targets down. The four horses kept just as good an alignment as they did at practice and drill, and kept well closed in on the center. The men and horses acted as if they had done this thing many times before. In fact, they acted just as they did before ammunition was used; the firing did not seem to affect them in the least. The horses were brought down to the trot twenty-five yards beyond the targets and the squad moved off to the flank at the raise pistol. This was repeated with two rounds with the same result, and finally with seven rounds. It might be of interest to know that the four men made ten hits out of the twenty-eight rounds fired in that run.

After this the troop commanders started their mounted firing. They all proceeded about in the same manner as indicated above for the trial four, first with a few selected men, then by fours, eights, sections, and platoons, and finally the whole troop in line. It was found that as soon as a man fell behind the line that he instinctively came to the raise pistol. The horses seemed to pay no attention whatever to the firing and kept well closed in on the center and always picked their own holes, so that the targets were seldom knocked down. The lines were always brought down to the trot within twenty-five yards behind the targets and moved off to the flank by fours, the men at the raise pistol. The ground over which the firing was done was rough, with stones and small ditches. The only difficulty encountered with the horses was with those that were too slow to keep up in the charge. We found that the old, slow fellows that were very quiet and the ones that we used to find so very good for the old firing by trooper to the flank were useless in our new firing. The only ones discarded were the slow old plugs, and they were fired by themselves. We used a great many horses that were never fired from before. I feel sure that absolutely green horses would give no trouble whatsoever. There was not one single accidental shot fired, none of the wild shots that we used to have in the old pistol practice. No one was hurt, although occasionally a horse would fall with his rider in the charge. The men were very keen for it, probably because there was real action and it was very realistic.

Without any special practice, the troops rode in column of troopers fifteen yards in front of the line of targets and fired seven shots to the right with very good effect. We did not fire in column of twos, as there was no safe place to fire. After all the troops had completed their firing we held a squadron competition for the best squads, sections, platoons, and troops. The Commanding General came out to witness it. When this was completed we made up a line of all of the squadron that the ground would accommodate.

We also had a short dismounted pistol competition with trench warfare in mind. A man was required to lie down in a trench with his rifle pointed over the parapet, and at the command forward he was directed to leap over

the parapet. As the trooper started forward he found himself confronted with five silhouette targets of different sizes at different distances and intervals. He was instructed to drop his rifle to the left hand and to draw his pistol as soon as he saw the targets. He drew his pistol while moving forward at the run, hesitating just long enough to fire at each target as he came into position to fire at it. The targets were so placed that he was required to fire to the front and right and left front. The shortest range was ten yards and the longest twenty. The results obtained were excellent.

The pistol and pistol practice have been badly neglected in the cavalry, and the average trooper has never had sufficient pistol practice. He is not familiar with the weapon and is a little afraid of it, especially after he has seen a few accidental shots. Make the trooper familiar with the pistol and give him lots of dismounted practice and trigger-pull, teach him to change magazines at the gallop, and he will make the pistol the very valuable arm it should be for the cavalry. From our experience with firing to the front, I am convinced that any troop of cavalry, with ordinary training, can use this type of fire while charging targets on the ground without mishap, and that every horse in the troop can be used with excellent results. The fire effect is very great and the whole effect of the charging horses and the mass of fire is terrifying.

The Second Cavalry in the St. Mihiel Offensive

BY

Captain ERNEST N. HARMON, 2d Cavalry

A PROVISIONAL SQUADRON of the Second Cavalry, consisting of Troops "B," "D," "F," and "H," was the largest body of American Cavalry that saw active combat duty during the World War. A brief account of this service may be of interest to cavalrymen.

The 25th of August, 1918, found the four troops located in an old French cavalry station near Toul. The troops had just arrived from Gievres, where they had been constructing a remount depot. Since the arrival of the regiment in France, in April, 1918, the troops had been widely scattered and had been engaged in remount duty most of the time. The men had been receiving very little drill or training during this period. The horses, to mount the squadron, had just been received from various remount depots and veterinary hospitals. They were in very poor condition, ranging in type from a heavy draft horse to a Spanish pony; forty-two were white or gray.

Thus with only fifteen days in which to train before taking part in a great offensive, with men who had not drilled for six months, with horses scarcely bridle-wise and utterly unaccustomed to cavalry weapons, the officers and men had a problem as difficult, perhaps, as any cavalryman can expect. The horses were grazed in the evenings and everything was done to prepare them for the hard work to come. Ammunition was procured and all men fired small combat exercises dismounted and fifteen or twenty shots mounted.

General Dickman, commanding the Fourth Corps, to which we were attached, caused experiments to be made with the Browning auto-rifle. It was his intention to equip each troop with four guns, if they were found to be suitable to our use. The offensive came before the guns were available, so each troop went into action with one gun. A set of fours could carry one gun and 2,500 rounds of ammunition and keep up with the troops at all gaits. A gun with this amount of ammunition was so carried in each troop in both the St. Mihiel and Argonne offensives with no ill effects. This was a case where the heavy draft horses were useful.

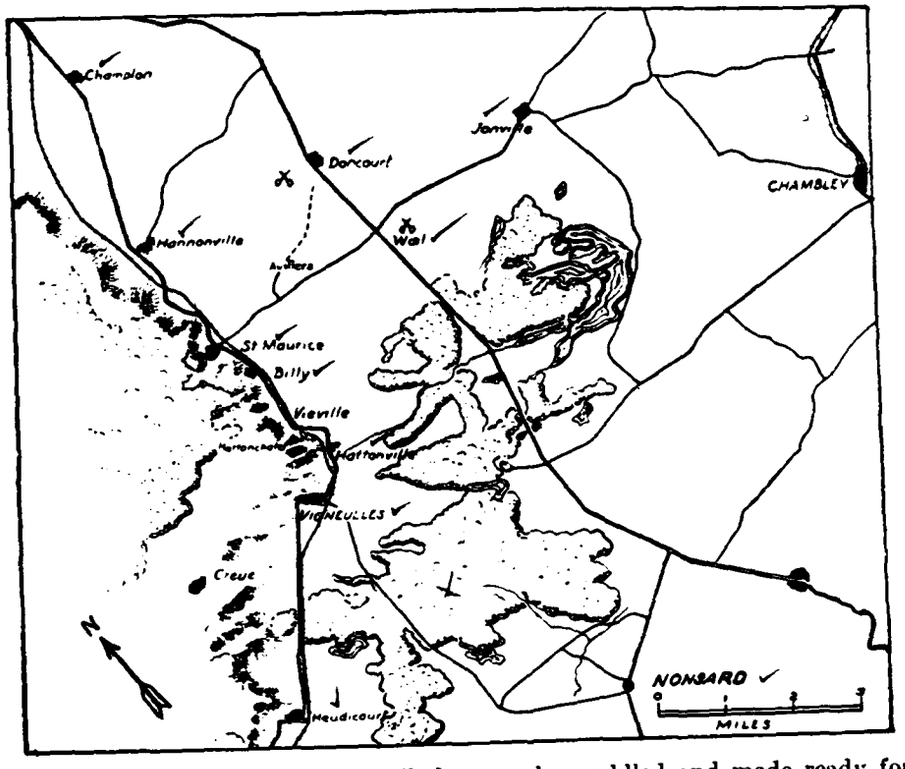
On September 9 Troop "B" was detached from the squadron and during the offensive performed liaison and patrol duty with the 1st, 42d, and 89th Divisions. In the performance of this duty they were subjected to severe shell fire, especially in Thiaucourt. On the same day orders came for the remainder of the squadron to proceed by a night march to a position about ten kilometers in rear of the front lines.

The night was cloudy and the roads were heavy from recent rains. The first march taught many lessons as to march discipline at night when hostile airplanes were overhead. The roads were choked with traffic and marching troops. The formation taken was a column of troopers on either side of the road, with 50 yards distance between platoons. This formation made the column long, but was necessary in order not to delay traffic at cross-roads and not to block road space. Liaison had to be maintained from front to rear. Each platoon dropped a man at crossroads to direct the next platoon in rear on the proper route. Due to the length of the column, it was found, on halting, that by the time the rear units received the word to halt the head of the column was ready to move forward. This had to be corrected by better liaison from the front. No smoking was allowed, as the spark from a cigarette has often revealed to a low flying plane the whereabouts of a body of troops, causing them to be attacked with bombs or machine-guns. Marching at night, while apparently not so fatiguing to the horses, was very tiresome for the men under the conditions that existed, and constant watch was necessary to prevent slouching in the saddle. The rain fell in torrents about 2 a. m. We reached camp at 4 a. m., and between flashes of lightning strung lariat lines between trees and tied the horses to the lines by squads. Our wagons arrived early in the morning and the day was spent reshoeing horses and overhauling our equipment. Due to enemy aërial observation, it was necessary to keep under cover of the woods during the day, a circumstance not pleasant after several days of rain. On the afternoon of September 11 two officers made a reconnaissance to locate the position our squadron was to occupy when the attack opened. This position was in an open space 1,000 yards behind the front-line trenches.

The night of September 11-12 was dark and rainy. Our squadron started from its hiding place at 8 p. m. with only six miles to go. The march was very trying. The road was filled with moving troops. The ground was swampy on either side of the road, which made it impossible to turn out of the column. The last platoon finally arrived at our position at 12.55 a. m. The squadron was formed in platoon mass with 100 yards between troops and 75 yards in depth between platoons in troops. The artillery preparation was to begin at 1.00 a. m., and all men stood by their horses' heads ready to control them in case of fright. Guns were all around us; we could hear the clang of breechblocks as they were closed on the guns at 12.55. We were in our proper place and there was only one place reserved for us. At 12.58 a. m. two signal guns were fired. The rain fell gently. The night was so dark that one could not see the horses from one platoon to another. At exactly 1.00 a. m. all the guns opened up. It seemed as if Hell had broken loose. The sky became light as day from the discharges. The horses did not seem to mind after the first few minutes, even though some of the guns were as near as 200 yards from our position. The bombardment was to continue until 5.00 a. m. when a rolling barrage was to be laid down and the infantry were to go over the top. The horses were ordered unsaddled and the equipment was placed in front

of them. The men tied the reins to their legs, laid down, and in spite of the frightful din and bombardment, nearly every one fell asleep, so exhausted were the men from the marching and confusion.

At 5.00 a. m. a drumfire barrage was thrown in front of our advancing infantry. So many guns were in action that one could scarcely distinguish between reports. The large guns increased their range and began firing on the cross-roads in rear of the German lines, doing great execution among the retreating forces, as we found the next day.



We watered our horses in mudholes near by, saddled and made ready for instant duty. About 11.30 a. m. we received orders to move up to Seicheprey. This was a town situated on the front-line trenches which had long since been battered to ruins. We passed through batteries of 155's and heavier pieces. On our way we passed long files of prisoners and lines of ambulances filled with wounded. We crossed the ruins of the trenches with great difficulty. At 2.15 p. m. we received orders to proceed to Nonsard. This town was situated some nine kilometers behind the original front lines and had been reached by our infantry early in the afternoon. The infantry had established outposts

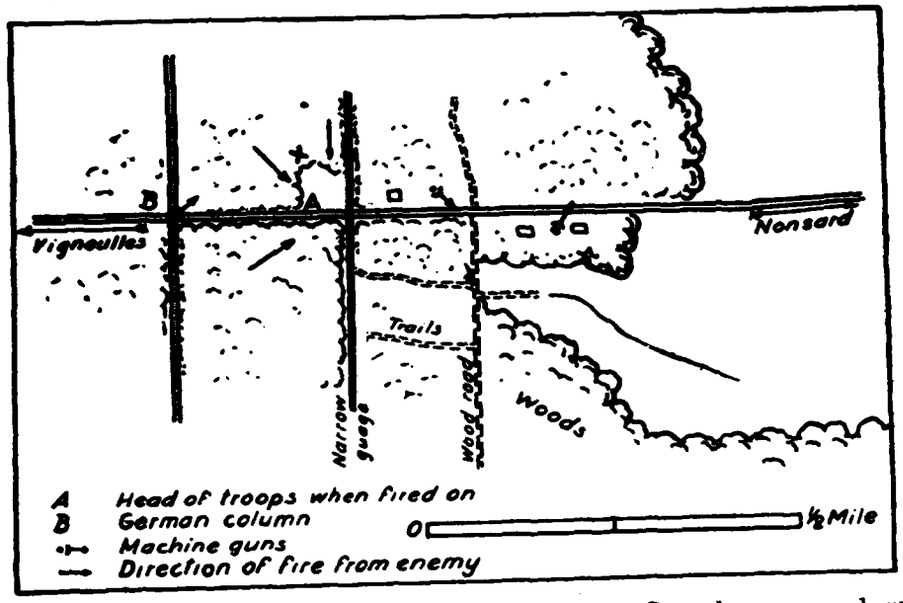
and rested at this point. The road was choked with artillery and ambulances and we were forced to pick our way through barbed-wire entanglements and trenches. Our tanks had plowed their way through the wire, which greatly helped our advance. We reached Nonsard about 4.00 p. m. Our mission was to reconnoiter toward Vigneulles, a town seven kilometers north of Nonsard, and to intercept the railroad line between Heudicourt and Vigneulles. Should we succeeded in making a dash across to the railroad line we had no demolition outfit for blowing it up. A thick wood lay between Nonsard and Vigneulles, with the main road running through it, crossed by several wood and military roads.

Troop "F" formed the advance guard. Specific instructions were given by the squadron commander to march rapidly and to put out a strong left-flank patrol. The advance guard commander was told not to put out a right-flank patrol as that flank was covered by the infantry. This was a great error. The point encountered a German immediately upon entering the woods. He was dismounted, and upon discovery of our men started to run. One private tried to shoot him with his pistol, but, after two unsuccessful shots, slid off his horse and, kneeling on the ground, took careful aim with his rifle, hitting his man between the shoulders. A few minutes later a mounted man was captured. Several horses were running loose in the woods, and in some of the huts along the road the fires were still burning. The point had penetrated about 700 yards within the woods, the advance party was 300 yards in rear and the support, followed by a platoon of Troop "D," was just entering the woods. At this juncture, the troop commander, who had just been down a side road to observe a patrol, came back and found the point and advance party halted on the road. It was stated that word had come from the rear to halt. The captain caused the troop to move forward, believing that there was some mistake and that there was no order to halt. This proved to be correct; who originated the order to halt no one knows.

Troop "H," followed by the remainder of Troop "D," now suddenly appeared from the left flank and came onto the main road just ahead of the advance party of Troop "F." This part of the force had been sent across the field through an opening in the woods 300 yards to the left of the main road with directions to proceed toward Vigneulles, paralleling the main road. The commander had not received instructions as to the duties or exact whereabouts of Troop "F," and, to avoid an impassable stretch of road, had swung into the main road. This situation was very confusing. At this moment the two troop commanders rode forward to a slight ridge from which the point had signaled the enemy in sight. The troops were about 200 yards in rear. Down the slope about 300 yards away was seen a continuous stream of horses, men, and vehicles crossing the main road from left to right. It was a column of retreating Germans. It was decided to cover the cross-roads at once with fire from the auto rifles and move through the woods by the right flank and cut the column off. However good or bad this plan might have worked out, its success was

doomed from the start by the precipitation of the auto rifles, which opened fire before the troops were ready, thus losing the element of surprise. As our leading elements moved off the road to form a line of foragers, fire was opened on our column from the right and left fronts and a machine-gun was set up at the cross-roads. The fire came from a machine-gun or automatic rifle and several rifles. The woods were so heavy that the enemy could not be seen.

The decision was quickly made to move to the rear about 300 yards to where a road turned off the main road to the left. On this road the troops would be under cover and could dismount and move forward in skirmish line, as the heavy woods made mounted action very difficult. The command: "Fours left about, trot," was given. Our horses were green and, under the excitement, a



command to gallop back would have stampeded them. Some horses were down from being hit. The men were falling back to the cross-roads in good order, when suddenly a machine-gun opened up on the column from a small trail leading from the main road on the right. This was on our unprotected flank. The Germans had allowed our patrols to go by and had brought their guns to the edge of the woods as the column started back. They had been trained to shoot low. Many of our horses were hit in the legs. All the men opened fire on the machine-gun crew with their pistols as they passed. All rules as to flank men only firing from column of fours were forgotten. All men fired, with the effect that the crew of three men were all killed. Of course, the horses broke into a gallop. The head of the column, being without a leader, dashed past the cross-roads before an officer could get in front. A second machine-gun

opened fire from the left. The crew hardly fired before they were all killed by the fire of the troops as they passed. Both guns were about twenty yards off the road. The time of firing was short. However, the only reason many of our men were not killed is the fact that the aim was low as for infantry and our column was moving so fast. No commands to fire were given our men; the firing was done from a sense of self-preservation, and was effective. After this incident the men had all the confidence in the world in their pistols. The horses were finally checked near the edge of the woods and, under cover of the woods on the left, order was restored.

The squadron spent the night at Nonsard. At 4.00 a. m. the next morning, Troop "D" was sent out on an independent mission. The troop was ordered to proceed cross country to Creue, a small town situated about a mile west of the main railroad line running south from Vigneulles, and was to destroy a section of the railroad track near Creue, falling back with delaying action to the north on Vigneulles. Troop "D" found the track already destroyed by the advance units of the 26th Division. The troop then proceeded to Vigneulles.

Troops "F" and "H" grazed their horses in the early morning and made a rapid march to Vigneulles. The town had been captured by the 1st Division and their outputs were on the high ground just north of the town. Considerable shelling was being done by the enemy, which caused the squadron to approach the town through the fields in line of squad columns with wide intervals. The troops followed each other at considerable depth. At the cross-roads, about 600 yards east of the town, our column divided. Troop "H" was joined by Troop "D" and both troops moved west and spent the entire day until 8.00 p. m. scouring the country west and south of Vigneulles for German stragglers. These troops covered an area heavily wooded and characterized by high, steep hills and deep ravines. All dugouts were entered. Few prisoners were found, but the work was most fatiguing, and the two troops by their mobility covered a large territory. French cavalry was met at Heudicourt about 3.00 p. m., and the French officers were greatly chagrined to find our cavalry had beaten them in following the enemy by a full day's operations.

Troop "F" was ordered to proceed north along the main line of railroad, St. Mihiel-Metz, gain contact with the enemy, locate their new line of resistance, and obtain liaison with the French, who were expected to come through from the west side of the salient. Our infantry advance had halted on the ridges north of Vigneulles. It was unfortunate that all three troops could not have gone north together as the mission to be performed was typical of the work expected of cavalry. The country to the north was an open plain flanked by a continuous high ridge running north and south on the left. The main road followed a single-tracked railroad about 500 yards from the foot of the ridge. The country to the right of the railroad was flat or gently rolling, with patches of woods here and there.

Realizing that much information could be obtained by as small a unit as a troop and anxious to redeem our first brush with the enemy, the troop moved

out at a fast trot in regular formation with point, advance party, and patrols on both flanks. In going through the towns the troop took the formation of column of troopers on either side of the road so that in case of machine-gun fire the men could get off the road to the right and left between houses. All towns were entered at a fast trot, and a march outpost was formed on the farther side, while a hasty reconnaisance was made by the main body. The first town passed through was Hattonville. The town was deserted and in flames. Our point was fired on by a small enemy party occupying a stable on the outskirts of the town. The advance continued; a squad turned out of the column and surrounded the stable, killing one man and taking the remaining two occupants prisoners. All along the road were wagons of loot and supplies left in the flight, the drivers having unhitched the horses and made their escape on them. The next town, Vieville, was on fire and apparently deserted. The troop kept up the advance, not stopping to search the town. The next town, Billy, six kilometers north of Vigneulles, was on fire. Outside of the town were captured six stragglers, who offered no resistance. They were sent to the rear. St. Maurice was now reached. This town was of considerable size, and many Germans were seen running about in the streets as we approached. The troop galloped through the town, establishing a march outpost at the northern exit and on the road going east toward Jonville. Patrols were at once dispatched to search the town. A German staff officer, mounted on a large black horse, was discovered leaving a side street. He was captured and the captain of the troop took the horse and rode him the rest of the campaign. Twenty-two stragglers were found and sent to the rear. The villagers came out of their cellars and were enthusiastic over our entry. The mayor of the village, an old man of distinguished bearing, gave valuable information. A German staff officer billeted at his house had told the mayor that the German army was forming on a new line through Champlon, Doncourt, Jonville, and Champly. He also stated that a German General had left the town barely an hour before the arrival of the troop.

With St. Maurice as a base, patrols were sent toward Champlon, Doncourt, and Jonville to reconnoiter the enemy. The main body of the troop remained at St. Maurice. The patrols were sent out about noon. The patrol sent toward Champlon reported back, stating that they had met the advance guard of a French infantry outfit at Hannonville. The French had come from the west across the salient and were patrolling to the north toward Champlon. Their air service had given them information which verified the report of the mayor of St. Maurice. At St. Maurice a large quantity of grain and food were found. While awaiting reports from the other patrols, men and horses were fed and grain bags were filled. This was the first feed for the horses since the morning of the 12th. The patrol to Doncourt returned at about 3.00 p. m. with one prisoner, reporting evidences of a prepared position about the town. They had come under a burst of machine-gun fire while

reconnoitering the approach to the town. At this time a verbal message came stating that the Germans were coming in force from the direction of Woel, in a counter-attack. The troop took a position to cover the retirement of the patrol on that road. This report proved to be the usual kind given by a trooper with a strong imagination. The patrol was met on its way back from Woel with five prisoners. Two horses of the patrol were wounded and one man was missing. This man came in later. The patrol reported that they had been fired on by a few mounted men on approaching the town. The enemy galloped away toward Jonville. While reconnoitering the town the patrol was again fired on from the church steeple. A new patrol was sent out which went through Woel and reported back about 6.00 p. m. with the information that Jonville was strongly held. Messages were sent back from time to time during the afternoon as information was received.

The infantry now began to arrive in St. Maurice from the south. Its mission accomplished, the troop joined the squadron, in camp at Vigneulles. The mess sergeant of Troop "H" had got his kitchen through the traffic, and had hot soup ready for the men that night. The cavalry squadron was the only outfit that had a kitchen up that far at this time. All the horses were greatly fatigued, and some wounded horses had to be shot. The next day the squadron marched south out of the salient. The attack was over, our infantry were organizing the ground won, and this sector remained inactive until the attack by the Second Army, November 10.

R. O. T. C. at an Essentially Military College

BY

Major ALBERT B. DOCKERY, Cavalry

THE VIRGINIA MILITARY INSTITUTE has long enjoyed a high reputation throughout the country and especially in the Army, where many of its graduates have attained distinction. A brief outline of the work being done here may be of interest to them and to officers contemplating college duty.

For the information of those unfamiliar with the R. O. T. C. regulations and the obligations assumed by the War Department and by the colleges, the following are emphasized as the salient features of the requirements:

Any college may have one or more R. O. T. C. units established in its student body by agreeing to inaugurate a Military Science Department and requiring, as a requisite for graduation, proficiency in the course. Three hours per week must be given to military science the first two years and five hours per week the last two years. It is voluntary with the students whether they take the military course, but the strength of the units must be maintained above a prescribed minimum, which varies according to the unit, being as high as 100 for certain ones and as low as 25 for others.

The college further agrees to care for all Government equipment issued for instruction and gives bond to guarantee its safe-keeping. The Government will replace all worn-out or obsolete equipment and that lost or destroyed through unavoidable causes. The college authorities are responsible for all equipment, animals, books, etc., from the time it is received and cannot transfer this responsibility to the Army officer detailed to the college.

The United States agrees to furnish the personnel, animals, equipment, books, and clothing required for instruction of the units. Commutation of clothing may be paid in lieu of issue in kind, at the option of the college. This commutation is at present fixed at $36.00 for the 1st and 3d years and $9.00 for the 2d and 4th. It is assumed that a uniform will last two years, the $9.00 being for repairs. The Government will pay commutation of rations to all students who sign the written agreement to pursue the advanced course during the last two years and attend the six weeks' summer camp. While in attendance at the advanced camp the student is fed, clothed, and quartered and paid $1.00 per day. Expenses to and from camp are borne by the Government. It is optional with the student whether he attends the basic camp held for the benefit of those pursuing the basic course. The allowances are the same as for the advanced camp, but the students receive no cash payment.

The character of the colleges represented in the R. O. T. C. varies between very wide limits. Some fulfill the bare requirements of the War Department, giving the three and five hours only to military instruction; others devote as much as nine hours. It is probable that the United States receives the greatest returns for funds expended on the essentially military schools—that is, from

those where military training is compulsory and the students wear the uniform and are under discipline at all times. However, as a rule, these students are younger than those at a college or university. In many colleges the instruction is largely theoretical, while at the military school the theoretical and practical are carried along together.

At the Virginia Military Institute the conditions are probably as favorable for the development of the R. O. T. C. idea as they are at any other institution. The average age of cadets upon entrance is about 17½ years. They wear the uniform, live in barracks, and are under strict discipline at all times. They form and march to and from all meals, recitations, and other duties. A small guard is maintained during the 24 hours. The cadets have no option as to taking all military training. At the end of the sophomore year they are required to sign the War Department agreement obligating themselves to complete the advanced course and attend the advanced summer camp. This provision was included in the regulations last year, and though the present senior classmen were not required to sign, 80 members out of 115 did so, and will, upon graduation, have completed all requirements for commissions in the O. R. C. All 80 have submitted applications for commissions. All members of the present Junior Class have signed the contract and will probably file applications for commissions.. It is thus seen that the United States receives the greatest possible returns for its expenditure here, since the fundamental idea is to commission trained junior officers in the O. R. C.

Four units of the R. O. T. C. were established here in 1916, but remained on a more or less paper basis until September, 1919, at which time the plan of unit instruction was put into effect and has now rounded into a four-year military course of about nine hours per week. The units maintained are artillery, cavalry, engineer, and infantry in a student body of about 540 cadets. There is complete equipment, including animals, for each unit. Six army officers and ten sergeants are detailed as instructors, and fifty enlisted men, to care for animals, equipment, and material, are on duty.

For many years the Institute authorities wished to have cavalry and artillery instruction in the Military Science Course, but could not bear the heavy expense incident to the upkeep of animals and equipment. When the War Department proposed to establish and maintain these mounted branches, as well as furnish the instructors, it coincided exactly with the desires of the Institute, and no time was lost in getting the necessary personnel, animals, and equipment. It is needless to say that, under these conditions, the Military Science Department receives the very hearty co-operation and support of every other department, as it does not have to struggle to get suitable hours or to have its needs looked after. The military feature is something around which everything else is constructed, and no member of the faculty begrudges the time given to it. The cadets regard it as a part of their lives and of as much importance as the course in mathematics, for example. In such favorable surroundings, a failure would be due entirely to the P. M. S. & T. and his assistants.

The War Department prescribes in general terms the program of instruction for each unit for the four years, but the P. M. S. & T. is given all necessary latitude in arranging the details of his courses. He may even interchange subjects from one year to another. Conditions at the colleges are so different that this latitude is necessary. The general plan is to make an efficient private the first year, a non-commissioned officer the second, and a company officer the third and fourth years. Instruction now bears little resemblance to that given a few years ago. Graduates leave with a very rich store of military knowledge and much experience as instructors. Should war be declared, they would enter upon their duties with confidence that they are prepared.

Here the P. M. S. & T. is a member of the Academic Board in every sense. He attends all of its meetings and engages in its deliberations. His recommendations regarding military matters are practically always put into effect. Being commandant, he is closer to the cadets than any other person connected with the institution. He knows them by name and has a fair knowledge of the personality and capabilities of each, and can exercise a marked influence on their characters.

The Fourth (Freshman) Class enters during the first three days in September and the upper classmen about September 5th, excepting the cadet officers and half of the non-commissioned officers, who report on the first to instruct the new cadets. The new cadets are inoculated, vaccinated, physically examined, issued clothing and equipment, assigned to companies, and installed in barracks immediately after reporting. Their military instruction is well under way before the old cadets arrive and academic recitations commence. All cadets of this class take the same course—First Year Basic Infantry. At the close of the session they are assigned to units, being given a choice according to their class standing, and proportioned among the units in the ratio of two to artillery, two to infantry, two to cavalry, and one to engineers. Only those taking one of the engineering courses may choose engineers. It is believed that this method of assignment has a marked effect on their academic work, since there is nothing a cadet desires more than an assignment to a particular unit. Some fair method of distribution among the several units became necessary, as the infantry was not getting its proper proportion. The artillery is most popular, cavalry next.

The practical instruction of the Fourth Class is conducted entirely by First Classmen and cadet non-coms., under supervision of the Assistant Commandant, who is an Institute officer. After this year the First Classmen will be able to give much of the practical instruction of the Second and Third Classes. They are not prepared for it yet, except at the usual drills.

The summer camps are intended to give a finish to the student and enable him to apply the theory he has learned at college. The liberal hours will in future make it possible to cover thoroughly the elementary subjects needed as a foundation for the camps, and place the cadet in a position to reap the maximum benefit from the advanced instruction. Many students appeared at the

last camp so poorly prepared that they were not ready for the program in the limited time available. This was especially true in minor tactics, engineering, and all classes of small-arms fire. Each year will probably find the students better prepared, as the work at the colleges becomes standardized. A large staff of instructors is essential for a successful camp. The young graduates from the Army schools should be sent direct to the camps, and thereby not only fill the needs there, but gain a valuable experience for themselves. They will find the work difficult and exacting, but not without considerable pleasure. There they see "intensive military training" in operation, for the problem of teaching the maximum in the least time is constantly before them.

The winter months must be devoted largely to theory and section-room work, but provision is made in the schedules for outdoor work when the weather is favorable. The spring months are set aside for small-arms range practice, equitation, mounted drill, minor tactics, smoke-bomb practice, and a few other subjects of lesser importance. The year's program is made in the summer, and detailed monthly schedules are prepared about the 20th of each month for the succeeding month. A copy of these is issued to each instructor and cadet officer. They are strictly adhered to unless changed by a memorandum, a copy of which is posted on the bulletin-board. Changes from one kind of drill or exercise to another are made upon the tap of a drum. Such rests as are given are also controlled by drum. The rests are few and short. Frequent changes in the character of the exercises are relied upon for rests. In the schedules, paragraphs of the texts are generally quoted to aid instructors and cadet officers in preparing their work and to make it easier to check up and learn whether all detachments are working up to their schedules. Definite programs and schedules are considered the first requisite of good instruction. Half-baked plans and indifferent instruction will not do, especially at schools where one deals with thinking youngsters.

From the beginning of the Third (Sophomore) Class year, unit instruction continues through the remaining three years for three days per week, with certain other hours. A period of 1½ hours on a fourth day is devoted exclusively to close-order infantry drill, setting-up and marching exercises. This is intended to keep the battalion in condition and for disciplinary purposes. On Wednesday battalion parade is held and on Saturday a review and inspection or other ceremony. A material part of the First Classmen's time is consumed in instructing the lower classmen. They are not required to take the classroom work or minor tactics. A cadet's time is about equally divided between theoretical and practical work, both being carried along together in so far as possible.

A cadet is graded on every subject and given a standing in his class in accordance with a rating plan. A final grade on a particular subject may be arrived at through daily marks, followed by a written examination, a practical examination, or through daily observation. The plan adopted is a modification of that used at West Point and has the advantage of largely eliminating

the personal equation of the individual doing the grading. A definite rating scheme has a marked effect upon the efforts of the student. His complete record is kept in his service record, on his individual card and on the rating sheet.

The instructors have no sinecure. There is considerable work besides instruction to be carried on. The grading alone is a great time-consumer. The supply duties draw heavily on the time of one officer and a sergeant. Three sergeants are busy in the forenoon on clerical and personnel work. Much time is required for class preparation, especially in minor tactics. The sergeant instructors study their subjects from the texts and are coached by the officers where necessary. They never appear before classes unprepared.

The marked success in athletics during the last two years has assisted in raising the already high *esprit de corps*. Next year rifle and pistol teams will be added and will be given a permanent place among other college sports. The Fourth Class gallery team is already in existence. During April and May two drill periods per week for the Fourth Class will be devoted to athletics. This should aid in discovering likely material for future development and bring out some timid men who would otherwise never appear. The physical development of the Fourth Class through setting-up and marching exercises and group games has been very gratifying. One would now never recognize in the youngsters the striplings who entered in September. Parents are most enthusiastic over this phase of military training.

In conclusion, I wish to say a few words about the Cavalry Unit. By properly arranging the schedules, sixty horses are found ample for all purposes. The distance, 1 11/16 miles, of the mounted drill ground from the stables is the only unfortunate feature, but there is sufficient room around the stables to teach subjects other than equitation and mounted drill. The cadets learn quite thoroughly the care of the horse and equipment, and members of the First Class are fair horsemen. They do cross-country riding, taking low jumps fairly well. They have acquired considerable knowledge of conformation, treatment of minor injuries and diseases, feeding, watering, forage, and stable management. They can put on a pack with the diamond or squaw hitch. They can fire a good score with gallery rifle and pistol, and can handle the saber and pistol, mounted, surprisingly well. They can dismount and assemble the machine-gun, auto-rifle, pistol, and one-pounder, and they know the functions of most of the parts. All who were at camp have fired the regular mounted pistol course, and the R. O. T. C. rifle course, each man being individually coached; they have also fired about 40 shots each with the machine-gun and auto-rifle; all of this is in addition to the subjects mentioned elsewhere in this article. These young men take great pride in being cavalrymen and in the fact that they work harder than those in the other units. When we recall how little officers knew of their duties upon entrance in the service some years ago, then we realize what great progress is being made toward producing efficient reserve officers.

Citizens' Military Training Camps

BY

Captain GEORGE W. HINMAN, Jr., Infantry

CARRYING OUT the policy of voluntary military service laid down by Congress in the National Defense Act, as amended by the Reorganization Act of June 4, 1920, the War Department will conduct twelve Citizens' Military Training Camps throughout the United States during the summer of 1921. By law, it is the primary purpose of these camps to train candidates with a view toward their appointment as reserve officers or reserve non-commissioned officers in the Army of the United States.

Three separate courses will be offered by the Citizens' Military Training Camps, according to the programs of instruction just published by the War Department. These courses are:

First, the Red, or elementary, graduates of which are eligible for enlistment in the Organized Reserves of the Army;

Second, the White, intermediate, which qualifies successful students for service as non-commissioned officers in the Organized Reserves;

Third, the Blue, or advanced, which offers advanced training with a view toward appointment in the Officers' Reserve Corps.

The sites for the camps, one or more of which will be located in each Corps Area, and the opening dates, are as follows:

Camp Devens, Mass., August 1.	Camp Pike, Ark., August 1.
Plattsburg Barracks, N. Y., August 7.	Fort Snelling, Minn., August 1.
Camp Meade, Md., August 1.	Ft. Logan, Colo., August 1.
Camp Jackson, S. C., July 18.	Camp Travis, Texas, July 15.
Camp Knox, Ky., July 21.	Camp Lewis, Wash., July 6.
Camp Grant, Ill., July 21.	Presidio of San Francisco, Calif., July 6.

To comprehend the conception back of the Citizens' Military Training Camps, it is most essential for one to appreciate fully the fact that the Army of the United States contains three components, namely, the Regular Army, the National Guard, and the Organized Reserves. As at present constituted, these three components rely for personnel entirely upon voluntary military service. In other words, during peace, we must obtain through voluntary military service the training required for the vast force that will be called to the colors through universal military service in a major national emergency such as that instanced by the World War. It is the aim of the Citizens' Military Training Camps to train candidates with a view to their appointment as reserve officers or non-commissioned officers.

The Citizens' Military Training Camps will be open to able-bodied male citizens between the ages of sixteen and thirty-five. The candidate must be of good moral character. The War Department will pay all expenses incurred incidental to the camps, including the cost of transporting the candidate from his home to the camp and return, food, lodging, medical attendance, and uniforms and equipment used in training. The candidate is asked to contribute only his time without receiving any pay therefor.

Emphasis this summer is being placed on the Red course, which, it is thought, will have an especial appeal for youths between the ages of sixteen and nineteen. At least one Red course, according to the plans of the War Department, will be given in each of the nine Corps Areas. The holding of White and Blue courses is being left to the discretion of Corps Area commanders.

Especial attention at all camps will be given to physical development. The most approved methods for the improvement of the individual will be put into practice. At the same time, competitions and mass athletics will be featured to arouse a laudable spirit of rivalry. Through this training, it is believed, not only will the individual return to his home in excellent physical and mental condition, but also he will take with him knowledge which will be of great value to the community in which he resides.

It is the object of the Red course:

First, to bring together young men of all types, both native and foreign born; to develop closer national and social unity; to teach the privileges, duties, and responsibilities of American citizenship; to stimulate the interest of the youth of this country in the importance of military training, both to the individual and to the nation.

Second, to show the public by actual example that camp instruction of the kind contemplated will be to the liking of their sons, will develop them physically, mentally, and morally, and will teach Americanism in its true sense, thus stimulating patriotism and self-discipline.

Third, to qualify young men for service in the Organized Reserves.

In a like manner and in furtherance of the results obtained through the Red course, it is the purpose of the White course:

First, to qualify selected privates of the Organized Reserves as non-commissioned officers, so that they will be capable of training recruits in the duties of privates and in leading them in active service.

Second, to provide preliminary training for candidates for commissions in the Officers' Reserve Corps.

Third, to provide further military training for those civilians who have completed the Red course or who have had equivalent training.

Rounding out the training camp idea, the Blue course aims to provide more advanced training for warrant officers and selected non-commissioned officers of the Regular Army, National Guard, and Enlisted Reserve Corps, and for

civilians, with a view toward their appointment, if found qualified, as members of the Officers' Reserve Corps.

Details relative to the establishment and maintenance of the training camps are being placed directly under the control of Corps Area commanders. An officer formerly with the General Recruiting Service has been assigned to each Corps Area headquarters for duty in connection with the work of these camps. One of the first activities so soon as the passage of the appropriation bill warrants the move will be a campaign to obtain candidates. Civilians desiring the training will apply direct to the proper Corps Area headquarters, which will make all arrangements for the attendance and training of those whose applications are approved. In thus distributing the responsibility for the promotion and maintenance of the camps, the War Department again is emphasizing the fact that, under the National Defense Act, each Corps Area commander is charged not merely with the administration of the Regular Army, but also with the development of all three components of the Army of the United States, which includes as well the great citizen forces upon which the nation must rely in a major emergency.

How these camps may develop in importance is indicated clearly in the views of President Harding which have received wide publicity in the newspapers of the country. A few weeks prior to his inauguration, Mr. Harding asserted that he hoped to have established early in his administration a comprehensive system of voluntary military training for at least 100,000 young men each year, his conviction being that the first essential of a military program is to strengthen the reserve through voluntary training. No standing army of a reasonable peace-time strength, the President believed, would be adequate in time of war unless backed by a strong volunteer or drafted force.

At the time his views were published, President Harding indicated that he was considering the voluntary training feature in addition to the continuation of the Reserve Officers' Training Corps. Both the Reserve Officers' Camps and the Citizens' Training Camps, he thought, could be made "feeders" for the skeleton reserve in the nine corps areas established under the National Defense Act, the additional camps to furnish material for reserve non-commissioned officers. The prime essential for the success of these camps, the President emphasized, is that the summer training be made as attractive as possible to the volunteers.

Through candidates drawn from the entire country, the Army has opportunity of indicating just what military training will do. If the camps are a success and the Citizens' Military Training Camp idea meets with favor, it is the hope of leaders in Congress to increase year by year the number of candidates in attendance. Whether or not it will lead to a form of universal training will depend, according to these leaders, upon the manner in which the public receives the camps.

Editorial Comment

HORSEMANSHIP IN THE CAVALRY

THE EDITOR had contemplated giving up the bulk of the editorial section in this number to an appeal for a more universal and active interest in horsemanship. This might, perhaps, seem on a par with an attempt to teach fishes to swim. Certainly it is taken for granted by our civilian friends that all cavalrymen are obviously and *par excellence* lovers of the horse. However, the Editor's observation that there are many cavalrymen who need to be reminded that the horse is the *raison d'être* of cavalry is very opportunely corroborated by a cavalryman of brilliant reputation in the following letter, to which this editorial space is gladly accorded:

THE CAVALRY SCHOOL, FORT RILEY, KANSAS, *April* 28, 1921.

EDITOR, THE CAVALRY JOURNAL:

HORSEMANSHIP IN THE CAVALRY

The question as to the best method to be adopted for the encouragement of horsemanship among cavalry officers is one that should be given the most careful thought on the part of those responsible for cavalry training. That such a necessity now exists, and that it has never before existed to such an alarming extent, is freely discussed by the few officers who spend several hours each day in equitation and horse training and in keeping themselves fit for mounted work.

While the World's War took many cavalry officers away from mounted duties and placed them in positions where it was impossible for them to ride a horse, I greatly fear that many officers who have recently returned from infantry or staff duty find themselves physically unfit for real mounted service and with a lack of sufficient zeal to cause themselves to exert the strenuous efforts necessary to re-establish their former fitness.

In looking back to my first few years of cavalry service, I am convinced that we rode no more than the bare amount required to carry out our drill and march schedules. Before I forget it, I want to say that one of the captains of my regiment in 1906 was issued 75 experimental bit-and-bridoon bridles, probably the best bridle we have ever had. Two years later an officer of the Inspector General's Department found the bridles in the troop store-room. Inquiry elicited the fact that the bridles had never been on a horse. The captain said that his men had always been able to "hold their horses with one set of reins." The bridles were ordered turned in. In 1913 I fell heir to the troop and found it still equipped with the "simple" curb bridle.

In 1905 there were just three flat saddles owned by the officers of my regiment. The owners of these saddles rode horses over a course of low obstacles two or three times a week during the summer months. Occasionally one could see some officer taking a young lady out for a ride.

Just stop and consider the matter for a moment and you will have to admit that the greater part of our riding was done and the highest jumps were taken

at the club, under the impetus of a dry Martini or a few fingers of rye. Many are still taking them the same way—minus the stimulants.

I hope that my friends and brother officers will forgive me if that which follows seems to be offensive. They may say that I have devoted my time to horsemanship at the expense of tactical training. Possibly so. I'll agree on a 50-50 proposition and guarantee that such an arrangement will place them in a physical condition assuring the application of their tactical training to the greatest advantage; but I am equally insistent that unless they do devote much time to horsemanship their tactical knowledge will be worthless to them as leaders of cavalry commands.

Since the opening of the war I have been directly concerned with the instruction in horsemanship of not less than 1,900 officers, and I must say that a great percentage of the older officers (lieutenant-colonels and majors) I have seen during the past year are far from physically fit to perform mounted duty requiring the high degree of mobility we are always claiming for the cavalry service; also, not a few of them would fail to be a credit to the cavalry arm should they ride in civilian company. Those who are not fit seem to have plenty of time for golf, afternoon bridge, and other "sports." They are prematurely old and stiff and have lost or are fast losing the appearance of neatness around the waist-line.

Possibly it will be difficult, or even impossible, for an officer on detached service to properly take care of his mount. Even so, he should not permit himself to get into such physical condition that he could not perform hard mounted duty within two weeks from the day he joined a regiment. It seems to me that, no matter what class of duty an officer may be on, he can by a few minutes of well-regulated exercise each day and by proper eating keep in good physical condition.

There was a horse show held at Fort Leavenworth on April 16, 1921. How many cavalry officers rode in the classes? Two, I am told. Other entries were from the field artillery and infantry.

Some of us who are 40 years of age or better awaken in the mornings feeling a little stiff in our backs. We go out to drill or for a ride. There are hurdles around, and we find ourselves riding around them, saying, "Guess I will not take it today." Keep it up for a week or two and we find ourselves so filled with apprehension that we would put it off forever. The taking of three 3-foot jumps each day will keep up confidence in ourselves and in our mounts.

I would like to invite the attention of all cavalry officers to the following extract from General Von Bernhardi's "Cavalry in Future Wars":

> "One of the first stepping-stones in our progress must be the actual horsemanship of the officer himself. A man who under every circumstance feels himself firm in the saddle does not need to exert force to fight with or restrain his horse, and, having learned both how to think and command at a gallop, will lead cavalry and reconnoiter before the enemy with far greater certainty and much better results than one to whom these things are hardly second nature.
>
> "Bold and determined horsemanship acts and reacts on all a man's other soldierly characteristics, and forms thus a basis for further progress of the highest order, apart from the fact that it impresses the men most favorably and induces them to follow with greater confidence.
>
> "Hence, even from the standpoint of the higher education, the standard of horsemanship can never be raised too high."

Please look around you and then answer these two questions:

(*a*) How many cavalry officers of ten years' service own their own mounts?

(*b*) Are the mounts owned really suitable animals?

My answer would be: (*a*) A very small percentage; and (*b*) few are really well mounted.

At the time Brigadier-General James Parker commanded a cavalry brigade on the southern border he instituted a system of inspections in which the troops were given a competitive rating. While some of the officers objected to his method of rating, it is a fact that all were most energetic in preparing for the inspections. The officers were also inspected as to their mounted qualifications, being required to show the schooling of their mounts and to jump hurdles.

The following suggestions are submitted:

(*a*) Re-establish the Russian ride, or require regimental commanders to frequently lead their officers across country, taking various obstacles of moderate height at a rate of sixteen miles per hour.

(*b*) Require every officer (including field and staff officers) on duty with troops to take one green horse each year and personally train it for service in the ranks, to include a willingness to jump various obstacles of three feet in height, the training of these animals to be inspected by regimental commanders.

(*c*) Utilize fully the services of graduates of the Cavalry School as instructors in equitation and in matters pertaining to horsemanship. Require all officers to attend classes until they have shown suitable proficiency.

(*d*) Select a number of level-headed and skilled horsemen and send them out twice a year to make detailed inspections of all cavalry troops and of all officers on duty with cavalry regiments, these inspectors to report on the training of organizations; the physical condition of officers, men, and horses; whether the training in horsemanship is carried out along the lines required by our regulations; the skill shown by officers in the training of the remounts assigned to them; and the general suitability of officers for mounted cavalry duty.

BEN LEAR, JR.,
Colonel of Cavalry.

THE HORSE SHOW

THE SEASON just past has been notable for its many successful horse shows. From the national capital, where in May the President and many members of the Diplomatic Corps and a generous representation from the Army attended the National Capital Horse Show, in which Major George S. Patton, with *Allahmande;* Brigadier-General William Mitchell and his bold-riding little daughter; Lieutenant-Colonel H. N. Cootes, Major Wilfrid N. Blunt, and many other officers of the Army on duty in and about Washington took an important part, to the most remote Army post, the horse show has been an important feature in Army circles. The CAVALRY JOURNAL has received handsome and striking programs of such horse shows and military tournaments from several cavalry posts, notably from Fort Bliss, Texas, from the 14th Cavalry, at Fort Des Moines, Iowa, and from Fort Ethan Allen, Vt. The Military Academy has come into line with a horse show of its own.

It would involve too much repetition to give space in the JOURNAL to these programs, and, after all, with every organization including in its horse show every possible form of showing, contest, and competition, there is no necessity for reproducing them in detail. It will be sufficient to state that every one has been complete and comprehensive. The influence of these horse shows and tournaments upon the commands giving them and upon the relation between those commands and the adjacent civilian population is excellent. With a marked universal increase of interest in the horse and in riding, which is reflected in such periodicals as *The Spur, The Thoroughbred, The Rider and Driver,* and in the splendid work of the American Remount Association, it is plain that the cavalry should itself devote a greater and greater effort toward popularizing the horse and equestrian pleasures. And the indications received by the Editor from all quarters make it apparent that the Cavalry Service appreciates this responsibility and is responding to it in hearty fashion.

THE ARMY SCHOOLS

The school season just ending seems to have been one of gratifying success. Reports from all the Army schools reflect a consciousness of real achievement. We are particularly interested in the Cavalry School, and from that Mecca comes a flood of glowing appreciation. As a corollary, it should be remarked that cavalry officers of all grades and degrees—active, reserve, and guard—are breaking their necks to get enrolled for the coming school year. Unfortunately, the capacity of the school will not permit all to be accommodated; or, perhaps it is fortunately so, else the cavalry branch would have to be administered and officered pretty much throughout by the Coast Artillery or the Tank Corps, that its own personnel might go to school.

In this great success lies the danger of a future blight. The pendulum, now swinging so far, will probably be pulled back to the normal level by the force of gravity of those who are afflicted—as who is not at times—with the desire for ease and the disease of laziness (let's call a spade a spade). Then, if the pendulum is not to swing to the other hand, we must be outposted against certain specious arguments which one hears not uncommonly—and which need no repetition here.

An emergency officer who was trying to fit his conception of the Army School system into an educational scheme familiar to any university man asked, "But what goal is there to reach? One would like to know that, after pursuing such or such a course of study, he would arrive." Of course, there is a progression provided for and terminating in the War College, from which a man may hope to graduate while he has yet a few years of active service to look forward to. However, there is a continuity and perpetuity about the Army educational system that is perplexing to the university man who conceives of a school education as a process to engage a man's full attention up to a certain age (not too advanced), after which the development of productivity

precludes a further prosecution of studies. And not a few Army officers have shown a failure to appreciate why in the Army it is any different; why it is that an Army officer's school courses are never ended; why such school courses should still be inflicted upon an officer of 20 years' service, who at the same age in a civil occupation would be putting out his product at the maximum rate, with no shadow of an idea of school (except for the rising generation) to distract him.

A very little consideration brings out the essential difference between civil and military education. In civil life, after a man receives the elementary and special preparative education necessary to enable him to take his place in the world's activities, he soon specializes, and thereafter the bulk of his energies is directed into a single channel. His education is by that means continued indefinitely—in his specialty. The energy directed into a special channel, be it narrow and unprofitable as an arroyo or broad and useful as a mighty river, and the education gained in that channel are coexistent and correlative. A man receives his higher special education from contact with his associates, from competition with his rivals, from the directing of his subordinates, from planning and striving. He attends no more schools or classes, but his daily life is no less a school.

There is no parallel in the career of the Army officer, because there can be only a limited amount of specializing. War calls into play all forces and all activities, demanding a breadth of knowledge and an adaptability not required elsewhere. No peace-time duties, whether with troops or in the exercise of administrative functions, can give adequate preparation for these demands of the great emergency. They may, indeed, foster adaptability and may furnish experience in a variety of useful details, but there is lacking in such haphazard training the co-ordination that a carefully thought-out school course can and will impart. In civil pursuits one practices throughout the year and throughout the cycle of years of a lifetime the work that that lifetime represents. The soldier must spend most of his lifetime in preparation for the supreme demands which will one day be made upon him. The school must, therefore, figure conspicuously throughout his service.

The Garrison School has always filled an important function and will, of course, continue to do so; but beyond a certain point it cannot go. Its work is conditioned and circumscribed by the demands of duty. The instruction, of however high an order, cannot at all stations be of the best; yet it is with nothing less than the best that we must be satisfied. The mind that is to impart instruction in the important duties of a soldier must be fresh and vigorous, full of its subject, sure in its grasp of knowledge, and constantly exercised in the art of giving instruction. Only at central schools can such conditions be assured. And there, amid the inspiring environment of a common desire to acquire fresh knowledge and ability, and where there is no other duty to overshadow the instruction, and where all the subjects of instruction are on the schedule in their best place and proportion, with due regard to a proper

admixture of theory and application, of class-room work and exercise, of mental and physical development—there can be surely attained the maximum success for the time and energy devoted.

Peace-time training, especially after the thrill and excitement of war-time preparation and participation, is in danger of seeming a little stupid by comparison. And the period of such training must be enlivened by games and sports, horse shows and gymkhanas—and *schools*. Enlivened by schools! When the thought of having to go to school *again* strikes the seasoned officer aghast, let him consider it in this light. The present-day school is not a dead thing of musty tomes and unrelieved grind. It is an enlivening, quickening experience, calculated to prepare the student to get the most out of his subsequent efforts, and to inspire and stimulate his less fortunate associates upon his return to duty.

CAVALRY REORGANIZATION STILL HELD UP

CAVALRY REORGANIZATION is still held up, pending the fight over the Army Appropriation Bill, which is still in conference at this writing. Secretary of War Weeks and Representative Julius Kahn, chairman of the House Committee on Military Affairs, in speeches at the recent banquet of the Quartermaster Corps in Washington, aligned themselves emphatically against a reduction in the military forces below 175,000 men. Mr. Weeks brought out prominently the fact that this figure was not to be taken as representing a combat strength available in this country to meet any emergency.

Without doubt, the vigorous opposition to a sufficient strength by those urging greater economy is based in some degree upon a misunderstanding. "The Army at 150,000" or "at 175,000," heard in speeches and read in newspaper leaders, creates inevitably an unreasoning, subconscious interpretation of these figures in terms of bayonets. Suggestion: that those responsible for framing the bills use in their presentation such terms as "an army of 50,000 with its auxiliaries *and* the personnel necessary to develop the reserve military strength of the nation." It amounts to this: that the nation has for the present passed up both a strong, active army and universal military training in favor of a limited development of reserve strength. It has presumably provided personnel to take in hand this development. Actually, it has robbed Peter much to pay Paul little, for the personnel necessary to develop national military reserve strength in its several phases will have to come from a *reduced* active military strength, leaving a pitifully inadequate armed force, almost too insignificant to call *an army*.

Topics of the Day

THE EXPEDITION INTO MEXICO TO RECOVER THE PIERSON AIRPLANE

THE RECENT EXPEDITION into Mexico directed by Colonel Sedgwick Rice, commanding the 12th Cavalry at Del Rio, Texas, and commanded by Lieutenant-Colonel C. O. Thomas, Jr., 12th Cavalry, to recover the airplane which came down with Lieutenant Pierson on February 10, presents numerous points of interest for the service. The admirable reports submitted by the commanding and directing officers make it possible to make note here of these interesting features.

As no information was available as to roads and water-holes, it was decided to send in a small reconnoitering party to locate the plane and ascertain the condition of the roads, the location of the water-holes, and determine if the plane could be salvaged intact, and what transportation would be necessary in such case. With the sanction of the Mexican authorities, therefore, Colonel Thomas, accompanied by Lieutenant Doolittle, Air Service; Mr. Bargar, formerly a Lieutenant-Colonel and Inspector, A. E. F.; a Mexican officer, and an enlisted man as chauffeur, proceeded in two automobiles from Del Rio, Texas, to Villa Acuna, Mexico; thence by way of La Parida Ranch, where the party was joined by Mr. King, foreman of the ranch, and an Indian, to El Mosco, from which point the party proceeded in a southerly direction into the Burro Mountains. In the Cibolo Pass in these mountains the Pierson airplane had been located by American flyers.

On the fourth day the abandoned plane was located, and it was decided that the plane might be saved, could a new motor be procured for it. A motor was sent out from Del Rio by light truck and was installed in the Pierson plane. The field in which the plane had come down was cleared and dragged with a drag made of timber. To quote from Colonel Thomas' report, "To simply fly this plane out from where it was was no feat for an aviator of Lieutenant Doolittle's ability; but to change the motors, putting in one that had been overhauled some time before, and that in a plane that had come down under a forced landing and had been left in that dry country exposed to the hot sun for more than three months, even though every part was tested so far as we could out there—it took a lot of nerve, I say, to step into that particular plane and switch on the gas." The work of the party had been well done, however, and the plane rose safely and was flown by the intrepid aviator back to the American side.

During the sojourn of this rescuing party in Mexico constant communication was kept up with the commanding officer at Del Rio by means of airplane and pigeons. The liaison furnished by the airplane was by no means perfect,

however. To the difficulties naturally attending long-distance flights and caused by electric storms was also added the difficulty of locating this small party in a country the rugged character of which hid them from sight very effectively. Colonel Thomas remarks: "On this reconnoitering trip we found we were in perfect touch with the commanding officer, Colonel Rice, Del Rio, at all times by airplane, but were ourselves handicapped in keeping him informed of our progress and needs, owing to the limited number of signals arranged before starting." One misunderstanding over panel signals resulted in calling out the pack-train from Del Rio when it was water that the reconnaissance party desired. No harm resulted. The party got its water and the pack-train got an instructive practice march under service conditions, but this incident suggests the necessity of perfecting to a higher degree the means of communication to the airplane from the ground. It would be interesting to know what might have been the result of the use of D. R. flags. It is to be hoped that when the pack wireless outfit has been satisfactorily developed that this side of the communication problem will be solved. There seems to be no difficulty with respect to communication from the airplane to the ground. Further than this, not only was information conveyed to the rescuing party by dropped messages, but water and rations were also delivered in this manner.

The water, a vital necessity in this dry country, was dropped in canteens placed in grain-bags, about a dozen to a bag, and packed around with hay. Although one bag was dropped from an altitude of at least 1,000 feet, none of the canteens burst. On the other hand, the canned beans, hard tack, and jam dropped from a much lower altitude opened up wide. "It is believed," says Colonel Thomas, "a little experimenting along this line would develop a system of dropping such articles from airplanes with no damage to the container or its contents."

Liaison by airplane was supplemented by the pigeons which were taken out from Del Rio by both the reconnaisance party and Captain Atwell's pack-train. The work of these pigeons was highly satisfactory. The best record made was, perhaps, that of pigeon number 2619, which, although it had been cooped up in a basket for nine days and bumped over the roughest of roads for 160 miles, was given a message for Del Rio at 12.30 p. m. and delivered it at Del Rio, 125 miles distant by air line, in good season the same afternoon. "My experience," reports Colonel Thomas, "is that there is no limit to the time you can carry the pigeons in the basket cooped up; but when you take them out to start them on their way, do not rush them off. Put them down quietly in the shade, let them rest a little and walk around and go of their own accord. They will take from half to three-quarters of an hour before starting, but when they do start they are fresh and you can count on their delivering the message."

Captain Richard N. Atwell, 12th Cavalry, was placed in charge of a combined pack and wagon train comprising 38 persons, 8 wagons and water carts, and a pack-train. This train was loaded with rations, forage, airplane motor

and parts, and started over the difficult route to La Parida, where it was met by Colonel Thomas. The pack-train was sent back to Del Rio and the remainder of the detachment proceeded on to El Mosco, where the personnel helped to rescue one of the liaison planes which had come down in this vicinity early in the operation. Among the interesting remarks which are made in the report of the march of this detachment is that it was delayed on a stretch of good roads by the mules of the pack-train, which were not thoroughly road broken and caused frequent halts.

Compressed forage was fed throughout the entire trip and there was no noticeable loss of weight in the animals in spite of the fact that the wagon train carried full loads the whole way. It should be remarked that this is the first test which has been made of the compressed forage under field conditions. The favorable report, therefore, of Captain Atwell is of considerable significance. "The Thomas cooking outfit was used during the trip and was found very satisfactory, due to the quickness with which coffee and water could be boiled on a very small fire. The sheet-iron plates which are a part of the outfit were used daily for the purpose of cooking griddle cakes and biscuits with a bake-pan inverted over them, and it is thought," says Captain Atwell, "that they are a most important part of the equipment. The outfit is light and easy to set up and quickly packed and is ideal for field service."

Among the amusing incidents of this expedition might be cited the occasion when a terrific hail-storm relieved the nearly desperate situation in which the reconnaisance party found themselves with only half a gallon of water left for six persons to drink and none for the automobiles, with the nearest water supply 50 miles away. "I do not believe I have ever seen such large hail-stones as fell on this occasion. As the storm increased in fury and the ground became almost covered with hail-stones, every one seemed to think of the same thing at the same time: here is our opportunity to pick up water. We had six 15-gallon water bags, our canteens, a water-bucket, a coffee-pot, and the radiator on each machine. The moment the storm was over, all piled out of the Dodge car, where we had sheltered from the storm, the Dodge car being the only car with a top. This top would probably have broken through by the hail but for the fact that it was covered with a heavy manta on which a black cross was painted as a sign to the aviators that this was the car they were to follow. We began picking up hail-stones and filled everything we had with them, and when morning came we found we had picked up more than 20 gallons of water from the hail. Had it rained on us the same length of time it hailed, it would not have helped," remarks Colonel Thomas, "as the country was so dry the ground would have soaked it all up."

The expedition did not lack for experience with the insalubrious denizens of this region. "One morning," reports Colonel Thomas, "while hanging my blankets out to air, the orderly discovered a large rat which had bunked with me the night before. Not so bad, though, as Mr. King's experience in finding the rattlesnake coiled up in his bedding when he drew the cover back preparatory to getting up. He was just stretching when he looked down and saw a couple of coils of a large rattlesnake just uncovered by him. From the position of the snake it had evidently spent the night right next to King's ribs."

GERMAN DISARMAMENT, NOLENS VOLENS

THE GERMAN ARMY is to consist, following the provisions of the Peace Treaty and the Spa Agreement, of seven divisions and three cavalry divisions, the total strength of the army not to exceed 100,000, including officers, depot battalions, and schools. The commissioned strength will be 4,000 in addition to 300 medical and 200 veterinary officers. The Great General Staff and other similar organizations have been dissolved. All armament, ammunition, and equipment not approved for the army has been, or is required to be, delivered to the Trustee Company, destroyed or rendered unserviceable. Future manufacture of arms, ammunition, and military supplies of every kind is to be limited, and imports and exports thereof prohibited.

Each of the three cavalry divisions will be composed of six cavalry regiments, giving a total of 18 regiments of cavalry. The total of infantry is only 21 regiments. There are no brigade staffs provided for. Every cavalry regiment will consist of four squadrons of a strength of 170 men and one depot squadron for the training of men and horses. Each infantry division will be provided with one divisional cavalry squadron. For purposes of training and supply these will be attached to cavalry regiments. The mounted artillery section of 3 batteries assigned to every cavalry division will be attached to the artillery regiments for training.

Every cavalry regiment will be equipped with four heavy machine-guns. The squadrons have no light machine-guns. Every cavalryman is armed with carbine, lance, saber, and bayonet. Certain higher grades carry the pistol.

Universal military service was abolished by the law of August 21, 1920. The Federal Army is composed and supplemented only from voluntary recruiting. The term of service is: for officers, 25 years; for enlisted men, 12 years. The schools will consist of an Infantry School at Munich, a Cavalry School at Hanover; an Artillery School at Jüterbog, and a Pioneer School at Munich.

In view of the opinion which obtains in some quarters that the allied reparation demands, the insistence upon which has caused the formation of a new German cabinet, are unduly severe, it is interesting to observe to what extent the Germans have been fulfilling the disarmament provisions of the Treaty of Versailles. Up to March 25 of this year 36,000 pieces of artillery and gun tubes (including 5,500 in various stages of construction at Krupp's), 8,700 trench-mortars and tubes, 67,000 machine-guns, and 3,300,000 small arms have been destroyed, and 770 pieces of artillery, 1,800 trench-mortars, 11,500 machine-guns, and 1,180,000 small arms have been delivered by the police and civilian inhabitants. However, there is still reported to be in the possession of the German Government a number of machine-guns estimated

at from 100 to 300 per cent in excess of that allowed by the Treaty. There is also in its possession a considerable unauthorized amount of weapons used for training, spare parts, etc. The amount of fortress material delivered to the allies is insignificant and consists only of guns. Germany is still arguing the question of munitions factories with the Conference of Ambassadors.

The German Government remains faithful to its traditional tactics and continues to present memorials on subjects which have already been definitely disposed of in the attempt to gain time and perhaps concessions.

THE STATUS OF THE CAVALRY IN OTHER FOREIGN COUNTRIES

(Translated from "Bulletin Belge des Sciences Militaires," May, 1921)

Czechoslovakia.—The cavalry organization provides for two brigades of four cavalry regiments and a cyclist company each, and one brigade of two cavalry regiments and a cyclist company. The cavalry regiments consist of four squadrons, one machine-gun squadron, one platoon of telegraph troops, and one platoon of pioneers. The squadrons have the usual continental organization. At present each regiment is composed of approximately one dismounted and two mounted squadrons.

Austria.—The Austrian cavalry is reduced to six squadrons which form a part of six mixed brigades.

Hungary.—This country has approximately 15 squadrons of cavalry, which number must be reduced in accordance with the treaty stipulations.

Italy.—By the decrees of 20 April, 1920, the Italian cavalry was fixed at one division of four brigades, each of two regiments. The regiments are composed of four squadrons of a strength of 122 men.

Japan.—The Japanese cavalry comprises 28 regiments. Of these 20 have three squadrons and are assigned to infantry divisions. The other 8 regiments are formed into four brigades. Each of these regiments in brigade has four squadrons. The odd-numbered regiments are to receive a section of machine-guns. Each squadron numbers 145 sabers and 31 non-combatants.

Holland.—The Dutch cavalry consists of a single hussar regiment of four squadrons.

Great Britain.—The English cavalry consists of ten to twelve regiments which form one cavalry division.

France.—The French army includes 61 cavalry regiments and 10 machine-gun groups. Twenty-five regiments are assigned to the army corps. The remainder compose six cavalry divisions. Each division comprises three brigades of two regiments (550 men per regiment), a group of horse artillery, a group of machine-guns, and a group of cyclists. In time of war a company of sappers is added to each cavalry division.

HORSES FOR ENDURANCE RACE

The following is a list of the horses being prepared by the Remount Service to participate in the endurance test ride this fall. These horses have been purchased from the money contributed by the Kentucky racing people and by Mr. Windsor T. White, of Cleveland, Ohio.

Oswin.—Age, 9; weight, 1,125 pounds; height, 16.1; girth, 73 inches; cannon, 8 inches. Sire, *The Puritan;* dam, *Miss Padden.* Raised by Mr. Chaney, Columbus, Kansas, and sold as a yearling to Major Irwin, Cavalry. Used as an officer's mount since a three-year-old on the Mexican border and throughout the West. An excellent type. His previous work should specially qualify him for this race.

Cosmic.—Age, 8; weight, 1,015 pounds; height, 15.3½; girth, 72¾ inches; cannon, 8¼ inches. Sire, *Countless;* dam, *Mjosen.* Purchased from Mr. Windsor T. White, of Cleveland, Ohio, who bought him from Mr. Frank Bonsal, of Monkton, Md., who purchased him a few years ago in Kentucky. He has since been used as a hunter. He is an excellent type.

Scrubwood.—Age, 13; weight, 1,025 pounds; height, 15.2; girth, 72 inches; cannon, 7½ inches. Sire, *Bushey Park;* dam, *Cortina.* Purchased from Mr. Charles Griffin Herring, of Bridgewater, Va. Imported from England in 1915 by the Wickliffe Stud, Lexington, Ky., as a brood mare. She has proved barren and has been used as a hack for the last two years. An excellent type, but lacking in back muscle.

Logical.—Age, 6; weight, 1,025 pounds; height, 15.3; girth, 71½ inches; cannon, 7¾ inches. Sire, *Celt;* dam, *Logistilla.* Purchased from Mr. A. B. Hancock, of Paris, Ky. She was raced as a two-year-old. A good type, but has never been worked enough to see what she will do.

Boston.—Age, 7; weight, 940 pounds; height, 15.3; girth, 70 inches; cannon, 7¾ inches. Sire, *Greenway's Best;* dam, *Queen Mary.* Purchased from Dickson Bros., White Sulphur Springs, W. Va. He has been used as a hack at the hotel. This horse has gone to pieces badly since purchased, probably due to nervousness at being stabled at a race track.

Charming Billy.—Age, 7; weight, 1,125 pounds; height, 15.3½; girth, 75 inches; cannon, 8½ inches. Sire, *Lucky Charm;* dam, *Betty Gum.* Purchased from Mr. J. H. Collins, of Boston, Mass. Fair type. Has gone blind in one eye since purchased.

Edomala.—Age, 11; weight, 1,075 pounds; height, 15.3½; girth, 73½ inches; cannon, 7¾ inches. Sire, *Marchmont II;* dam, *Alamode.* Bred by Mr. J. C. Fuller, of Texas. Was never broken until this year. An excellent type, but it is a question whether he can be hardened enough before the race. He has an unusually strong back.

Bay gelding (unnamed).—Age, 6; weight, about 1,000 pounds; height, 15.2; girth, 70 inches; cannon, 7¾ inches. Sire, *Firestone;* dam, *Margaret*

Alice. Purchased from Mr. W. A. Buckley, of The Plains, Va. A good type of small horse. He has been used as a hunter and a polo pony.

Weldship.—Age, 8; weight, 1,250 pounds; height, 16.3; girth, 76 inches; cannon, 8½ inches. Sire, *Sea Horse II;* dam, *Moon Daisy.* Loaned by Mr. E. Weld, of Warrenton, Va. He has been used as steeplechaser. An excellent type.

Commodore Gaunt.—Age, 7; weight, 1,075 pounds; height, 16; girth, 74½ inches; cannon, 8¼ inches. Sire, *Sir Wilfred;* dam, *Follow On.* Loaned by Mr. J. Temple Gwathmey, of Warrenton, Va. He has been used as a steeplechaser and for hunting. A most excellent type.—*The Thoroughbred Record.*

THE CAVALRY SCHOOL BASIC COURSE, 1920-21

NEVER HAS the Cavalry School at Fort Riley, Kansas, had such a large number of student officers as during the school year 1920-21. This is due to the enlargement of the school to accommodate a Basic Class of some 130 junior officers. Of this number 50 are from the West Point class which was graduated in June, 1920; the remainder are veterans of the World War commissioned under the act of June 4, 1920.

The Basic Course is composed of four major subjects—tactics, cavalry weapons, general instruction, and horsemanship. The military reservation, comprising some 22,000 acres, is admirably suited to maneuvers and tactical problems of almost any kind. There are hills for observation by Corporal A's patrol or point, cover for either mounted or dismounted deployment and for the led horses, draws and ravines through which an assaulting echelon can make its approach march, and ground suitable for the mounted attack with pistol or saber. In fact, the terrain is suitable for almost any type of cavalry action.

The course in horsemanship began with the assignment to each officer of two horses—a trained horse, known at the school as a jumper, and an untrained colt. The colts were permanently assigned, but the jumpers were changed around about once a week, so that each officer had an opportunity to get acquainted with the peculiarities of many different horses and thus develop a better seat. The colts were put through the progressive course of training as laid down in the Cavalry Drill Regulations, starting with the day they were assigned and working up to the standard required of the trained troop horse. For the first two or three weeks the riding halls witnessed some rather strenuous workouts with the remounts. A good number of them were from western remount depots and had been running on pasture for a long time, so they were not quite as gentle as horses with considerable stable handling. Nearly every member of the Basic Class was "policed" a few times before he persuaded his horse that "policing" his rider was not a polite thing to do. Until April 1 only two hours a day were spent in equitation, probably a rather small amount of time on so important a subject, but the instruction was most excellent. Several of the instructors in equitation were members of the American Olympic

riding team and everybody took the keenest interest in the work, so the quality of the instruction made up for quantity. Most of the riding was done in the riding halls.

When the training of the horses was fairly well advanced, a number of exhibition rides by the different Basic Class platoons were staged in the school riding hall. Some of this work was competitive and considerable friendly rivalry between platoons resulted. As soon as spring opened and the weather became mild, more time was spent riding outdoors, and, commencing about the first of April, practically all the riding was done outside over the reservation. There were standing orders at the school that no jumping would be done by individual horsemen when riding alone, so practically all the jumping was done when the platoons went out together.

The Fort Riley Reservation is an ideal training ground for cavalry. The terrain is rough and broken with many deep wooded cañons and ravines. There is also plenty of open country where one may gallop for miles without a halt. A mounted man can get about as many thrills riding at Fort Riley as he could well find anywhere. One not infrequently hears the remark that a man who has ridden over the Fort Riley Reservation can ride anywhere. There are many jumps all over the reservation to tempt the bold rider, some in odd out-of-the-way places, others in the form of a steeplechase course. To those who have attended school at Fort Riley mention of Magazine Cañon and the Hill Pasture will probably bring back many memories.

All of the cross-country riding and jumping was done by platoon under the supervision of the equitation instructor. Thus every student officer received the benefit of criticism and advice as to form in jumping and in the proper management of his horse when riding at rapid gaits over varied ground.

Although the number of student officers at Fort Riley is the largest in the history of the school, all have been well taken care of with respect to quarters and mess. The bachelor officers are quartered in a set of enlisted men's barracks specially fitted for their use. Each man is provided with a desk and locker space in addition to his bed. The building is well lighted and an excellent mess is operated in the same building. The quarters are located at no great distance from the Academic Building and stables, so that these places are quite conveniently reached. At first there were no quarters available for the married officers, but the buildings comprising the former Camp Funston Base Hospital were remodeled to make suitable apartments, and they were ready for occupancy about November 15. Nearly every married officer in the Basic Class brought his family to the post and every set of quarters was occupied by December 1. Although no facilities for cooking were available, an excellent consolidated mess was provided.

The purpose of the Basic Course is to give young cavalry officers just entering the service or who have had comparatively limited cavalry experience a grounding in the fundamentals of their profession. There has been considerable discussion as to whether a young officer just entering the cavalry service

or one who has transferred from another branch should first serve with troops a year or two or take the Basic Course before joining his regiment. The former method of procedure might enable him to better understand the practical application of the theoretical knowledge gained at the school, but the latter undoubtedly makes him better fitted to assume the duties of an instructor when he goes to duty with troops. It therefore seems to be the correct policy to send all new officers as far as possible to school first.

Captain L. A. PULLING, *Cavalry*.

THE CAVALRY SCHOOL COURSE, 1921-22

The Basic Course and Troop Officers' Course will be of nine months' duration and will commence September 15, so that these classes will complete their courses on June 15, 1922. No courses will start before or terminate after those dates. The dates for the Field Officers' Course and those for National Guard and Reserve Officers will be announced in the near future.

General Washington and General Jackson are examples of the fondness that great military men have generally entertained for the horse and the turf. Though equally bold and graceful riders in the field, General Jackson was most successful on the course. The racing annals record his numerous victories, and, according to the anecdotes which are told of him, he sometimes intimidated his adversaries by the boldness of defiance where he might not have won by the speed or bottom of his horse.

One of Jackson's closest friends was the Rev. H. M. Cryer, a minister of the Methodist Episcopal Church, who was a breeder of thoroughbred horses, and raced one of them in the name of his partner, Colonel George Elliott. The reverend gentleman was charged with horse-racing and was summoned before the tribunal and asked if he had anything to say in his defense. "Nothing," was his rely, "except that I would like to have you let me know how I can arrange it for my half of the horse to stand in the stable while Colonel Elliott's half is racing. The horse belongs to us jointly. He has the same right to control him as I have, and he will race him and I cannot keep him from it." It is needless to record the fact that Mr. Cryer was acquitted.—*The Rider and Driver*.

New Books Reviewed

The Book Department of the U. S. Cavalry Association can furnish any of the new books reviewed or referred to in this department, and will give prompt attention to any orders submitted by the readers of the Journal.

THE STRATEGY ON THE WESTERN FRONT (1914-1918). By H. H. Sargent, Lieutenant-Colonel, U. S. Army, Retired. A. C. McClurg & Co., Chicago. Crown 8vo, with maps; 261 pages, with index. Price, $2.50.

The military student will welcome this little volume from the pen of Colonel Sargent, and those of us who have his former works on their shelves will be glad that it comes from the publishers in a size and binding which make it uniform with those volumes. Readers of those volumes do not need to be assured beforehand of the quality of the contents of this one.

So much has already been published about the great World War that one seeking what is most profitable to read is lost in a wilderness of books and pamphlets. And, if what has already been published is an earnest in quantity, not to say quality, of what is going to be published hereafter, the student who should try to read it all, or the half of it, would set himself a task as hopeless and as futile as that of the young officer of forty years ago who undertook to read all the *Rebellion Records*.

Most of the war books that have appeared so far have been written hastily, many of them too obviously with the purpose of getting as quickly as possible on the counters of the bookshops. Most of them are merely descriptive, and some of those which essay to discuss the strategic features of the great movements are decidedly amateurish in their efforts. Their authors have got hold of the stock phrases concerning "lines of communication," "interior lines of operation," "turning movements," and so forth—above all, concerning "salients"—and have exploited them at every possible opportunity. A reader familiar with the principles of strategy cannot help suspecting that some of these neo-Jominis and Napiers have taken a get-there-quick course, a sort of "Pelmanism," in the art and science of war in order to qualify themselves as military historians and critics for the occasion.

But in the little volume now before us the student will find the work of a master. As its title indicates, it treats specially of "the strategy on the western front"; but it deals also with the strategy on other fronts and of the war in general. And if the author has had the boldness to point out strategical mistakes made by the great German general staff, as well as those of the Allies, including the United States, he has done so with such cogent argument in every case as to carry conviction.

It is doubtful if there is another man that writes in the English language today who has as profound a knowledge of the great principles of strategy and is able to discuss them as soundly and intelligently as Colonel Sargent. His previous work in this line had long ago firmly and widely established his reputation, both here and abroad, and it is no wonder, therefore, that the editor of the *North American Review* chose him out of all American writers to discuss "The Strategy on the Western Front" in the pages of that magazine. This little volume is composed mainly of the articles contributed to the *Review*.

In every movement of hostile armies from the moment war is declared between nations, principles of strategy are involved—are adhered to or violated. No doubt

commanders often order movements without considering in technical terms the strategic principles involved, and the strategy of the movements is not discovered until the critical historian writes up the campaign after the war. A good deal of the strategy of our Civil War campaigns was of this sort—never evolved in the minds of our generals at the time, but worked out afterward at the desks of historians and critics. So in this great twentieth century conflict maybe the principles of strategy followed or violated were not in every instance appreciated or even considered by the commanders at the time; but Colonel Sargent has taken the operations of those vast armies and analyzed them and measured them by the simple rules of strategy, and has shown wherein those rules have been followed and wherein they have been violated, and has pointed out the consequences in each case, and, withal, he has done it in such simple and excellent diction that "he that runs may read" and he that reads must understand. He has made the whole matter so easy and convincing that on reading his pages one cannot help concluding that after all strategy is nothing but common sense applied to war.

M. F. STEELE,
Lieutenant-Colonel, U. S. Army, Retired.

MILITARY CORRESPONDENCE—REPORTS AND ORDERS. By Colonel Lucius H. Holt. Frederick A. Stokes Co., New York. ($1.75 *net.*)

From the pen of Colonel Lucius H. Holt, Ph. D. (Yale), Professor of English and History at the United States Military Academy, comes a very excellent text-book on military correspondence, reports, and orders. While written primarily as a text-book for cadets of the Military Academy, it nevertheless is so full of meat that officers of experience will find it a well-worth-while book of reference.

The chapter on military correspondence goes into detail regarding the method of writing military letters and indorsements, discusses channels of communication, and is full of examples of all kinds of such correspondence. While the chapter on business and social correspondence may seem a bit out of place in a purely military manual, still the fact remains that many of our officers need just such helpful hints as can be found therein.

Under the head "The Official Report" is discussed a very important phase of every officer's work; for, sooner or later, especially as one rises in rank, must such reports be rendered. The author believes that to present intelligently such matter there must first be the analysis or estimate of the situation; second, the collecting of data, if such be necessary, and, finally, the preparation of the outline of the proposed report. There is nothing new or startling in the chapter devoted to "Field Messages." The basic principle that the information contained therein should be accurate and unmistakable, and that clearness must not be sacrificed for brevity, is stressed.

Because of its importance, more space is devoted to "Orders" than to any other subject. The material for the chapter on "Combat Orders" was furnished by the School of the Line at Ft. Leavenworth, and is a result of the World War and experiences derived in the instruction of the 1919-1920 class at the School of the Line. It is well done, and while most of the subject-matter is an old story to the majority of the older officers of the Army, yet to those recently appointed there will be found much of interest.

In each chapter will be found a number of problems illustrating the principles discussed. Major J. J. O'Hara, Cavalry; J. G. Taylor, Infantry, and Captain C. H. Tenney, Coast Artillery, assisted in the preparation of this book, which thoroughly covers practically every type of military correspondence, reports, and orders.

JULIUS T. CONRAD,
Colonel, Cavalry

BATTLE STUDIES: ANCIENT AND MODERN BATTLE. By Colonel Ardant Du Picq. Edited by Colonel J. N. Greely, U. S. A., and Major Robert C. Cotton, U. S. A., with a foreword by Marshal Foch and preface by Frank H. Simonds. The Macmillan Company, New York. Price, $2.50 net.

It is significant that the editors should have passed by a perfect plague of last-hour military writings that clamor insistently for the attention of the military student, and should have selected for their sympathetic labors this fragmentary work dealing with the maniples and cohorts of the Romans and the skirmishers of 1870. But this is not expressing it fairly. Rather, this notable contribution to military literature has for its subject: man in battle, and how he fights (or fails to fight).

The frontispiece presents us with a daguerreotype of Colonel du Picq, and the reader cannot fail to turn continually to this likeness and feel that this hawk-eyed old fighter is a master of his trade who speaks with authority. And the words of this remarkable little book reach one's consciousness almost as if the words impinged upon the ear direct from the utterance of this French Colonel of the Line. That is significant, too. It is not a school man that writes these pithy paragraphs. This book is in no sense a treatise or a development of theory. It is the record of an investigation into the facts of fighting—facts tersely expressed and unforgettable. Admittedly, the work of this writer, cut short by his own death in battle, is fragmentary and unpolished. Some of his discussions have lost their point in the developments of the last half century. Many of his conclusions are long since axiomatic. But even after taking account of all that is today somewhat unprofitable, there remains a wealth of trenchant truths that are as applicable today as in the past age, and as worthy of profound consideration.

THE EDITOR.

TERRY: A TALE OF THE HILL PEOPLE. By Charles Goff Thomson, Late Lieutenant-Colonel, U. S. Army, formerly Assistant Director of Prisons for the Philippine Government. The Macmillan Co., New York. $2.00 net.

Terry, a New England lad, is chosen for the hero of this Philippine romance. Although he does not conform strictly to the orthodoxy of his townsmen at home, nevertheless he takes with him to the tropics the high principles and idealism of his native clime. A winning personality, firmness of purpose, and unbounded enthusiasm for his work among various tribes carry him to the goal of his ambitions, the establishment of friendly relations with the Hill People. This is only achieved after surmounting great difficulties, which enable the reader to study existing racial problems.

The background of tropical loveliness is so atmospheric and real that one is all but transported to those Southern Seas. A charming love story is woven throughout, but is not essential to the interest of this volume, which owes its merit to its vivid portrayal of Philippine life. The whole is a tribute to the zeal and splendid accomplishments of the Philippine constabulary. It shows how this organization is carrying on most efficiently the great task of civilizing and humanizing these primitive people.

MRS. H. T. BULL.

HINDENBURG. By General Buat. Paris, Librairie Chapelot, 1921. Price, $2.00 net.

From the fruitful pen of this highly endowed French military writer comes a companion volume to his recent "Ludendorff." With easily flowing style he follows the interesting career of the greatest of the German leaders in the Great War. In the chapter entitled "*Les Traits Essentiels,*" after a general discussion of the pre-

dominant characteristics of the Field Marshal, he devotes considerable effort to an exposition of his ineptitude for political power and statecraft, and holds up to ridicule many of the specious arguments offered by the Prussian in his *"Recollections,"** recently published.

With irrefutable logic the author brings down Hindenburg's strategy of the western front like a house of cards upon his head, in contrast to the steady, uninterrupted consuming of German reserve divisions that occupied the Allies under the incomparable leadership of Marshal Foch. One bears in mind, of course, that the unsympathetic source of this study of Hindenburg cannot fail of being critical to a fault. Notwithstanding, the merit of this French contribution to the study of the war is striking, and deserving of the attention of any American military student to whom the French language is not an obstacle. THE EDITOR.

THE CASE OF KOREA. By Henry Chung, Ph. D. Flemming H. Revel Co., New York, 1921. Price, $3.00 net.

The author is a Korean who has been educated in the West and has imbibed the true spirit of its institutions. He is a scholar, a member of the Commission to America from the Republic of Korea, and is able to present authoritatively the case and aspirations of his people.

The English language has responded remarkably to the pen of an Oriental, giving an exceptionally readable and idiomatic work. It is not technical. It has not the wearisome monotone of the "reports" which saw publications during the war. It is a clear, logical presentation of a story full of human interest, in a shape for quick, easy reading.

Faithfully and with striking absence of the passion, prejudice, and partiality which might have been expected, the author calmly presents with all the fullness of hitherto concealed facts, the destruction of the independence of a small and peaceful nation by a powerful and warlike neighbor pursuing its own advancement. Just enough of Korea's four thousand years of history is sketched to show her original standing as a free and independent nation at the opening of her international relations in the treaty with Japan, in 1876; the treaty between Korea and America *binding the United States to exert its good offices in case of oppression of Korea by a third power;* the murder of the Korean queen; the treaty of 1904, that gave Japan the military foothold, which in disregard of her obligations she never relinquished; the "made in Japan" protectorate of 1905; the final audacious annexation in 1910. Co-ordinately the author shows that all the while a policy of penetration had been pursued, and now became one of ruthless "Japanization," going to extremes of exploitation and oppression beside which the alleged war excesses of Germany in Belgium are trifling.

Small wonder, then, that the spirit of the nation rose in March of 1919, after the death of the Korean Emperor under circumstances suspicious at least. The people, deprived of weapons, could not "take arms against a sea of troubles," but opposed them by an organization which had thoroughly permeated the nation to the bewilderment of the too-shrewd oppressor, and by a method unique in the annals of revolution—passive opposition.

Skillful publicity presented the news for foreign consumption, as it had all that had gone before and has come after. Through the stern repression that followed, stopping at neither massacre nor devastation, the national spirit survived, was crystallized in the Republic of Korea, and continues to aspire to complete restitution of territory and independence.

The book presents evidence which, though occasionally indirect, comes from separate sources, including even official Japanese documents, and is consistent. It makes a clear case. At this most opportune time of the negotiations for the renewal of the Anglo-Japanese alliance and for the settlement of questions between Japan and the United States, the Hermit Kingdom presents her claim to the right to pursue her own national existence and destiny, pinning her faith to her American "big brother" under the treaty of 1882. ROBERT C. HILLDALE.

* OUT OF MY LIFE. By Field Marshal Von Hindenburg. Two volumes (translated). Harper & Bros. $7.50 net.

HIGHLAND LIGHT AND OTHER POEMS. By Henry Adams Bellows. The Macmillan Company, New York. Price, $1.75 net.

The title poem of this little volume of verse is its beacon-fire. With a vigorous setting of the hurricane-swept sea the lesson which it essays to teach—of a strong, natural, extra-ecclesiastical faith in the world of men—is beautifully and forcibly presented.

"We trust each other," he says, "and the best
Life shows is only this." . . .

And again,

. . . "we live
To earn the hopes men have of us;"

Discipline, *esprit de corps,* are empty words, "joint responsibility of troops" a mockery, if we have not developed this faith in our fellows.

"We can win courage only thus,
And have but just the faith we give."

Through its underlying inspiration is the peril of the seas rather than the peril of battle, this is a true song of the soul for men who would lead men into battle to put in their hearts.

The author's original conception of the true significance of "The valley of dry bones" that Jehovah set Ezekiel to exercise his prophecies among is presented in the poem of that title, and is a lively study of the sweep of inspiration over these "busy bones" that

. . . "sometimes fought
Without passion or knowing or caring why."

until, with the breath of the prophet, came to one:

. . . "passion for a cause, and straight
He rose to meet the clamorous alarm
Of battle, and the burning joy of hate,
And victory, and pride;
And smiling he went forth, and fought, and died."

Undrowned affords a glimpse into a very human mind which eternity threatens to engulf momentarily—which, notwithstanding, continues to mind its p's and q's with respect to things mundane.

Readers will find a number of the other poems gathered together in this attractive little volume of considerable merit. THE EDITOR.

THE NEW JAPANESE PERIL. By Sidney Osborne. The Macmillan Company, New York, 1921. Price, $2.00.

This essay by Mr. Osborne is both timely and interesting. Within the next few weeks the Anglo-Japanese alliance of 1911 will be either renewed in some form or rejected. The position of Great Britain is unusually delicate. The security of her possessions and the maintenance of her prestige in the Far East depend in a great measure upon her relations with Japan, while, on the other hand, her so-called entente with the United States appears to be seriously threatened in case she draws too close to the Mikado's empire. The author gives a short but accurate account of conditions in the Orient since the rise of Japan as a great power, and in his interpretation of events he is frankly anti-Japanese. In his indictment of Japan's policy in the past there is nothing that is new, but his chapters on the Anglo-Japanese alliance and its dangers to America are fresh and suggestive. He clearly points out how the fast-increasing economic superiority of the United States over Great Britain might well embitter relations between the two countries, and that in the trade war that has even now begun Great Britain could easily consider that her future as a world power directly depended upon a close understanding with Japan to exploit the markets of the Far East for their exclusive advantage. When one considers that in past years Great Britain has consistently played the game of *Realpolitik* and has seldom sacrificed her interests for mere sentimentalism, it is not difficult to appreciate the author's contention that there would be considerable menace to the United States in any renewal of the Anglo-Japanese alliance. A feeling of "hands across the sea," etc., has easily subsisted through the years, while the United States was merely developing its potential strength. Will this feeling continue during a period of bitter commercial strife? CHARLES C. TANSILL,

Professor of History, American University, Washington, D. C.

AT THE SUPREME WAR COUNCIL. By Captain Peter E. Wright, late Assistant Secretary, Supreme War Council. G. E. Putnam's Sons, New York. (Price, $2.50 net.)

In "As You Like It" the soldier is described as one

> "Seeking the bubble reputation,
> Even in the cannon's mouth."

Many a military chief has tasted the bitter gall of discredit and disparagement, and many reputations acquired at the cannon's mouth have indeed been bubbles that have burst. Whether the claim to glory of such leaders as Haig and Robertson and Pétain is invalidated by the startling disclosures of the author, who, though occupying a subordinate position, was evidently in a good one to get the proofs, or whether the facts he presents so fearlessly are only part of the truth, the reader must try to determine for himself.

This book came into the hands of the editor a few days before this number of the JOURNAL goes to press, and it seemed impossible to do more than give it a hasty examination in order to call the attention of JOURNAL readers to whatever merit it might appear to possess. But the gripping power of this narrative—the drama of dominant personalities, the tragedy of Cambrai, that is so presented that the reader almost involuntarily shudders with the retrospective fear of a lost war—was fascinating and irresistible and claimed attention to the end.

This book will be widely read and widely discussed. In British circles there seems to be a tendency to evade the issue it presents. Perhaps this is exactly what

could be predicted of the British public. In a parallel American case there would be congressional investigation without end—and without result. Who can say? Lloyd-George, who surely is in a position to know the truth, says: "This is the *best* thing that has yet been written about the war." THE EDITOR.

JIM LOFTON, AMERICAN. By George Brydges Rodney, Lieutenant-Colonel, U. S. Cavalry. The James A. McCann Company, New York. $1.90 net.

The Regular Army man leads such a matter-of-fact existence that, with a few exceptions, the Army roster has not generally been regarded as a fruitful source of writers of fiction. A notable exception, however, is Lieutenant-Colonel George Brydges Rodney, 15th U. S. Cavalry, who, in "Adam's Earth" and "Seven Cities of Cibola," published in *Adventure*, has given the lovers of tales of adventure two delightful stories illustrating the greed for gold, with scene setting of the mesquite and cactus of northern Mexico and southern Arizona.

His latest effort is a strong labor-capital story of the coal mines of Colorado during the coal strike of 1914, and deals with the iniquitous activities of the United Mine Workers of America. He points out the unfairness, not to say folly, of the employment of State troops in such situations, where, in the preservation of law and order, State troops may be called upon to fire on their personal friends and neighbors. Capital comes in for its share of criticism, in the description of the company stores of the mine owners, where exorbitant prices are charged to their employees, and in the disclosure of dishonest practices in the weighing of the coal, on the basis of which the miner is paid for his work.

Those who are interested in the present very live question of immigration—and who is not?—will heartily agree with Colonel Rodney that our national entity is only to be preserved by more restrictive immigration laws, now, happily, an accomplished fact. He illustrates the point by the reply which one of his characters, a burly Slav, gives to a National Guard corporal sent among a crowd of foreign miners to make an arrest: "Who you tink you fellows be? S'pose you b'long Guv'ment. H'm! Bime-by zis dam' Guv'ment tink it own dis place—dis whole country!"

As a readable story based on very live sociological subjects, I take pleasure in recommending Colonel Rodney's "Jim Lofton." WILLIAM C. BROWN,

Colonel, U. S. Cavalry, Retired.

PERIODICALS

Revista del Ejercito y Marina, January, 1921.

This number contains an article by Leobrado Butillos, entitled "The Battle of Carrizal, June, 1916." As two troops of U. S. Cavalry were engaged in this battle, American cavalry officers may find interest in the Mexican account.

Revue de Cavalerie, March-April, 1921.

This number of the French *Cavalry Journal* is a particularly valuable contribution to the cavalry literature of the World War. Its contents are briefed as follows:

"La Cavalerie d'hier et de demain," by X, discusses the adoption of dismounted fire action during the war; it is a general article on the employment of cavalry.

Study (by Lieutenant-Colonel Villemont) of a hypothetical employment of the

German Cavalry, March 26 and 27, in the Boye-Montdidier region. This admirable speculative study has been translated by Major H. R. Smalley and mimeographed at the Cavalry School. The author maneuvers the German Cavalry under most favorable conditions, supposing them to be well informed as to the allied dispositions.

Raid of the 5th Cavalry Division in the rear of the German Army at the Battle of the Ourcq, by Commandant de Cosse-Brissac.

The French Cavalry in Palestine, by Lieutenant Zamit, followed by comments upon these Palestine operations by Lieutenant-Colonel Lebon.

"Faits de Cavalerie" includes a short account of a patrol action on the 10th of September, 1914; the attack of Le Maisnil, October 17, 1914, by a dismounted squadron reinforced by artillery, and a successful saber charge by a platoon of 24 hussars against a squadron of 120 German chasseurs.

The Military Engineer, May-June, 1921.

The *Military Engineer* for May-June has excellent half-tone likenesses of Field Marshals Foch and Haig and of General Pershing, illustrative of an article on the Army uniform by Mayor Aymar Embury, 2d, with comments by other well-known officers. A discussion of the Vicksburg campaign is by Major-General Peter C. Hains, U. S. A., retired, who took part in the events which he describes; Major-General W. G. Haan writes of the Organized Reserves; Major D. H. Connolly, General Staff, on "What and Why is a General Staff?" and Major F. B. Wilby, C. E., discusses the "Functional Organization of the Engineers." The duties of engineers in an advance are covered by solutions of the prize-map problem presented in an earlier number. The bridges of Paris are discussed by Lieutenant Carl L. Rimmelle.

The Cavalry Journal (British), April, 1921.

The account of the Fifth Cavalry Brigade at Cerizy August 28, 1914, by Lieut.-Col. R. G. H. Howard Vyse, C. M. G., D. S. O., Royal Horse Guards, is a lively narrative of an action which deserves study as an example of the combined use of mounted and fire action. The British brigade, acting as flank guard cavalry, stopped and by its brilliant offensive action routed the German cavalry vanguard of the large force of all arms which was pursuing the British 1st Army Corps, thus bringing this force to a standstill for four hours.

A most noteworthy contribution to this number is the account of "The Operations of the Mounted Troops of the Egyptian Expeditionary Force" (continued from the preceding number), by Lieut.-Col. W. J. Foster, C. B., C. M. G., D. S. O., Australian Military Forces, which includes studies of: "The Battle of Romani," the delaying action fought by the 1st Light Horse Brigade, and after the defeat of the enemy the pursuit by the British Cavalry; the "Raid on Bir el Mazar," in which the cavalry brigades made marches of from 60 to 100 miles in four days, in intensely hot weather over very heavy sand; and the attacks of the Mounted Division on Rafa and Magdhaba.

Polo

THE INTERNATIONAL MATCHES

The big polo event of the season has been the International Tournament, played at Hurlingham, England. The American team, headed by Captain Devereaux Milburn, and including J. Watson Webb, Thomas C. Hitchcock, Jr., and Louis Stoddard, won with a fair margin both of the first games of the match, winning the cup for America. On the British team were Colonel H. A. Tompkinson, Major Barrett, Lord Wodehouse, and Major Lockett. The games were full of sensational riding and skillful mallet-work, and were noted for absence of fouls. The Americans' victory was based on their individual and collective resourcefulness. Three times during the last match they changed their system. At first they used long, hard strokes, which went for long shots. Then they started a short dribbling and passing game. The second change was back to the old Meadowbrook system of playing the ball around the boards, then out in front of the goal to the waiting teammates. This trio of systems, used alternately, puzzled the English team, which could not divine what to expect next.

AT POTOMAC PARK

This excellent and popular polo field has been the scene of many hard-fought games this past quarter. In the spring tournament three teams representing the War Department Polo Association, together with three teams from Fort Myer, Va., and a Freebooters Team, participated in a series of games in which the Freebooters Team, composed of Lieutenant-Colonel Margetts, Majors Blunt and Erwin, and Captain Waters, won the trophy. The playing of Colonel Margetts was particularly able. Throughout this tournament the competent refereeing of Lieutenant-Colonel H. R. Cootes, 3d Cavalry, and Major C. L. Scott, of the Remount Service, excited much favorable comment.

Following this tournament and during the target practice of the commands at Fort Myer, practice games continued to be played by the several teams, while the War Department First Team, composed of Majors Quekemeyer, Millikin, Potter, and Groninger, played in two tournaments at the Philadelphia Country Club and the Bryn Mawr, Pennsylvania, Country Club.

As this number of the JOURNAL goes to press a tournament is in progress in which the teams of the War Department and of Fort Myer are pitted against a team of Cuban army officers from Havana. The visitors have been making a creditable showing.

FIFTH CAVALRY

Polo stills retains its popularity. Games are played each Sunday afternoon. During target season no weekly practice games are practicable, so that the ponies have been getting a much needed rest. The enlisted men have organized a polo team and the players have made a creditable showing. They hope to have an opportunity some day to compete against some other regiment's enlisted team.

ELEVENTH CAVALRY

January of this year saw the resurrection of the Regimental Polo Team, which had been lying dormant since the regiment left Fort Oglethorpe, Georgia. A few individual players turned out last fall for practice and games on the Del Monte Field, but it was

difficult, even with the civilian players at the hotel, to round up enough players for two teams. In January a strenuous effort was made to organize a team to take part in the tournament to be held at Del Monte, commencing January 29. A practice field was constructed on Moss Beach, a Polo Detachment was organized, and all horses which had been used for polo were assigned thereto for conditioning and training. It was with great difficulty that sixteen ponies were finally selected from this detachment to mount the team which was scheduled to play the first game of the tournament. Although the showing was creditable, our ponies had neither the speed nor handiness to compete with the mounts of our civilian opponents. We won our first game, which placed us in the finals, but were unable to carry off the cups. Most of our players took part in the invitation games which were held throughout the tournament and the experience gained was invaluable.

On March 19 the Spring Tournament started, the following teams participating: Eleventh Cavalry, Midwick, Point Judith Tigers, Del Monte, Wichita. The team lost the two games played by one goal each. A great improvement, however, was noticed in the ponies and the stick-work of the players; also the team-work. This tournament really did more for polo than any one thing, as evidenced by the enthusiasm shown during and since the tournament.

The Polo Detachment has been augmented by the best horseflesh which is available. However, the best we have is only fair, and there is an urgent need for mounts suitable for polo purposes if we expect to compete with the civilian teams on the western coast.

In January it was hardly possible to get out six players for practice. At present we have sufficient for four teams. During the summer the Del Monte Polo Fields have been turned over to the regiment and an effort is being made to develop ponies for the July tournament, in which we expect to make a creditable showing.

TWELFTH CAVALRY

The Twelfth Cavalry Polo Team, which was organized in January, has played four games to date, all with the Thirteenth Cavalry. While we have been defeated by them each time, the last game, played on March 8 at this post, showed a marked improvement in our team. The final result was 8 to 7 in favor of the Thirteenth, and the game was close and hard fought throughout. Considering the fact that both our players and horses are green, we feel much encouraged over the progress made. Great enthusiasm is shown and from ten to fifteen men are out for practice every day. The enlisted men's team is doing splendid work. In the two games, both with the Thirteenth enlisted men's team, which have been played since the team was organized in February, we have won by scores of 7 to 2 and 9 to 1, respectively. The line-up of the team is Sgt. Strach, 1; Sgt. Mulvaney, 2; Sgt. McGeehee, 3, and Sgt. Conda, 4. The brilliant stick-work of Sgt. McGeehee and the daring riding of Sgt. Mulvaney were notable in both games.

THIRTEENTH CAVALRY

Polo players and ponies are showing great improvement. There is keen competition among the officers for places on the regimental team, and there is some change in the line-up in nearly every game with the 12th Cavalry, the only organization near enough with which to play regular games. The target season has slowed up the playing, but not the enthusiasm of the officers and men.

A handicap tournament between three officers' teams and three enlisted men's teams has been postponed until the return of the 1st Squadron from its practice march to Laredo. Cups will be given to the members of the winning team.

The enlisted men's teams are doing splendidly. They started in green, with no ponies, on the first of March, and in their two games with the 12th Cavalry have put up good, clean games. The 12th Cavalry won both these games, but by very close scores. The regimental team playing the officers' team of the 12th Cavalry on the same dates as the enlisted men's games won both of their games.

The polo stables have been moved to larger quarters and there are now thirty-seven fairly well-trained ponies in the string. With every officer interested and playing hard, the 13th Cavalry expects to make a good showing at the Corps Area Tournament to be held this summer.

FOURTEENTH CAVALRY

Polo was actively taken up in the regiment on April 1, and in spite of a very late and wet spring good progress has been made.

The policy has been to get as many officers playing the game as possible, and the polo manager tentatively organized four teams from the nineteen officers who have been actively engaged in practice. Only eight of these nineteen officers have played polo before, and in organizing the teams the players were assigned so as to make the four teams as near equal in strength as possible, the object being to keep up the interest and rapidly teach the new men the game. Everything considered, the results have been satisfactory.

The regiment had about thirty-five prospective ponies to begin with, some of them having played before, and recently twenty additional horses have been received which are expected to develop rapidly. An excellent polo field, believed to be one of the best in the Army, has been made on the parade ground, and Round Robin games are played every Sunday afternoon. Practice is held four days per week when weather permits.

There is an excellent polo spirit in the regiment and it is expected that at least one strong team to compete with outside teams will be developed before the summer is over. However, it is believed that the policy of keeping four teams going as long as possible is a good one and will in the end be for the best interests of the game in the regiment.

HEARD ON THE BOAT—EN ROUTE TO HURLINGHAM

One day when we were passing the Grand Banks two men were leaning over the rail—one short, the other tall. They were, I suppose, "Americans," but in their faces was that touch of the East now become so prevalent about New York—that touch which brings to one's mind Palestine in all its glory. Men of means, no doubt, but they looked more like pawnbrokers taking an afternoon off at the polo grounds. The tall one was speaking. It was difficult to hear all he said; for, as is the way with the true type of "polo grounder," a cigar occupied a prominent position in his vocal organs.

"But, me boy (*vait vile she rools not*), *there!* (*I knew so it would come!* Spray in mine face!) Me boy, how many innings do them polo fellers bat, yes?"

And the short one answered him:

"Eight innings; but it is sweller to call them 'chuckkems'."

The tall one pondered for a moment, and then spoke again:

"But that is not a fair thing, Abe; have we not paid eighty dollars for to sit down in those bleachers? And now vot? They play them not even a full nine-inning game. I shall go it to court! Vatch me my dust!"—*Eric Hatch, in "The Rider and Driver."*

Regimental Notes

FIRST CAVALRY—Camp Harry J. Jones, Douglas, Arizona

Colonel A. V. P. Anderson, Commanding

The First Cavalry Branch of the American Remount Association, the first branch to be organised, was granted its charter by the parent association December 2, 1920, and has a membership of twenty-five. The A. R. A. is presenting a trophy to be competed for at regimental horse shows, under such conditions as may be decided upon by the association, and has donated funds to start a Remount Library.

The last regimental horse show was held on March 30, 1921, and comprised nine events, including section, platoon, four-line team, and rolling kitchen contests and jumping and equitation, as follows: two ladies' events, one of five and one of six entries; two officers' events, with one of twelve and one of sixteen entries, and one enlisted men's event, with twenty-four entries. It is planned and preparations are under way to hold another horse show during the early part of next August. It is the intention to have more strictly horse-show events at this show.

Fort Apache, Arizona, has been garrisoned by troops of the 1st Cavalry for the past two years. Troop "F," now stationed there, is under orders to rejoin the regiment, being relieved by a troop from the 10th Cavalry.

Practice marches by troop are required for all organizations in the regiment, one troop going out each day and returning the next. The marches average about eighteen miles and include simple tactical problems, instruction in care of animals, equipment, and self in the field and bivouac at night. A strenuous target season is approaching completion. The new rifle and pistol manuals are considered the best the Army has had to date.

The polo situation is improving and the outlook is promising. The interest and active participation necessary to produce the desired results is an assured fact and daily practice is the rule. The regular Sunday games are well attended, drawing players from units other than the cavalry at this station. A polo stable has been instituted, where the most promising ponies, about forty in all, are trained and cared for with a view to ultimately getting together the best string available. Local mercantile firms have contributed a set of cups for a tournament to be played in June.

SECOND CAVALRY—Fort Riley, Kansas

Colonel John S. Winn, Commanding

A composite troop (war strength) was organized on March 19 for demonstration purposes under the Department of Cavalry Weapons, The Cavalry School. Each of three troops of the Second Squadron furnished a rifle platoon and a squad for the machine rifle platoon.

The troop was instructed in the principles of the Cavalry Service Regulations by members of the faculty of The Cavalry School.

The new drill is based upon two guiding principles, the integrity of units and leadership in close as well as in extended order. The basis of the system for dismounted attack corresponds to that upon which the infantry attack is founded.

Rapid progress was made in the drill and the troop has been used for demonstration purposes before the various classes at The Cavalry School since early in April. Such a keen interest was taken in the new drill by the other troops of the regiment that the regimental commander directed the organization of a rifle platoon and a machine rifle squad in each of the other lettered troops.

The Regimental Competition for tryout positions on the Cavalry and Engineer Rifle Team was held from May 16 to 24. Unfortunately the weather conditions were bad, due to a very strong fishtail wind, and only average scores were made. The high score was made by Major Kenna G. Eastham.

Regimental Day, May 23, the eighty-fifth anniversary of the organization of the regiment, was observed with appropriate ceremonies. The regiment was formed in a hollow square and, after a brief invocation by the chaplain, the regimental commander, Colonel John S. Winn, delivered a most interesting and instructive address on the history of the regiment. The remainder of the day was devoted to athletic events, including a very creditable exhibition of horsemanship.

THIRD CAVALRY—Fort Myer, Virginia

Headquarters and Third Squadron, Colonel William C. Rivers, Commanding

The great event of the spring was the review of the Fort Myer garrison, on May 19, by the President, accompanied by the Secretary of War, the Assistant Secretary of War, and other prominent persons. The Secretary of War wrote the Regimental Commander, expressing the pleasure of the President at the condition and training of the command.

Officers of the 3d Cavalry were represented on each of the three teams from Fort Myer participating in the Spring Polo Tournament in Washington.

Officers and men and detachments took a prominent part in the National Capital Horse Show at Washington during May, winning many ribbons and eliciting much praise for their work. Major George S. Patton's *Allamande* won ribbons in seven classes, bringing in a blue ribbon in the Thoroughbred Saddle Class and the Open Charger Class against fourteen other entries in each. Lieutenant-Colonel H. N. Cootes, 3d Cavalry; Major Patton, on other mounts; Captain John T. Cole, 3d Cavalry; Captain Woodbury F. Pride, 3d Cavalry; Captain R. I. Sasse, 3d Cavalry; Captain John A. Hettinger, Cavalry, and Lieutenant Jones, 3d Cavalry, were also ribbon winners.

Fort Ethan Allen, Vermont, Detachment

THIRD CAVALRY—Colonel Edgar A. Sirmyer, Commanding

On May 19, the 75th anniversary of the "Old Third Horse," the whole world seemed to smile on Fort Ethan Allen—and the smile still lingers. The entire program showed forethought, tireless and painstaking preparation, and consideration for the guests that thronged the parade.

Before reveille the E. and R. band marched around the post and with stirring martial airs heralded the occasion for the "Third" Cavaliers to come forth and show their prowess and skill in athletic contests and horsemanship. At 9 o'clock the post commander, Colonel Edgar A. Sirmyer, cavalry, addressed the assembled command on the traditions and history of the Third Cavalry, the regiment to which he was first assigned on March 8, 1898. The Colonel also touched on discipline and the splendid *esprit de corps* that has always existed in the Third Cavalry.

A baseball game and dismounted field events featured the morning program. At 2.00 p. m. the post polo team, by a score of 5 to ½, defeated the Norwich University's team in a hard-riding and spectacular game. The polo game was followed by a horse

show. In the evening the regimental dinner-dance in the auditorium of the post administration building was most elaborate and enjoyable. There was also a dance in the post gymnasium for the enlisted men and attended by over two hundred couples.

The command is at present being put through an intensive course on the range prior to the beginning of the R. O. T. C. Camp, which will be held here from June 16 to August 1. The candidates will represent the following State schools:

University of Illinois, 86; Michigan Agricultural Institute, 13; Culver Military Academy, 27; Virginia Military Institute, 33; Massachusetts Agricultural Institute, 6; Norwich University, 56; University of Georgia, 46; University of Arizona, 2; New Mexico Military Academy, 1—a total of 270.

All of the New England and New York National Guard Cavalry will encamp here from July 31 to August 15 and both have a preliminary course of instruction here June 7 to 12.

FOURTH CAVALRY—Fort Brown, Texas

Colonel Howard R. Hickok, Commanding

Major-General Joseph T. Dickman, the Corps Area Commander, arrived at Fort Brown, May 18, 1921, on his annual inspection. An inspection and review was made of the troops at this station, and General Dickman left early on the following morning to visit Mercedes, McAllen, Sam Fordyce, and Fort Ringgold.

An endurance test for officers was held on the night of May 26, 1921. The ride began at 6.00 p. m. and covered a distance by the charted route of approximately 70 miles, starting and ending at Fort Brown. The conditions of the race and the points from and to which messages were to be carried were not made known until the time set for the race to start, at which time maps were given out and the conditions of the race made known. The last officer to start left at about 6.15 p. m., and the winner, First Lieutenant M. M. Jones, 4th Cavalry, returned to Fort Brown at 3.05 a. m. The mounts of all officers were inspected prior to starting on the test, at which time the riders were required to certify that the horses they were riding had been conditioned for one month prior to the test. All mounts were inspected at Fort Brown at the completion of the test, and the final inspection was held at headquarters at 8.00 a. m. on the morning of May 28, 1921, at which time the winner was presented with a silver loving cup which was given by Lieutenant-Colonel O. A. McGee, 4th Cavalry.

A very successful horse show was held at this station June 1, 1921.

Polo practice is held three times a week and considerable improvement is shown this spring. Match games are played as often as sufficient numbers are available. On June 1 Fort Brown played Fort Ringgold a six-period polo game at Fort Brown, Texas. Notwithstanding the fact that the regiment is stationed at three different stations and lacks sufficient numbers of suitable polo mounts, the 4th Cavalry is confident that they will be able to send a team to Fort Sam Houston which will make a creditable showing in the fall tournament.

FIFTH CAVALRY—Marfa, Texas

Colonel James J. Hornbrook, Commanding

On April 16 Troop "M" (Captain M. F. Meador, commanding) left Marfa for duty "in the field," relieving Troop "L" (Captain John D. Hood, commanding). A detachment of the troop took station at Presidio, Texas, Troop Headquarters, and twenty men remaining at La Jitas. During the month of April schools of instruction were held in "Rifle Marksmanship" for officers and non-commissioned officers. Target practice began May 1. Much interest is being taken in firing, and good results have been attained

during the preliminary firing. During the month of May schools of instruction in "Pistol Marksmanship" for both officers and non-commissioned officers were held.

Very few men are being discharged and the regiment is now a well-trained unit. Marfa is one of the best stations in Texas, with modern conveniences, good barracks, and stables and excellent climate, with plenty of diversion. Men are given frequent passes for the week ends for hunting, etc. Many furloughs are granted and the command seems well contented. Dances for officers and enlisted men are held every other week, officers and men alternating.

Motion pictures are shown three times each week in the Service Club, boxing and wrestling bouts are held one night each week in the open air, and two baseball leagues of eight teams each are well organized. They are known as the Northern and Southern Leagues. Much interest is being taken in baseball and there is keen rivalry. There is good material and some excellent players are being developed.

On May 17 the blacksmith and wheelwright shop of the Quartermaster corral were discovered to be on fire. All animals were saved, but these shack buildings were destroyed with contents. The fire was confined to these two buildings, due only to the good work of the Station Fire Department and "Bucket Brigade" of the Fifth Cavalry.

SEVENTH CAVALRY—Fort Bliss, El Paso, Texas

Colonel Walter C. Short, Commanding

Athletics continue to play a very prominent part in the life of the regiment. Every Wednesday afternoon is devoted to this relaxation, and the rapid development of the regiment both individually and collectively is very apparent. Boxing is a particularly favorite form of athletics. Every Monday night the program consists of from ten to fifteen bouts, with many challenges that cannot be put on, due to lack of time. It will soon be necessary to run two programs a week to take care of all who aspire to pugilistic laurels. A big track, field, mounted, boxing, and swimming meet is scheduled for the entire garrison of Fort Bliss on June 23 and each one is straining every nerve to excel over last showing, when we took six out of seven cups offered, losing the relay cup to the 82d Field Artillery team.

The polo team continues to be successful in all local games. Constant practice keeps the efficiency of the team at a high state of excellence. The team has been invited to participate in the tournament at Colorado Springs.

Twenty-three officers and men are competing to make the Regimental Rifle Team for the coming competitions. The best shots in the regiment were picked. The range is very difficult, but there have been some excellent scores made.

Organization Day in memory of Custer's last stand was held June 25. It is a day held sacred by the 7th Cavalry, and is featured by a staging of the spectacle of Custer's last stand at the Battle of Little Big Horn.

NINTH CAVALRY—Camp Stotsenburg, P. I.

Colonel Edward Anderson, Commanding

On February 15 the Ninth Cavalry started on strenuous maneuvers in conjunction with the First Philippine Field Artillery (Provisional Mountain). The area covered embraced the rugged and mountainous terrain to the north of the post, from the Bamban River across the bamboo and fern-filled valleys and cañons of the First, Second, and Third Rivers to the barrios of O'Donnell and Capas. The route led for the most part over steep and narrow trails. At one place was encountered an ascent of six hundred feet in a quarter of a mile, ending in a hog-back so narrow that the slightest deviation

to either side meant falling over the cliff; and here several horses, through fright and exhaustion, slipped or stumbled on the rocky trail and went crashing down the precipitous slopes to instant death.

One of the tactical positions occupied during the maneuvers was near the barrio of Bamban, where for many days Aguinaldo resisted the American advance under General Bell, until the latter, guided by the Negrito chief Lucas, found his way through the Spanish Cut and turned the right flank of the Insurrecto General.

The target season began March 1 and is still in progress.

The 9th Cavalry baseball team recently won the Army Baseball League championship of the Philippine Islands, in which eight teams participated. The same teams are now starting a short series to decide which team shall represent the Philippine Department on a tour of China and Japan.

A boxing tournament, in which about fifty men will participate, is being arranged.

The Educational and Vocational Training schools seem to be popular with this regiment and about seven hundred men are now attending.

Our polo team, which has consistently won everything in the way of tournaments in this part of the world, has been practicing for the big tournament about to take place in Manila in honor of former Governor General Forbes, who has just arrived with General Wood.

TENTH CAVALRY—Fort Huachuca, Arizona

Colonel Edwin B. Winans, Commanding

There has been no change of station during this quarter. Troop "I" remains at Naco and is the only one absent from our happy home. However, orders have been received that the 10th will again garrison Ft. Apache and Troop "F," under command of Capt. James Duke, will leave on June 2 for this duty, expecting to make the march in ten days.

The Regimental League Baseball season is in full blast, every game being bitterly contested and drawing capacity crowds. On June 1 Headquarters Troop, the Machine-Gun Troop, and Troop "D" were tied for first place, with 1,000 per cent each of games won.

The target season has started, and, unless all signs fail, the rivalry between troops and individuals for high scores and first place in the regiment is going to be intense.

The regiment's polo horses are undergoing a thorough and systematic course of training and there are some excellent prospects among them.

The 8th Cavalry polo team honored the 10th with a visit May 13 to 16, and two exciting games were played, the first resulting in a 5 to 2 victory for the 10th. In the second game the 8th won by a last-minute goal, the score being 9 to 8.

ELEVENTH CAVALRY—Presidio of Monterey, California

Colonel John M. Jenkins, Commanding

Officers and men participated in a series of field events on March 31, which included jumping for form, won by Private John McCoy, Headquarters Troop; a potato race, won by Private Robert Cassidy, Troop "I"; a team jump, won by a team from Troop "H"; a tent-pitching race, won by Sergeant Button and Private Fluker, Troop "C"; a driving contest, won by Private Rusek, Supply Troop; a litter race, won by Privates Cox and Boyce, Medical Department; jumping for form (officers), won by Captain Charles R. Johnson, 11th Cavalry.

In a series of field events held on May 31, 1921, the jumping contest for enlisted men was won by Sergeant John H. Mayes, Troop "H"; the jumping contest for officers was won by Captain Harry A. Buckley, 11th Cavalry; a jumping contest over 4-foot jumps

for enlisted men was won by Corporal Albert Pollock, Troop "K"; and the push-ball contest was won by a team from Headquarters Troop.

The Machine-Gun Troop left on April 28 for the Artillery Range at Gigling, California, seven miles from the Presidio of Monterey, for their annual target practice and field firing.

TWELFTH CAVALRY—Del Rio, Texas

Colonel Sedgwick Rice, Commanding

As a result of the recent inspection of the post and regiment by the Corps Area Commander the following letter was received:

HEADQUARTERS EIGHTH CORPS AREA,
FORT SAM HOUSTON, TEXAS, *April* 5, 1921.

From: Commanding General.
To: Colonel Sedgwick Rice, 12th Cavalry.
Subject: Commendation.

1. I hereby express my approval of the appearance of the buildings, grounds, and utilities of Camp Robert F. L. Michie, Del Rio, Texas, under your command, and of the efforts you are making for the sanitation and beautification of the cantonment and its surroundings. The full benefit of the work done by you and your officers will be reaped by those who come after you, who cannot fail to appreciate the disinterested character of your labor.

2. The appearance of the enlisted men and horses, as well as of their equipment, is a source of pleasure to me. The perfection of the various gaits at which the command moved in review gave evidence of painstaking and thorough work. The condition of the transportation was very gratifying.

3. It affords me pleasure to furnish this expression of appreciation and commendation for file with your record.

J. T. DICKMAN,
Major General, U. S. A.

The new officers' club which has been under construction was formerly opened with a reception and ball on the night of March 18. The officers and ladies of Fort Clark and Eagle Pass and many people from Del Rio and vicinity were invited. Colonel and Mrs. Rice and the members of the staff and their wives received. At a meeting of the officers of the regiment it was decided to turn the club into a country club, and accordingly invitations have been sent to many people of Del Rio and vicinity to join as associate members. We are prepared to give full country-club service. An outdoor dancing pavilion has been completed and the work of laying out a golf course around the famous San Felipe Springs is now under way. It is hoped that it will be completed so that the links will be ready for play in the fall. Mrs. Bedell Moore has given the use of the property for this purpose. Tennis courts are to be built near the club, and the swimming pool, which was so much enjoyed last summer, is an added attraction.

On application of the regimental commander, the Commanding General of the Eighth Corps Area has authorized the regiment to make a practice march beginning July 1. The regiment will proceed to Fort Clark, stopping there for a week for the purpose of holding practice tests and solving combat problems. Thence it is proposed to march to Eagle Pass and down the Rio Grande, following the road along the bank of the river to Laredo; thence to Fort Sam Houston, returning via the road following the line of the railroad, through Fort Clark to this post. The itinerary provides for a march of approximately five hundred and forty miles. On this march it is proposed to test the compressed forage, automobile trailers, the Thomas field-cooking outfit, and other equipment.

THIRTEENTH CAVALRY—Fort Clark, Texas

Colonel Roy B. Harper, Commanding

At present the regiment is split up, with Headquarters, 3d Squadron, Machine-Gun, and Supply Troops at Fort Clark. The 2d Squadron is at its permanent station at Fort Ringgold, and the 1st Squadron is at Laredo, having left the post May 23 on a practice march.

Major-General Joseph T. Dickman arrived at the post April 2 to make his annual inspection. Saturday afternoon was spent in making a general inspection of the post and Monday in inspecting the command. Sunday the General proved his ability as a fisherman at Silver Lake.

Baseball, weekly boxing bouts, and swimming are the principal and most popular sports at the present time. The regimental minstrel troupe has finished a very successful season on the road, having visited the 12th Cavalry at Del Rio, 46th Infantry at Camp Eagle Pass, and the commands at Camp Travis and Kelly Field.

Regimental Organization Day was appropriately celebrated May 17 and there was a varied program in the morning at Las Moras Park. At noon a barbecue picnic dinner was to have been served, and in the afternoon a circus, to be followed by a swimming contest and dancing. Inclement weather interfered somewhat with the program, and the exercises were held in the Service Club in the morning. Dancing was held in the pavilion at the spring late in the afternoon, and in the evening boxing bouts and vaudeville were staged.

FOURTEENTH CAVALRY—Fort Des Moines, Iowa

Colonel Robert A. Brown, Commanding

It has been the policy of the regimental commander to grant as many requests for troops to give exhibition drills at near-by towns as possible. Troop "A" has developed a very spectacular exhibition which was given at the State Agricultural College at Ames, Iowa, on May 20. One feature of this exhibition was the entry of the troop into the riding track by jumping off a 6½-foot ramp built over the side wall of the riding track. Another feature was the fire jump, consisting of a hurdle and arch of flames.

On May 14 the regiment was reviewed by Governor N. E. Kendall, of the State of Iowa, and his staff. The Governor complimented the regimental commander on the appearance of the regiment and the condition of the barracks and stables.

A military tournament and horse show was held at this post on May 28 and 29. Many handsome cups and trophies were donated by the leading firms of Des Moines and the competition in the different events was very keen. The general admission to the tournament and horse show was free, but a certain number of reserved seats and boxes were sold and the proceeds are to be given to the Army Relief Society.

Tentative orders have been received for a squadron of this regiment to go to Camp Grant, Illinois, for the Civilian Military Training Camp to be held at that station.

On Memorial Day the Second Squadron and the band took part in the parade in the city of Des Moines under the auspices of the American Legion, while the services at the post were conducted by the chaplain and the graves at the post cemetery were decorated by the troops remaining in the post.

SIXTEENTH CAVALRY—Fort Sam Houston, Texas

Lieutenant-Colonel Lewis Foerster, Commanding

After a prolonged period due to rainy weather, the Spring Polo Handicap Tournament, for the Kyle Cup, was brought to a close by the game between the 16th Cavalry and Headquarters Eighth Corps Area on April 17.

Line up of the 16th Cavalry Polo Team:

1. First Lieutenant Thomas T. Thornburgh.
2. Major Henry J. M. Smith.
3. Major Herbert E. Taylor.
4. Major Henry W. Hall.

The 16th Cavalry came out victorious by a score of 9 to 5, thereby winning the tournament. As the 16th Cavalry ponies have been playing polo steady for over a year and have earned a rest, they have been turned out to pasture and new ponies are being developed.

The 16th Cavalry Regimental Baseball Team stepped into first place in the Army League on Saturday, April 30, by defeating the Arsenal Team by a score of 9 to 6.

Cavalry School Notes

COLONEL GEORGE H. CAMERON, COMMANDANT

The school year at the Cavalry School has come to a close, and preparations are already under way for the third school year, which will commence on September 15.

The courses will not be greatly different next year, yet such changes as last year's experience has shown to be desirable are being carefully considered and will be put into effect if possible.

The school facilities have been worked to full capacity during the past year, and it is expected that the same condition will prevail next year, for there will be about the same number of student officers ordered here. The size of some of the classes, however, will not be the same, for it is planned to have a larger Troop Officers' Class and a smaller Basic Class. In the former there will be about 60 student officers, with a large percentage of young majors. In the latter there will be about 100 student officers.

Many requests are being received for a list of the text-books used at the school. It has been necessary to answer that, except for the Government manuals on the particular subject, text-books are not used. Instruction has been carried on by practical exercises and by lectures and either written problems or examinations. These lectures, mimeographed and distributed from time to time throughout the course, become available as texts on their particular subjects. Gradually this material, which represents research work from varied sources, is being compiled, and next year it is expected that it will be issued in pamphlets of a less temporary nature than the old mimeographed sheets.

The most interesting item to report from the Cavalry School is the result of its year's work. The officers on duty here have watched with interest the development of the graduates of all classes, but especially the development of the young officers of the Basic Class. It is gratifying to see the change that has been worked physically and mentally since last September in these young men, and it is a pleasure to be thrown with them, for they are full of enthusiasm and energy. These qualities are important requirements in our profession, and it is felt that in this respect especially our young graduates are bringing a distinct contribution to the cavalry.

The Reserve Officers Department

COMPLETING CLASSIFICATION OF RESERVE OFFICERS

The classification of the 68,000 reserve officers is being consummated by the chiefs of corps and branches of the War Department. The present plan embraces a complete record of every officer in the Organized Reserves, so that men especially fitted for an assignment may be located and called into active duty in event of national emergency.

Preliminary classification now being made is not expected to be perfect. The data in the possession of the War Department on a large number of reserve officers is very meager and mistakes in classification will undoubtedly develop. It is desirable, however, to get at once as much data as possible into the hands of corps commanders, so that the first units can be consistently organized. One of the great advantages of organizing the reserve forces in time of peace is that mistakes of classification and assignment can be tested and corrected, whereas the compilation of these most important records and assignments are practically impossible to obtain in time of emergency.

Corps Area Commanders have been making a study of their districts with a view of locating reserve units according to the local population. It is anticipated that by the time Corps Area Commanders will have completed their studies the classification cards of reserve officers will have reached each corps area, so that an assignment can be made of these officers to their respective units.

Pending final completion of the Organized Reserves, its units will comprise only skeletonized organizations consisting of the full commissioned officer personnel, as far as the number of reserve officers permit, together with such non-commissioned specialists as will enable the complete organization to expand to full war strength in the shortest possible time.

ORGANIZATION OF A RESERVE DIVISION

The following, taken from Special Regulations No. 46, describes the method of organizing an infantry division. With appropriate substitutions, it can be taken as a guide for the process which will be followed in organizing the Reserve Corps Cavalry.

The War Department has made available to the Corps Area Commander certain officers and enlisted men of the Regular Army for assignment to organizations of the Organized Reserves in his area. From their number the Corps Area Commander designates Colonel Adams to organize the 79th Division and places at his disposal for this purpose eleven other officers of the Regular Army and twelve enlisted men. Colonel Adams is also furnished with a list of the reserve officers available for assignment to this division residing in the divisional area, with such information regarding their qualifications as is necessary in order to enable him to recommend their assignment intelligently. Colonel Adams is ordered to take station at Philadelphia, and having arrived there he establishes divisional headquarters. In proceeding with the organization of the 316th Infantry in southeastern Pennsylvania, he assigns Captain Ball and one enlisted man of the Regular Army to this regiment and directs them to proceed with the organization. Colonel Adams and his staff, from examination of the records of the available officers, determine that Colonel Crew, of the Infantry Reserve Corps, residing at Lancaster, Pennsylvania, is the most available officer to command the 316th Infantry, and Colonel Adams recommends that the Corps Area Commander assign him to command that regi-

ment. This assignment having been made, Captain Ball and his enlisted assistant report to Colonel Crew. He explains thoroughly the plan of organization. As Colonel Crew resides in Lancaster, this city is designated as Regimental Headquarters of the 316th Infantry. Colonel Crew and Captain Ball carefully consider the officers available within their area and recommend assignments based on records and Colonel Crew's personal acquaintance with these officers. These assignments are made by the Corps Area Commander. While the organization of the 316th Infantry is thus initiated, similar action is being taken with the other regiments of the division and with the special units. Certain qualified reserve officers are also assigned to the Division Staff. While the officer personnel is not complete, the distribution throughout the divisional area is such that practically all units have had assigned to them at least one officer. The first stage in organizing the division has, therefore, been accomplished.

ORGANIZATION OF THE REGIMENT

Authority is now given to recruit all units to an enlisted strength, which, for the purposes of this study, will be assumed to be one-third their number of non-commissioned officers and specialists, and organization commanders are directed to recruit this strength and to complete their commissioned personnel as soon as possible. Colonel Crew and Captain Ball, after numerous conferences, which included other officers assigned to the 316th Infantry, have developed a working plan for the further organization of this regiment. Residing in the city of York, Pennsylvania, are Captain Dowd, First Lieutenant Elwell, and Second Lieutenant Ford, all holding commissions in the Officers' Reserve Corps, Infantry Section. These officers have been assigned to Company C, 316th Infantry, which was localized at York. Captain Ball proceeds to York for a conference with the officers assigned to Company C. He explains in detail the plan of organization. Captain Dowd and his lieutenants invite into this conference Mr. Gray and Mr. Hall, both of whom served as infantry lieutenants in the Army during the World War. They are urged to apply for commissions in the Officers' Reserve Corps, which they do. In forwarding their applications, Captain Dowd requests that they be assigned to Company C. Captain Dowd and his officers then call a meeting of ex-service men. Captain Ball is introduced, and plans for the organization of the Organized Reserves, and the requirements of membership in the Enlisted Reserve Corps are presented. Those present are told of their local officers who have been assigned and who will probably be assigned to this company. A number of those present served under Captain Dowd in the Army and are desirous of perpetuating their old company. With the impetus to recruiting given by this meeting, Captain Dowd and his officers are able to enlist the fifteen men which their present order authorizes. The number enlisted includes men who served in the following grades:

1 first sergeant,
1 mess sergeant,
8 sergeants, and
5 corporals.

These men are given their warrants in due course, and Lieutenants Gray and Hall receive their commissions and are assigned to this company. The first stage in the organization of Company C has been accomplished.

Captain Ball works along the same lines in the other cities which have been given companies in the 316th Infantry. He holds frequent conferences with Colonel Crew. During the progress of the organization, Colonel Crew designates the officers for his regimental staff, who are properly assigned thereto. Captain Ball is assigned as adjutant of the regiment. Battalion commanders and their staffs are assigned.

TRAINING A COMPANY ON INACTIVE STATUS

Captain Dowd finds that all of his officers and men will agree to devote one evening a month to instruction. He arranges with Captain Ball to conduct conferences on a designated evening each month and secures the use of an available meeting place for this purpose. Throughout the winter and spring these assemblies are continued, while Captain Dowd and his officers are given additional instruction whenever Captain Ball's time will permit.

Lieutenant Elwell applies for admission and is sent to Camp Benning for a special course of one month at the Infantry School.

Several afternoons during the spring the members of the company go out for technical problems, which are conducted by Captain Dowd.

The interest of the officers and men increases and all look forward to their annual field training.

TOURS OF DUTY WITH TROOPS

Several reserve officers have availed themselves of the opportunity to derive experience through duty with troops by temporary assignment to active units. This opportunity, while limited, has not up to the present been sought by many Reserve Officers and it is believed that sufficient publicity has not been given to this phase of reserve officer training. Applications for such temporary assignments should be made to the Chief of Cavalry. Periods of such duty will not ordinarily exceed two weeks and must, of course, be without pay and allowances, though temporary quarters will be available.

CAMP INSTRUCTION FOR RESERVE OFFICERS

In view of the statements which have been made, that no appropriations were available this year for camps for Reserve Officers, it will be gratifying to many members of the Officers Reserve Corps to learn that, notwithstanding this fact, it has been found possible, at least in one Corps Area, to provide a camp of instruction this year for Reserve Officers. The following letter, issued from headquarters of the 3d Corps Area, will indicate the splendid opportunity that exists this summer for the Reserve Officers of that Corps Area. It is not known at this writing whether other Corps Area commanders have been able to make similar provision.

Reserve Officers' Letter No. 2

HEADQUARTERS THIRD CORPS AREA,
FORT HOWARD, MARYLAND, *June* 10, 1921.

SUBJECT: CAMP FOR INSTRUCTION OF RESERVE OFFICERS

1. Despite the fact that no funds for expenses are available, a camp for the instruction of Reserve Officers will be held at Camp Meade this summer. These headquarters will reduce the expenses that must be borne by each officer who attends to an absolute minimum—travel and about $13 for rations—in order that, even under the present adverse conditions, the largest number may avail themselves of this opportunity.

2. Everything possible will be done to make this camp both pleasant and profitable for Reserve Officers. All the facilities of a large divisional camp will be utilized to make it a success. Cantonment barracks, latrines, bath-houses, mess halls, mess equipment, beds and bedding—all will be furnished by the Government without cost to Reserve Officers.

3. The opportunities afforded for military instruction will be exceptional. The schedule will include demonstrations showing the latest developments in material and methods of employment of infantry, cavalry, field artillery, air service, signal corps, tanks, etc.; lectures by experts, conferences on interesting subjects, including matters pertaining to the development of the Organized Reserve, and practical exercises. A visit to the Tank Center schools at Camp Meade, and if practicable visits to other interest-

ing stations near by, will be arranged. The program will include instruction for officers of all branches, whether line or staff.

In addition to these features, this camp will be a great reunion. Old friendships will be renewed and new ones formed; experiences will be related and ideas exchanged. Athletic games under the direction of an expert physical director and recreational activities will help make it pleasant. For many, the small cost will make an enjoyable vacation possible, and for those who will take a vacation any way, there is no better way to spend part of the summer.

4. The camp will be held from August 15 to August 24, both dates inclusive. In order to enable these headquarters to make adequate preparations, immediate response on the inclosed franked post-card is requested from officers who desire to attend this camp. Although this camp will be held at the same place and during the period of this year's Citizen's Military Training Camp which was described in inclosures to our letter of June 1, these two camps should not be confused, as they will be conducted as entirely separate and distinct affairs. It is hoped that many of the 8,000 Reserve Officers in this Corps Area will avail themselves of this opportunity. All who desire to attend can be accommodated.

5. The Corps Area Commander regrets that there is no appropriation for active-duty pay and allowances, but is anxious to demonstrate that we have a live and active Corps of Reserve Officers who are anxious to do their part and ready to take their place in the great machine which constitutes the Army of the United States.

COURSE OF INSTRUCTION AT THE CAVALRY SCHOOL, 1921-22

RESERVE OFFICERS' COURSE

	Subject.	Hours. Conferences and lectures.	Practical exercises.	Review examinations.
Department of Horsemanship.	Equitation and horse training	*	*	3
	Hippology and stable management	20	5	1
	Harness and transportation	4	4	..
	Horseshoeing	6	6	1
	Marching	6	6	..
Department of Tactics.	Minor tactics	22	34	..
	Liaison	6	4	..
	Cavalry drill	..	48	..
	Marching and camping	..	6 days	..
Department of Cavalry Weapons.	Musketry	6	23	2
	Machine rifles	3	11	1
	Pistol	..	28	..
	Saber	..	21	..
Department of General Instruction.	Map-reading	8	6	13
	Riot duty	6	..	2
	Lectures on cavalry	10	..	..
	Leadership and discipline	5	..	..
	History	9	..	..

DEPARTMENT OF HORSEMANSHIP

Equitation and Horse Training.—This course includes riding with and without stirrups in riding hall; riding across country; elementary equitation to include the training of a remount for duty in ranks; saddling; conditioning of animals; gaiting; methods to be used in training enlisted men; leading of a platoon; care of equipment.

Hippology and Stable Management.—This course includes the care and treatment of sick or injured animals; conformation and unsoundness of animals; management of stables; care of animals in the field; expedients. In addition to the scheduled lectures and conferences, the subject is dwelt upon during entire course.

* Daily, in periods of two or three hours.

Horseshoeing.—This course covers all the features of "Inspection of Shoeing" and common diseases of the foot.

Harness and Transportation.—This course includes harnessing and driving; care of equipment; loading of wagons; transportation by land.

Marching.—This includes the making of a six-day march of about 160 miles.

Department of Tactics

Minor Tactics.—The course comprises three conferences on "Organization," "Estimate of the Situation," and "Orders"; four map problems, each preceded by two conferences on the same subject-matter and followed by one, a critique; two tactical rides and three terrain exercises, each followed by a conference, a critique.

Liaison.—The course comprises six conferences, in which the methods of communications and liaison in general are discussed; two demonstrations of the working of the technical implements used.

Cavalry Drills.—The class will be organized into a cavalry platoon and students will perform all the duties from private in ranks to lieutenant; in addition, time is also devoted to small field problems.

Marching and Camping.—Instruction is given in a six-day practice march.

Department of Cavalry Weapons

Musketry.—Musketry pamphlets of the A. E. F. are followed. The subject will be covered by a series of conferences and demonstrations, using school troops. Student officers actually command units in the latter part of course.

Machine Rifles.—The subject of machine rifles will be covered by a series of conferences and demonstrations, illustrating the mechanical features of the machine rifle, its characteristics and its tactical application. The last six hours will be devoted to the marksmanship course. Combat exercises will be included under the subject of musketry.

Pistol.—In pistol-firing the course includes both mounted and dismounted firing. Methods of instruction are prescribed and taught throughout the course.

Saber.—A limited amount of instruction in the saber, dismounted, is given. All instruction is given with a view to developing an offensive spirit and skill in combining the use of the saber in thrusting with the speed and momentum of the horse.

Department of General Instruction

Map-reading.—Scales; true and magnetic meridians; map orientation; map distances and directions; co-ordinates; conventional signs; representation of elevations; visibility; position, outpost, place, road, and panoramic sketches.

Riot Duty.—Legal and tactical sides of riot duty.

Lectures on Cavalry.—Principles of organization of small unit for tactical training and tactical operations; the training for preservation of order and to bring order out of confusion; the training of small cavalry units for combat in warfare against bandits or guerrillas; training of small units in taking the necessary measures for security in camp and bivouac; observation; the rôle of cavalry and training to perform it.

Leadership and Discipline.—Course of lectures on morale, instruction, discipline, and leadership.

History.—Course of lectures on the Palestine Campaign and cavalry in Europe during the World War.

The National Guard

NEW ORGANIZATIONS

Federal recognition has been extended the following cavalry organizations since January 1, 1921:

Alabama—Divisional Headquarters Troop, Birmingham.

Colorado—Troop B, Denver.

Georgia—Troop C, Atlanta.

Idaho—Regimental Headquarters, Pocatello; Band Section, Service Troop, Pocatello.

Illinois—Troop B, Urbana.

Iowa—Regimental Headquarters Troop, Burlington, and Troops B and C, Des Moines.

Kansas—Troop A, Yates Center.

Massachusetts—Service Troop, Boston.

New Jersey—Regimental Headquarters, Headquarters and Headquarters Detachment, 1st Squadron, Newark; Headquarters and Headquarters Detachment, 2d Squadron, Westfield; Troop F, Orange.

New Mexico—Troop D, Santa Fe.

New York—Headquarters and Headquarters Detachment, 2d Squadron, Buffalo; Troop K (temporary designation), Brooklyn; Troop E, Brooklyn; Troops A and C (Squadron A), Machine-Gun Squadron, New York City.

North Carolina—Troop D, Andrews.

Ohio—Troop D, Delaware; Troop M (temporary designation), Canton; 1st Separate Troop, Toledo; Squadron Headquarters and Headquarters Detachment, Akron.

Pennsylvania—Troop G, Philadelphia.

Porto Rico—Troop B, Mayaguez.

Texas—Headquarters and Headquarters Detachment, 1st and 2d Squadrons, Dallas.

Wyoming—Troop E, Torrington.

STATUS OF NATIONAL GUARD REORGANIZATION

New Jersey has completed the organization of its cavalry regiment. The regiment is commanded by Colonel Lewis B. Ballantyne, with Lieutenant-Colonel Moeller and Majors William A. Ross and Hardy J. Bush as the other field officers.

Pennsylvania has been authorized to complete the organization of the Cavalry brigade allotted to that State. Federal recognition has been extended to eleven troops, and three others are organized and ready for Federal inspection.

Texas has completed the organization of all cavalry authorized for that State—a brigade headquarters, brigade headquarters troop, one regiment, and one machine-gun squadron.

Due to failure to appropriate funds by the State of Wyoming, it became necessary to disband Troops A, G, and H, stationed at Basin, Lovell, and Sheridan, respectively.

. . . . . .

There were many entries from Troops B, D, and E of the Ohio National Guard in the very successful horse show held at Columbus, Ohio, May 20 and 21, under the auspices of the Columbus Riding Club. The officers and troopers competed in the following events: Three-gaited saddle horses, officers' mounts, novice saddle horses, model hunters, hunters, horses suitable to become hunters, model three-gaited saddle horses, enlisted men's mounts, military jumping, horses suitable for military mounts, polo mounts, road hacks, jumpers, and saddle pairs.

At the tenth Exhibition of the Philadelphia Horse Show, May 4, 5, and 6, prises were awarded in the class for officers' mounts as follows:

1st prize—Captain Edward W. Hoopes, Troop A, 1st Cavalry, P. N. G. (Government mount).

2d prize—Captain Clement B. Wood, Troop E, 1st Cavalry, P. N. G. (private mount).

3d prize—Captain Samuel Evans, Jr., Troop D, 1st Cavalry, P. N. G. (Government mount).

4th prize—Captain Joseph P. Maguire, Service Troop, 1st Cavalry, P. N. G. (private mount).

Enlisted men's mounts:

1st prize—Troop D, 1st Cavalry, P. N. G.

The University of Pennsylvania defeated the First City Troop of Philadelphia at polo.

THE NATIONAL GUARD CAVALRY OF TEXAS

The National Guard allotment of Texas includes as Army troops the following Cavalry units:

Brigade headquarters, 1 regiment, 1 cavalry machine-gun squadron. The other cavalry regiment to form a part of the brigade is allotted as fololws: regimental headquarters, headquarters troop, service troop, and one squadron to New Mexico; one squadron to Colorado. These are the only National Guard cavalry units allotted to the 8th Corps Area.

The organization of the cavalry units in Texas is practically completed in accordance with the new Tables of Organization. All of the units have been federally recognized. Some vacancies still exist in the commissioned personnel, which is of the highest order by reason of the care with which officers with past experience and good records are being selected.

Brigadier-General J. F. Wolters, of Houston, Texas, with long experience in the cavalry service of the National Guard, including the Spanish War, and a graduate of the Cavalry Officers' Training School, Camp Stanley, 1918, has been assigned to the command of the Brigade.

Former Lieutenant-Colonel Lloyd E. Hill, with a record of service in the National Guard of Colorado, including active service in the Philippines, and later in the National Guard of Texas, including service with the 36th Division in France, has just been commissioned Colonel, and assigned to command the Texas Regiment. His residence is at Ft. Worth, Texas.

Major O'Brien Stevens, a graduate of the Cavalry Officers' Training School, Camp Stanley, 1918, has been assigned to command the Cavalry Machine-Gun Squadron.

FIELD DAY OF THE GEORGIA HUZZARS

Troop "A," Georgia National Guards (Georgia Huzzars), gave a very successful mounted Field Day on May 28 at the Fair Grounds at Savannah, Ga.

A large crowd, a majority of whom had never seen the Cavalry "Stunts," witnessed the fifteen events, which consisted of the troop dashing by the grand stand, riding Cossack fashion, a half-mile dash open to all, quarter-mile dash, half-mile hurdle race, rescue race, Roman race, and slow-mule race. All of these events were for the military men except the half-mile race, open to all, while a half-mile ladies' race, a boys' race, two trotting races, and a pacing mare record 2.02¼, against time, paced by two running horses (each going a half mile), were non-military events.

The novelty of the events, in addition to the excitement of the races, all of which had close finishes, kept the crowd interested and excited; in fact, the meet met with such hearty approval that it has been suggested, through the daily papers and individually, that it be made an annual event.

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*Reviewed in this number of *The Cavalry Journal.*

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Devoted to the Interests of the Cavalry, to the Professional Improvement of Its Officers and Men, and to the Advancement of the Mounted Service Generally

EDITED BY

JEROME W. HOWE

MAJOR OF CAVALRY

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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.

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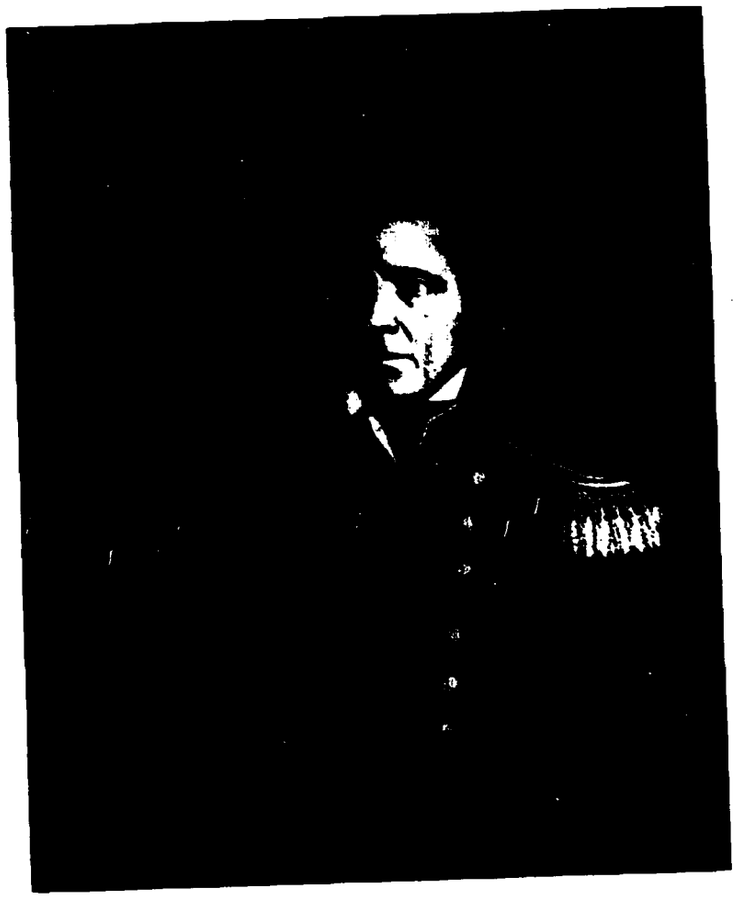


STEPHEN WATTS KEARNY
Commander of the Army of the West, 1846.
Commanding First Cavalry, 1836-1846.

THE
CAVALRY JOURNAL

VOL. XXX OCTOBER, 1921 No. 125

The First Regiment of Cavalry, United States Army*

History of the First Cavalry from its organization, in 1833, to the termination of the Rebellion, 1865. In the next issue of the CAVALRY JOURNAL the history of this regiment will be concluded with an account of its many Indian campaigns and its participation in the War with Spain and the Philippine Insurrection, with which many officers still on the active list are very familiar.

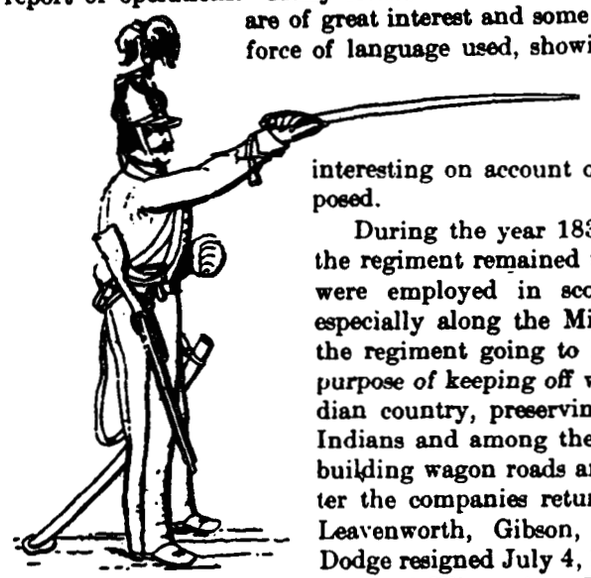
THE "United States Regiment of Dragoons" was organized by act of Congress approved March 2, 1833, becoming the "First Regiment of Dragoons" when the Second Dragoons were raised, in 1836. Its designation was changed to "First Regiment of Cavalry" by the act of August 3, 1861. The first order announcing appointments in the regiment was dated March 5, 1833, and gave the names of the colonel, lieutenant-colonel, major, four captains, and four lieutenants, stating that the organization of the regiment would be perfected by the selection of officers from the "Battalion of Rangers." Headquarters were established at Jefferson Barracks, Missouri. Colonel Henry Dodge was the first commander, with Stephen W. Kearny† as lieutenant-colonel. Lieu-

* It is intended to present the histories of the several cavalry regiments in successive issues of the CAVALRY JOURNAL.—EDITOR.

† Stephen Watts Kearny was born in 1794 at Newark, New Jersey. He was a student at King's College, New York City. At the outbreak of the War of 1812 he was commissioned first lieutenant in the 13th U. S. Infantry. He was captured at the battle of Queenstown and later exchanged. He offered to serve at the head of a marine force in Chauncy's fleet on Lake Erie, but his offer was not accepted. He was made captain April 1, 1813. After the war he was transferred to the Second Infantry. He formed part of the Yellowstone Expedition in 1820 and again when it was continued in 1825. He was a major in 1829 and was made lieutenant-colonel of the First Dragoons in 1833. He was colonel of that regiment in 1836. Soon after the outbreak of the Mexican War he was made brigadier-general, June 30, 1846, and put in charge of the "Army of the West." He was promoted to be major-general as a reward for his able conduct of the campaign for New Mexico and California and was later Governor of California. In 1848 he was for a short time military and civil governor of Vera Cruz and subsequently of the City of Mexico. In the fall of that year he died in St. Louis.

tenant Jefferson Davis was the first adjutant, but soon resigned the staff position and was assigned to Company A.

During the summer of 1834 the regiment was engaged in the "Pawnee Expedition," during which short campaign one-fourth of the officers and men died of fevers. Throughout the summer of 1835 all the companies of the regiment were kept in the field in the territory just west of the Missouri frontier. The object appears to have been exploration chiefly, for no conflicts with the Indians took place. The regiment performed its duty thoroughly, as was shown by the letter of commendation sent by General E. P. Gaines, commanding West Department, to the regimental commander upon receipt of his report of operations. Many letters written and orders issued about this time are of great interest and some are very amusing, from the force of language used, showing great difference in military correspondence then and now. The court-martial orders are especially interesting on account of the peculiar sentences imposed.



RIGHT MOULINET

During the year 1836 the general disposition of the regiment remained unchanged. The companies were employed in scouting among the Indians, especially along the Missouri frontier, a portion of the regiment going to Nacogdoches, Texas, for the purpose of keeping off white trespassers from the Indian country, preserving peace between whites and Indians and among the Indians themselves; also in building wagon roads and bridges. During the winter the companies returned to their stations—Forts Leavenworth, Gibson, and Des Moines. Colonel Dodge resigned July 4, 1836, and was appointed Governor of Wisconsin. He was succeeded by Colonel Kearny.

"The First Regiment of Light Dragoons at Fort Leavenworth," reports the commanding general in 1837, "was found to be in a state of police and discipline reflecting the highest credit on Colonel Kearny—the exemplary commandant—his captains and other officers, non-commissioned officers and soldiers, whose high health and vigilance, with the excellent condition of the horses, affords conclusive evidence of their talents, industry, and steady habits."

In October, 1837, and again in March, 1838, serious difficulties were reported between the settlers and the Osage Indians, and companies of the regiment were at once sent to the disturbed regions. On the second occasion the rapidity of Colonel Kearny's movements and the sudden appearance of 200 dragoons in their midst appear to have had a very quieting effect on the

Indians, for after his return to Leavenworth Colonel Kearny reports no further danger of trouble with the Osages.

Twice during 1840 the regiment was called upon to overawe the Indians, and the end of that year found it garrisoning the posts of Forts Leavenworth, Gibson, Wayne, and Crawford. In April, 1842, on account of some disturbance among the Cherokees, Colonel Kearny marched his command of five companies from Fort Leavenworth to Fort Gibson, and then made a forced march of 57 miles to Fort Wayne in one day. During the summer of 1845 Colonel Kearny led five companies of the regiment into the Rocky Mountains, in which the command covered 2,000 miles in less than 100 days. It will be seen from these examples that, although these years were not marked by combat, they were years of active and extensive exploration and marching, which went far toward making and keeping the regiment fit for its participation in the Mexican War.

In 1846 Colonel Kearny was promoted to be brigadier-general and was succeeded in command of the 1st Cavalry by Colonel Richard Barnes Mason, who had served in the regiment since its organization, as major and lieutenant-colonel. Very soon after the commencement of hostilities between the United States and Mexico, in 1845, preparations were begun for the invasion of Mexican territory at various points. One expedition was to advance from the Missouri River west to Mexico, Santa Fe being its objective point. It was immediately determined, however, to push on with this column and occupy Upper California. General Kearny was placed in command of this "Army of the West," which consisted of companies B, C, G, I, and K, 1st Dragoons, two companies of artillery, two of infantry, and nine companies of Missouri volunteer cavalry under command of Colonel A. W. Doniphan—in all, about 1,800 men. This command was concentrated at Bent's Ford, on the Arkansas, from which point it marched for Santa Fe August 1, 1846.

Some show of resistance to Kearny's advance was made by the Mexican governor of New Mexico, but Las Vegas was occupied on the 14th and Santa Fe on the 18th of August without a conflict, the Mexicans retreating upon Kearny's approach. Leaving Colonel Doniphan in command at Santa Fe, General Kearny took up the march for California September 26, and encamped about 40 miles from San Diego December 5, where he was met by a small party of volunteers under Captain Gillespie, sent out from San Diego by Commodore Stockton to give information of the enemy, of whom there were supposed to be six or seven hundred opposed to Kearny's advance.

On the morning of the 6th Kearny's command met and defeated, at San Pasqual, about 40 miles from San Diego, a body of Mexicans under General Andres Pico. Kearny had at this time about 300 men, composed of companies B and C, 1st Dragoons, and volunteers. The action was severe, the 1st Dragoons losing three officers—Captains Moore and Johnston and Lieutenant Hammond—and 14 men killed, and about all the dragoons were wounded, princi-

pally with lance thrusts. General Kearny himself received two wounds, Lieutenant Warren, of the topographical engineers, three, and Captain Gillespie, of the volunteers, three. Kearny was compelled to remain at San Bernardino until the 11th on account of wounds, but reached and occupied San Diego December 12.

General Wilcox, in his history of the Mexican War, says:

> "At dawn of day the enemy, already in the saddle, were soon at San Pasqual. Captain Johnston charged them with the advance guard, followed and supported by the dragoons; they gave way. Captain Moore led off rapidly in pursuit, accompanied by the dragoons (mounted on horses)* and followed, though slowly, by those on tired mules. The

DRAWING BY A MEMBER OF THE ARMY OF THE WEST

> enemy, well mounted and superb horsemen, after falling back a half mile, halted, and, seeing an interval between Captain Moore with the advance and the dragoons coming to his support, rallied their whole force and charged with lances. Moore held his ground for some minutes, but was forced back, when those in the rear coming up, the enemy were in turn driven back and fled, not to rally again. Kearny occupied the field and encamped upon it.
>
> "But few of Moore's men escaped without wounds. Captain Johnston was shot dead at the commencement of the action; Captain Moore was lanced and killed just before the final retreat of the Mexicans; Lieutenant Hammond was also lanced, surviving the wound but a few minutes; two sergeants, two corporals, and ten men of the 1st Dragoons, one private of volunteers, and a citizen engaged with the engineers were killed."

General Kearny had left companies G and I at Albuquerque under Captain J. H. K. Burgwin. When Colonel Sterling Price (the successor of Colonel Doniphan in command at Santa Fe) learned of the seizure and murder, at Fernando de Taos, of Governor Bent and five others by the Mexicans (January

* In explanation of the remark "mounted on horses" it may be stated that, with a few exceptions, the dragoons were mounted on mules which had been ridden from Santa Fe, more than a thousand miles.

20), he moved out against them with a force of about 350 dismounted men and easily defeated them, January 24, at Canada. Captain Burgwin, with Company G, 1st Dragoons, also dismounted, joined him on the 28th, and the Mexicans, numbering about 500, were again encountered on the 29th in a canyon leading to Embudo, from which position they were driven out by Burgwin with a force of 180 men of Price's regiment and Company G. He entered Embudo the same day.

On the 31st, having united his force, Price moved toward Pueblo de Taos, which he attacked February 3, but on account of its strength and the stubborn resistance offered, and more especially for the reason that the ammunition for the artillery had not come up, the attack failed. It was renewed on the following morning, when Captain Burgwin, with his company of dragoons and McMillan's of Price's regiment, charged, crossed the walls, and attacked the church, which, with other large buildings within the walls, was occupied by a large force of the enemy and was stubbornly defended. While gallantly leading a small party against the door of the church, Burgwin received a mortal wound from which he died on the 7th. Company G sustained a loss in this engagement of one officer and 23 men killed. The Mexicans lost 153 killed and many wounded.

TO THE GROUND—POINT

During the year 1847 companies A and E were with Taylor in Mexico. Company B was reorganized at Jefferson Barracks in May and sent to Albuquerque, New Mexico, being engaged while en route with Comanche Indians at Grand Prairie, Arkansas, June 26, losing five men killed and six wounded. Company F escorted General Scott from Vera Cruz to the City of Mexico and was present at the battles at and near that city, being later engaged on escort duty between the Mexican capital and Vera Cruz. Companies D and K, as well as F, saw service on Scott's line in Mexico.

From this time until the year 1861 scouting and skirmishes with the Indians were almost incessant and portions of the regiment were always found where the fighting was going on. On March 30, 1854, Lieutenant J. W. Davidson, with Company I and 16 men of Company F, had a sharp fight with Apache Indians about 16 miles south of Taos, in which 14 men of Company I and 8 men of F were killed and the lieutenant and 14 men wounded. The Indian camp was surprised and captured, the Indians escaping; but while plundering the camp the troops were in turn surprised by the Indians, who returned and took Davidson at such disadvantage that the command narrowly escaped annihilation.

In 1854 Colonel Thomas T. Fauntleroy, then in command of the regiment, made three expeditions against the Utahs and Apaches, and companies I and K went with Colonel Miles against the Mescalero Apaches. Meantime companies C and E took part in the Rogue River war in Oregon, in which, at the battle of "Hungry Hill," the troops were compelled to retire with a loss of 26 killed and wounded, after fighting a day and a half. Four companies were present with Chandler's expedition against the Navajos and Apaches in March and April, 1856. In the same year two companies took part in numerous Indian skirmishes in Oregon and Washington; one was with Wright's expedition to the Walla Walla country in April and to the Yakima country in June; later in the year it was out with Colonel Steptoe.

In May, 1858, companies C, E, and H formed part of Steptoe's expedition northward to the British line, which, on the 17th of May, met a force of about 800 Spokane and other hostile Indians and was driven back. Later in the same year these same companies, together with Company I, were with Wright's column, which administered a severe thrashing to the Indians who had fought Steptoe.

Colonel Fauntleroy resigned May 13, 1861, and was succeeded by Colonel B. S. Beall. By the act of August 3 of this year the designation of the regiment was changed to "First Regiment of Cavalry."

It is impossible to give here in detail the part taken by the regiment in all the battles and engagements in which it participated during the Rebellion. but included in its many battles were Williamsburg, on May 4, 1862, where a portion of the enemy's cavalry was repulsed by a brilliant charge of a squadron of the regiment commanded by Captain B. F. Davis. A rebel standard was captured and there were 13 casualties. At Gaines Mill, June 27, its casualties numbered 26. The regiment was present at Malvern Hill, July 1; Kelly's Ford, March 17, 1863, and Stoneman's raid in April and May. At Upperville, June 23, the regiment met the "Jeff Davis" Legion and the 1st and 2d North Carolina regiments in a charge. The regiment suffered severely, Lieutenants Fisher and Moulton being wounded and captured and 51 men killed, wounded, and missing, a large proportion of the wounded being disabled by the saber.

At Gettysburg, July 1 and 3, Lieutenant Trimble was wounded and the loss was 15 men. The regiment lost two men at Williamsport, and on July 6 charged the enemy on the pike road to within half a mile of Funkstown, capturing an officer and 13 men and driving the enemy within their lines. The regiment was engaged near Boonsboro July 7, 8, and 9, losing 14 men. At Brandy Station, August 1, it repulsed the enemy in four charges, losing 11 men. With the Reserve Brigade it was then ordered to Washington to remount and equip. Camp Buford was established, where the brigade remained about a month, when it was again ordered to the front.

The 1st Cavalry was engaged at Manassas Junction and at Catlett's Station November 5; Culpeper, November 8; Stephensburg, November 26, and Mine

River. A cantonment having been established at Mitchell's Station, the regiment was employed during the winter doing picket duty along the line of the Rapidan.

A reconnaissance to the left of the enemy's line was made February 6, 1864, by the 1st Division, Cavalry Corps, the 1st Cavalry leading the advance. Sharp skirmishes took place near the crossing of Robinson River at Hume's Ford on the 6th and 7th. On the 6th the regiment charged the enemy, driving him from the ford and capturing four prisoners, and continued the pursuit to within two miles of Barnett's Ford, on the Rapidan. On the morning of the 7th the regiment, again in the advance, encountered the enemy in force at the ford. One squadron—G and M companies, under Captain Feilner—made a charge to gain possession of the ford, but was met by a heavy fire from infantry in strong position on the opposite side of the river and was recalled with loss of two men and six horses wounded. On the 27th General Custer started on his raid to Charlottesville, and on the 28th, the 1st Cavalry being in the advance, the enemy were encountered in their camp near Charlottesville, from which they were driven and the camp partially destroyed. On the return march the Rosanna bridge was destroyed by the pioneers of the regiment under Lieutenant Ogden. On March 1, shortly after leaving Stanardsville, the enemy charged the 5th Cavalry, which regiment, supported by the 1st, returned the charge, capturing 25 and killing or wounding several.

On General Sheridan's taking command of the Cavalry Corps the 1st Cavalry, commanded by Captain N. B. Sweitzer, was attached to Merritt's Reserve or Regular Brigade, Torbert's Division, and in the preparation for the Wilderness campaign the regiment was employed in picketing the Rapidan, taking part in the battles of Todd's Tavern, May 7, and Spotsylvania Court-House, May 8, during the first of which six out of the sixteen officers on duty with the regiment—Captain Sumner and Lieutenants Hall, Hoyer, Pennock, Ward, and Carr—were wounded. During the two days' fighting ten men were killed.

The regiment accompanied Sheridan on his raid around Richmond and took part in the following engagements: Beaver Dam Station, May 10; Yellow Tavern, May 11; Meadow Bridge, May 12; Tunstall's Station, May 14; Hawe's Shop, May 28; and Old Church, May 30.

At the battle of Cold Harbor, June 1, Captain Samuel McKee was mortally wounded and died on the 3d. Lieutenant Pennock was shot through both eyes and two men were killed and four wounded. The regiment accompanied General Sheridan on the Trevillian raid, and was present at the battle of Trevillian Station, June 11 and 12, on which days it suffered severely, losing Lieutenants Ogden and Nichols killed and Captain Dunkelberger wounded. Three men were killed and 29 wounded or missing. The regiment was engaged in daily skirmishing during the return march to White House Landing, and was engaged with the enemy at that point on June 17, at the Chickahominy River on the 18th, and at the battle of Darby's Farm, June 28. At

the battle of Deep Bottom, July 28, where the Regular Brigade, fighting on foot, routed a brigade of Confederate cavalry, a battle-flag was captured by the 1st Cavalry.

On July 31 the 1st Division marched to City Point, embarked the next day, and was transported to Washington to assist in repelling the threatened attack of General Early. The regiment disembarked at Giesboro Point with its division August 3 and went into camp near Washington.

On August 5 the movement to Harpers Ferry was taken up, the 1st Division being ordered to the Shenandoah Valley under Sheridan. Harpers Ferry was reached on the 8th and the division moved out on the Halltown road and camped. General Sheridan having formed his cavalry into a corps under General Torbert, General Merritt succeeded to the command of the division and Colonel Alfred Gibbs to that of the brigade.

On August 10 a reconnaissance was made by the Reserve Brigade in the direction of Winchester, and the enemy's cavalry was engaged and routed. From this day until the close of Sheridan's operations in the valley, the regiment was engaged in almost daily fighting and took part in all the important battles except Fisher's Hill, where it was otherwise employed, as will be seen hereafter.

The enemy's cavalry was engaged August 11 and driven several miles towards Newtown, but our cavalry became opposed to a heavy force of infantry and the entire 1st Division was put in on foot. The 1st Cavalry charged across an open plowed field and drove the enemy from the timber beyond, but were in turn repulsed by a heavy flank fire and compelled to take refuge behind rail barricades, which they held until dark, in spite of persistent and repeated efforts of the enemy to dislodge them. Lieutenant Harris was wounded in this affair.

On August 13 Lieutenant J. S. Walker, the commissary of the regiment, was killed by Mosby's guerrillas near Charlestown, Virginia, while going to Harpers Ferry in the discharge of his duties. About this time also the regimental trains of the Reserve Brigade were captured and destroyed by Mosby. These trains contained the regimental and company records and the personal effects of officers. Several of the wagons belonging to the regiment were saved and with them some of the records. From August 16th until the 20th the 1st Cavalry was employed, together with the whole of the 1st Division, in the destruction of all wheat and forage and the seizure of all horses, cattle, sheep, and hogs accessible in the valley.

The 1st Division was engaged with Early's infantry near Charlestown on the 21st, and on the 25th the 1st and 3d Divisions marched in the direction of Leetown, near which place a strong force of the enemy's infantry was encountered and defeated with a loss of many prisoners. On the 28th the division marched again in the direction of Leetown, the Reserve Brigade leading, with the 1st Cavalry in advance. The Confederate cavalry was found in force beyond Leetown and a severe fight followed. Two squadrons of the 1st were

deployed to the left and right of the pike and a third held in reserve. The deployed squadrons were driven back and the reserve squadron was moved into the pike in columns of fours, and in that formation charged with the saber. The enemy's cavalry, a full brigade, charged with the pistol, and, just before the two bodies met, slackened speed to deliver their fire, when Hoyer's squadron struck them at full charging gait and sent them flying to the rear. The loss was ten or twelve men wounded with the pistol and the gallant Hoyer killed. He was shot through the body while leading the charge and died in an hour. The command of the squadron then fell to Lieutenant Moses Harris, and at about this time Captain E. M. Baker succeeded Captain Sweitzer in command of the regiment.

From the 5th of September until the 19th the 1st was employed on picket duty along the Opequan and in harassing the enemy—an arduous duty, with constant skirmishing and attendant casualties. Colonel C. R. Lowell, 2d Massachusetts Cavalry, "The bravest of the brave," now succeeded to the command of the Reserve Brigade, and the period of his command is described as the most brilliant in its history.

The 1st took part in the memorable charge of the Reserve Brigade at the battle of Winchester, September 19, and, in conjunction with the 2d Cavalry, captured two stands of colors and some 200 prisoners. The casualties of the regiment were 37 killed, wounded, and missing, including Lieutenant McGregor, wounded.

The battle of Fisher's Hill was fought and won September 22, 1864. On this day General Torbert, having been ordered to proceed with Merritt's and Devin's Divisions through the Luray Valley to fall upon Early's retreating army at New Market, in the event of his defeat at Fisher's Hill, found the forces of the Confederate General Wickham strongly entrenched near Milford. Torbert's failure to dislodge Wickham and Sheridan's disappointment over the failure of his plan to capture the whole of Early's army are matters of history.

On the morning of the 23d the ambulance train was attacked by some of Mosby's guerrillas near Front Royal, who were then chased by the 1st and 2d Cavalry and a number killed and ten or twelve captured. Lieutenant McMasters, of the 2d, was cruelly murdered, after capture, by the guerrillas, in retaliation for which several of those captured were hung.

Learning on the 23d of the victory at Fisher's Hill, Torbert returned with his command to Milford during the night, and finding the enemy's strong position abandoned, pushed on until the enemy's cavalry was encountered near Luray, early on the morning of the 24th. The latter were signally routed and narrowly escaped destruction. The 1st Cavalry took part in this engagement and, September 28, in the action at Waynesboro, in which it met with a loss of 18 killed, wounded, and missing.

General Sheridan having decided to withdraw his army to a defensible position nearer to his base of supplies, in the northern end of the valley, com-

menced the retrograde movement on the 6th of October. General Rosser, becoming emboldened by Sheridan's apparent retreat, took the initiative and so annoyed Sheridan that he determined to punish him, and the memorable battle of Tom's Brook, or "Woodstock Races," took place on the 9th. The entire management of the affair was given to General Torbert, and how well he redeemed himself for his failure in the Luray Valley by the ignominious rout of Rosser and Lomax is well known. The 1st Cavalry led the advance of the Reserve Brigade during the charge on the pike against Lomax's cavalry, from Tom's Brook to Edinborough, 18 miles. The chase was continued by the 2d Brigade to Mount Jackson, 8 miles farther on. The 1st Cavalry captured 4 guns, 4 wagons, and a number of prisoners, with a loss of two men "missing in action." It is related that some of the guns here captured were quite new and had been marked "For General P. H. Sheridan, care of Jubal Early."

The 1st Cavalry played an important part in the battle of Cedar Creek, October 19, 1864. After the surprise and defeat of Wright in the morning, a position was taken about one mile north of Middletown, which was held by the divisions of Merritt and Custer until Sheridan came up with that portion of his army which he had met flying to the rear, a defeated and demoralized mob. The 1st Cavalry was formed, one squadron to the left, the other to the right, on the Valley pike, dismounted, behind stone walls, the third squadron being held in reserve. This position was held with the greatest difficulty, the advance squadron, commanded by Harris, being subjected to an enfilading fire. The personal example, however, of the brigade, regimental, and squadron commanders kept the men up to their places until the return of the Sixth Corps, when the squadrons were mounted and joined in the pursuit of Early's beaten forces, which was continued on the 21st and 22d as far as Mount Jackson.

The regiment now returned to Middletown, and during the fall and winter was engaged in numerous skirmishes and took part in Merritt's raid to the Loudoun Valley and Torbert's raid to Gordonsville. In December the regiment was assigned to duty at the headquarters of the Cavalry Corps in Winchester.

On the 27th of February, 1865, General Sheridan commenced his last expedition through the Shenandoah Valley, having for his object the destruction of the Virginia Central Railroad and the James River Canal and the capture of Lynchburg. Sheridan took only the Cavalry Corps and a portion of his artillery. The regiment was present with the Reserve Brigade and took part in the battle of Waynesboro, March 2, where the remnant of Early's army was captured. It was also engaged in many skirmishes during the march from Charlottesville to White House Landing, while destroying locks and the embankment of the James River Canal, railroads, and supplies, and arrived at White House Landing March 17, taking part in the engagement of that day.

On the 27th of March Captain Baker was relieved from command of the regiment by Captain R. S. C. Lord.

The 1st Cavalry was present and took part in all the battles and daily skir-

mishes of the Cavalry Corps until the close of the war. On March 30 it was in the engagement on White Oak Road; March 31, at Dinwiddie Court-House; April 1, at Five Forks. Here the regiment made a brilliant charge on an entrenched position of the enemy, which was carried and 200 prisoners captured. April 2 it participated in the engagement near Southside Railroad; April 6 was at the battle of Sailor's Creek, and April 9 was present at Appomattox at the surrender of the Army of Northern Virginia. After the surrender the regiment returned to Petersburg, where it remained in camp until April 24, when it marched with the Cavalry Corps toward North Carolina for the proposed junction with Sherman. On the surrender of Johnston's army the corps returned to Petersburg and the regiment, escorting General Sheridan, left for Washington May 8, arriving May 16 and taking part in the "Great Review."

RECONNAISSANCE

"We were continually getting false rumors about the movements of the Turks. We had believed that it would be impossible for them to execute a flank movement—at any rate, in sufficient strength to be a serious menace—for, from all the reports we could get, the wells were few and far between. Nevertheless, there was a great deal of excitement and some concern when one afternoon our aëroplanes came in with the report that they had seen a body of Turks, that they estimated to be from six to eight thousand, marching round our right flank. The plane was sent straight back, with instructions to verify most carefully the statement, and be sure that it was really men they had seen. They returned at dark with no alteration of their original report. As can well be imagined, that night was a crowded one for us, and the feeling ran high when next morning the enemy turned out to be several enormous herds of sheep."—*Kermit Roosevelt, "War in the Garden of Eden."*

Lisette: The Story of a Famous War-Horse

BY

J. S. TAYLOR, Captain, Medical Corps, U. S. Navy

One of Napoleon's generals said truly that "people will never tire of reading about the French Revolution and the Empire." There seems to be no end to the books describing the events of those interesting periods. One of the most delightful of them all is by Baron Marbot. In his "Memoirs" he tells the story of his own life from boyhood to the date of Napoleon's banishment to St. Helena. At eighteen he became a soldier in his father's division and rose rapidly from the rank of private to that of general. He fought in Italy, Spain, Germany, Poland, and Russia.

Marbot loved horses and was very particular in the selection of a charger, though he professed not to be a very good rider. In view of his startling experiences on more than one occasion, the reader of his biography is forced to believe that, in this particular at least, Marbot was modest and perhaps no mean horseman after all. Really good riders are usually modest. At any rate, he loved horses and took a great interest in other people's horses as well as his own. Once when the French were drawn up in battle array to attack the English he saw an officer near him maltreating his horse. The animal had refused to obey his rider just as the charge was about to sound, and it is not surprising that the man lost his temper, but Marbot was not the person to stand by and see a good steed abused, so he took his brother officer to task and spoke to him so sharply that the latter turned on him fiercely and a duel would have resulted then and there had circumstances permitted. After the battle the other officer realized that he had been in the wrong and came to Marbot to apologize and they eventually became fast friends.

Baron Marbot's favorite horse was Lisette, who particularly distinguished herself in the Battle of Eylau. After describing that terrible engagement, fought on frozen ground in the midst of a driving snow-storm, the writer tells how he came to possess Lisette and describes her performances on that memorable day.

Before setting out for the campaign in Poland, in 1806, Marbot looked about him for a suitable charger, and after considerable delay heard of an excellent animal reputed very fleet, pleasant to ride, and full of spirit. She was offered for sale at two hundred dollars, though only a short time before she had cost a thousand. The wife of one of Napoleon's aides had bought her, but was eager to dispose of the mare owing to one serious fault. Lisette was given to biting. A short time before Marbot began to consider the purchase the groom in charge had been found dead in Lisette's stall. This led to a lawsuit, and by order of the police the mare's owners were required in future to keep conspicuously posted in her stall a notice telling of her habit of biting.

The police also ordered that no sale of the horse should be binding on the purchaser unless he stated in writing that he had been told of the animal's fault.

Marbot did not have a great deal of money and he felt that he could not afford to let slip such a chance of getting a valuable horse at so much less than her original value, so he bought her. Perhaps he would not have done so but for the confidence he felt in his groom, a man afraid of nothing and at the same time very skillful in the management of horses. When the transaction was effected it took four men to saddle Lisette, and even this number was unable to put a bridle on her until she had been blindfolded and had all four legs tied together.

Marbot's groom resorted to the following trick to cure her of biting: He heated a leg of mutton in an oven, and as he entered the stall and Lisette made a rush to bite him he thrust the sizzling roast into her mouth, so that when she bit down upon it her lips, tongue, palate, and cheeks were severely burned. From that day Lisette never attacked the groom, and she became easy for the Baron to handle, once he had taught her the same lesson. To every one else she continued to be an object of terror.

When the French were in the vicinity of Berlin, it was noticed that every day during the dinner hour a good deal of the corn provided for the horses of Marshal Augereau's staff disappeared, and some one suggested that Lisette's halter be taken off during the period with a view to her catching the thief. The scheme worked well, for in a few moments everybody in the vicinity was startled by cries of agony, and Lisette was seen to rush out of her stable, dragging a man by the collar of his coat, which she held securely between her teeth. It was the robber of the forage. Before he could be rescued Lisette had broken two of his ribs. After this there was no more stealing from that stable.

At the Battle of Eylau, where the combined Russians and Prussians practically defeated Napoleon Bonaparte, the 14th regiment of the line had been directed to occupy a certain hill and not to abandon the position except by the Emperor's express order. The fire from the enemy's guns was so hot that in a short time a large part of the regiment was destroyed, but the men who were left stood their ground, bravely awaiting certain death. At last Napoleon directed Marshal Augereau to recall the regiment from its terrible position.

It was customary for the aides-de-camp to place themselves in line, a little distance from the general they were serving, and take turns in going on messages. As fast as one came back from delivering an order he went to the foot of the line and would not be sent again till all the others had had a turn. In this way there was a fair division of labor and, as some errands were, of course, far more dangerous than others, there was no room for partiality on the part of the general nor for complaint on the part of the aides-de-camp.

The first messenger dispatched by Augereau to order the retreat of the 14th was never seen or heard of again. Doubtless he was killed by one of the Cossacks riding in swarms over the plain. A second officer was dispatched on the

dangerous mission and he met the same fate. Marbot was now the next in line, and Marshal Augereau, with tears in his eyes, hesitated to send him forth on a duty that seemed to be impossible to accomplish and to promise death to the man who undertook it. He was very fond of Marbot, and Marbot's father and been a dear personal friend. Still the Emperor had to be obeyed and at all costs the brave 14th regiment must be saved. Without a moment's hesitation the young officer put his horse in motion. The officers who had preceded him had tried to fight their way to the hill they wanted to reach, but, as a contest between one man and the hundreds he must ride through could have but one result, no matter how often it was tried, Marbot resolved to rely on his horse rather than his sword and did not even draw it from its scabbard. To use his own expression, he decided to put out of his mind all thought of the enemy in the way and proceed as if he were merely riding in a race.

He was mounted that day on his favorite Lisette, and at a touch of the spur she darted away like a deer. He made a wide circle to one side and then turned straight to the hill in question. The hundreds of Cossacks scattered about the field saw him start and gradually come toward them, but, as he did not show fight but simply galloped madly into their midst without looking to the right or the left, each beholder hesitated to get in his way, thinking that the next man to him would attend to the reckless rider and cut him down. Whenever Marbot saw some one ride toward him he swerved a little in his course, without abating in the least the furious pace at which the fleet-footed Lisette was carrying him over the ground. As he got nearer and nearer to his destination he only urged the mare to go faster and all the time his sword hung untouched at his side. Thus, to the surprise of those who were watching him as well as to his own astonishment, he succeeded in reaching the hill, and, having with difficulty jumped Lisette over the horrible rampart of dead bodies, both of horses and men, piled high around the survivors of the brave regiment, he found himself in the midst of a little square of men preparing to sell their lives as dearly as possible.

Marbot delivered his orders to the major in command, who replied that as it would be impossible for him to cut his way through the crowds of Russians and Prussians coming up for the final attack he preferred to die fighting where he was to being cut down while making a vain effort to retreat. He handed to the aide-de-camp the emblem of the regiment, a brass eagle conferred by the Emperor himself, and begged him to take it away with him so that it might not fall into the hands of the enemy. Marbot cut it off from the long pole on which it was carried, so as to be less hampered in his ride, and prepared to start back to Augereau.

Meanwhile the Russian grenadiers had charged up the hill and, mistaking Marbot, who was the only officer there on horseback, for the regimental commander, began making furious thrusts at him through the crowd of French soldiers around him. At this critical juncture a cannon ball came whizzing through the air and passed so close to Marbot's head that it tore away the

greater part of the shako he wore, fastened securely by a strap under his chin. The shock stunned Marbot completely, and as blood at once streamed from his mouth and nose he was unable to defend himself and would have been killed but for Lisette. One of the bayonet thrusts intended for her master penetrated her shoulder instead and maddened her to fury. She plunged forward, and with one savage bite literally tore off the whole scalp of the unfortunate man who had wounded her. Then she seized between her teeth another Russian who had grabbed her bridle and with a mighty bound got clear of the crowd. Dropping her burden and killing him instantly by a few blows from her hoofs, she broke into a mad gallop and headed back to the French lines by the way she had come. Marbot was barely able to sit in the saddle, but he managed to hold on until, weak from loss of blood, Lisette rolled over in the snow, throwing her rider, who fainted, as he, too, had been badly wounded at the last moment.

When Marbot came to his senses some time later he was naked, except for his shattered hat and one boot. Everything else had been stripped off by some marauder looking for plunder on the now deserted battlefield. The young officer was too weak to rise and it was useless to cry for help, so he lay back in the snow, resigning himself to death, which he had every reason to believe would come to him before morning, either from loss of blood or exposure to the intense cold.

By one of those strange coincidences which are not very rare in war he was saved. It happened that some weeks before he had been able to do a kindness to one of Marshal Augereau's servants, who had gotten in trouble and was to be dismissed. Marbot succeeded in having him pardoned and restored to his place, thereby earning the fellow's gratitude. As the marauder who had robbed Marbot of his things, believing him to be dead, was sneaking back into camp he ran into the Marshal's servant, who instantly recognized on his arm the pelisse that Marbot had worn that day. It seems that there had recently been a change in the uniform of the officers, but, of all those attached to Augereau's staff, Marbot was the only one who had succeeded in getting the new things before the battle. Instead of a black fur such as the others were still wearing, Marbot's was a light gray. It had thus immediately attracted the servant's attention. He insisted on examining the rest of the stolen things and recognized the officer's watch and other personal trinkets. The grateful servant, on making this discovery, immediately started to search the field for the body of his late benefactor and was not long in finding him and bringing him to the hospital tent, where the doctors revived him and treated his wounds.

By that time the cold had stopped the bleeding from Lisette's leg and she got up and quietly suffered herself to be led back to the picket. After a serious and very painful illness, Marbot recovered, and it was not many months before he and his gallant little charger were fighting Napoleon's battles again as hard as ever.

Cavalry Lessons of the Great War From German Sources*

GERMANY'S CAVALRY always contributed largely to the prodigious victories of German arms in all Germany's wars. The mere names of Derfflinger, Zieten and Seydlitz, Blucher, and of their victories are sufficient to compel a just estimate of Prussian and German prowess in the saddle.

How far was Germany's cavalry able to meet the problems which were set for it in the late war? The mounted service had successful competitors, even in the minor spheres of mounted action. Aëroplanes, motor cars, motor-cycle troops, wire and wireless telegraphy, messenger pigeons, and many other resources disputed the cavalry's ancient quasi-monopoly of the necessary means for reconnaissance and dispatch service. But, in point of fact, flyers were able to reconnoiter only by daylight; they could not ascertain enemy movements in the dark, and they could not see through anti-aircraft screens. Thus, for example, the French and English flyers failed to perceive the night movements which preceded the German spring offensive of 1918. It is true that the character of the position warfare then in progress did not permit the employment of cavalry in this case. But similar problems are bound to arise in open warfare, sooner or later, and their solution will require cavalry details to supplement and to verify the observations by flyers. And we do not know yet what insuperable obstacles the perfection of anti-aircraft devices will, perhaps, oppose hereafter to aëroplane surveys of a given area. This reservation already applies to motor cars and motor-cycles. These conveyances cannot replace cavalry altogether, with safety, because they depend on the state and quality of roads and terrain. Any veteran soldier of Germany's eastern front remembers what frightful difficulties motor vehicles encountered there. Forest, soil, and other conditions will always present certain obstacles to motor-car operations, and the presence of these obstacles will necessarily require the solution of the problems in question by cavalry.

Commanding officers have never yet been able to dispense with messages carried by mounted staff officers or by a dispatch rider. General Goltz laid down this rule at a military debate about three years before the war: "A well-mounted horseman will always be the safest transmitter of information." This dictum was verified in the World War. Its truth was imperfectly apprehended for a period; but the employment of dispatch riders increased materially during the last years of hostilities.

* Comments of von Ammon upon a portion of Treatise No. 3 in Schwarte, Lessons of the Great War.

Officers often praised the resourcefulness of their mounted messengers in Russia, where the difficult terrains peculiar to that country frequently forbade the use of motor cars altogether, and where wireless telegraphy also commonly failed. Dispatch riders thus became a commander's only resource. One man of this service, who spoke only German, once covered 120 miles in 18 hours, without a map; and he crossed woods alive with enemies or was compelled to follow detours; yet he delivered his message at an average pace of about 9 kilometers (5½ miles) an hour. Examples like this were so common that we owe a tribute of remembrance to those heroes. Dispatch riders were constantly used in position warfare, too. They and their animals were accommodated under front-line shelters, where their assistance proved invaluable to infantry detachments.

OPERATIONS OF GERMAN CAVALRY

Cavalry Corps I and II, under General von Marwitz and Baron von Richthofen, were employed on the principal combat front in the western theater of hostilities when the war began. Their initial task was to screen the advance of the 1st, 2d, and 3d Armies and to facilitate their rapid progress. The German cavalry was badly handicapped by its lack of field guns and machine-guns. It was, nevertheless, able to carry out a continuous advance across enemy territory with a hostile population and to fulfill its task. Our cavalry patrols rode close to Paris, winning the admiration of friend and foe.

During the battle of the Marne those cavalry corps maintained connections between the 1st and 2d Armies and stopped the gap which had developed there. The German cavalry's next task was to cover the withdrawal of the German forces when that was ordered. It prevented a rapid advance of the enemy cavalry and it held its lines until the German troops had evaded the attack of the enemy's superior force and had arrived at positions fit for enduring defense. The cavalry afterwards had the right German flank to protect. It kept the enemy from outflanking that wing of the army in a series of hard fights and thereby enabled the extension of the German front to the sea.

Superior Cavalry Command No. 4 (Bavarian Cavalry Divisions III and VI) was ordered to this zone of hostilities in the meantime, raising the mounted force there to eight divisions. Great credit is due to the good offensive spirit of the German cavalry in its engagements at that period, although the enemy's numerical advantage and our cavalry's inadequate equipment as to machine-guns and entrenching material and its deficient training for dismounted action kept it from accomplishing the objects of its utilization. It did score local successes, as for example, the storming of La Bassee by the Prussian Horse Guards Division. Engagements were almost constant until October, and they will always be a glorious page in the history of the German cavalry arm; for scarcely any cavalry has ever had similar battles to sustain for three months without interruption.

When open warfare gave place to position warfare after these actions, most of the army cavalry in the western area was utilized to guard the Belgian frontier against Holland, on service at bases and for police purposes. The cavalry found little further opportunity for field service until the army retreated to the Siegfried line. The constant falling off of horse supply and the existing need of employing every available force there was in the trenches compelled the Supreme Military Command to dismount a large part of the cavalry for rifle service. This measure unfortunately led to such a shortage of cavalry as to interfere with our reaping the full benefit of our spring offensives of 1918. The enemy's generals agree with this view: they admit that the German army's lack of cavalry and its consequent failure to effect rapid pursuit alone enabled its adversaries to bring up the reserves they needed to stiffen their resistance in time.*

The German cavalry's first service on the eastern front was in frontier guard garrisons. The 1st Cavalry Division was at first the only army cavalry there, whose strategic task was to cover the rear of the 8th (German) Army against the Russian Army of the Niemen, while our forces advanced against the Russian Army on the Narew and during the battle of Tannonberg.

Several divisions of cavalry were then transported from the western front to the eastern front in November, 1914. The observation was made in the course of that transfer that the horses conscripted in Belgium were spoiled by their previous good stabling, etc., and were ill-suited to endure the poor shelters they often encountered in the east.

One Austrian and four German divisions of cavalry took part in our second advance on Warsaw, among which the VIth and IXth rendered especially creditable service. These two divisions and the 25th Reserve Cavalry were ordered to encircle the city of Lodz on the east and at the same time to operate against the enemy's rearward connections. This enterprise failed because the Russians brought up substantial reserves and reversed the game by surrounding the German forces in question. The German forces succeeded, however, in breaking the enemy belt, and, thanks largely to the successful devotion of our cavalry, they managed to rescue our troops, material, and even our wounded from the enemy's clutch.

Four divisions of cavalry took part in the (German) Army of the Niemens's dash at Schaulen, which it occupied in April, 1915. Detachments of the army cavalry destroyed Beimy railway station behind the Russian front on May 7, in the course of these actions. Serious conflicts began in Lithuania in July. There the army cavalry fought its way through the neighborhood of Jacobstadt. In September, 1915, another cavalry command under General von Garnier advanced along the road artery Kovno-Uzyany-Dvinsk to cover the wing

*An excellent example of Allied concurrence with this statement is the account of the Great German Offensive (March, 1918) by Commandante de Cossé Brissac in *Revue Militaire Générale*, May-June, 1921.—Editor.

of the Niemen Army. This corps first encountered strong detachments of enemy cavalry, outnumbering its own, which it drove back. It then opened the isthmus between the lakes at Antologi near Uzyany and continued its march on the enemy's rear connections, with railway station and junction Molodezno for its principal objective. Molodezno was of signal significance for the fetching up of the Russian active reserves. Our cavalry command was unable to seize this railway junction, but Molodezno was subjected to bombardment and some of the railway lines in the Russian rear were wrecked, under conditions of extreme difficulty. Above all, even aside from the losses the cavalry inflicted on the foe and the destruction of his rearward connections, he was compelled to oppose a strong force (about one army corps) to Garnier's cavalry command to escape a beating. Superior as they were in men and material, the Russians required two days of battles to compel the German cavalry's retreat.

The operations of Lieutenant General Eberhard Gr. von Schmettow's cavalry command in the Rumanian campaign deserve to be understood. The reader will recall that this campaign led to the conquest of most of Rumania in a relatively short period. After the battles at Targu Yiu, Schmettow's reinforced cavalry command was ordered to carry out a pursuit and forced a passage across the lower course of the river Alt. Since the 9th Army and Mackensen's Army were performing a concentric advance, the one from Transylvania and the other across the Danube to Bucarest, it became necessary to effect an early connection between the two forces. This was accomplished by Schmettow's cavalry corps in spite of wretched road conditions and unfavorable weather which lasted as long as the operations themselves. Schmettow's corps served as the liaison member between the two armies all the way to Bucarest and helped to take that city. The action of Schmettow's cavalry corps and the way it was handled are a good illustration of the necessity of having a well-equipped and suitably stiffened army cavalry. Only the swiftest grip can lead to a prompt victory with a minimum of loss to the victor; this could be compassed only by giving the enemy no opportunity for recovering his hold on the ground.

The cavalry arm was brought into large play during Germany's later occupation of the Ukraine. No compact, disciplined troops opposed it here, but the hostile population and its Bolshevik passions were a serious condition, since a successful ambush of a small detachment would involve its annihilation. Mounted messenger service acquired a signal importance throughout the Ukrainian campaign.

THE LESSONS TO BE LEARNED

In general, one can sum up the cavalry experiences of the late war with regard to composition, training, mounts, equipment, armament, and drawing up reserves of men and animals about as follows:

1. *Composition:*

Constant drafts upon the cavalry service for staff and messenger details regularly weakened its combat efficiency. It would have been a good plan to assign a sufficiency of mounted messengers to these services without taxing the cavalry units, to keep the cavalry unburdened and determined. The personnel allowance of 150 men per squadron would have proved sufficient, had it not been for the aforesaid constant drains by detail of mounted messengers.

Great advantage was experienced when a machine-gun squadron of six heavy machine-guns and three machine-guns in reserve and an intelligence section were added to the four mounted squadrons of a regiment of cavalry. The reinforced Hussar Brigade found this arrangement exceedingly satisfactory during its advance. The allocation of light machine-guns would have been beneficial. Had the colonel of a cavalry regiment been able to dispose of four light machine-guns per squadron, with six in reserve, many problems could have been solved faster and more easily.

The experience of the 2d Cavalry Division is worthy of remark. This division had been utilized in trench warfare for five months, when it was ordered on mounted service again. Its forces had also been used for non-cavalry services about the German bases 100 to 200 kilometers back of the eastern front and were consequently in poor condition to cover long stretches rapidly. Other drawbacks were poor shelters or none, bad weather, soggy roads, and the many difficulties of provisioning and recruitment. Yet the 25th Cavalry Brigade, for example, covered 140 kilometers in its first three days of march, in a hard snowfall. Large parts of the 2d Cavalry Division had about 3,000 kilometers to cover in four months. It is true its losses in horses played out or fallen sick could be instantly made good by local requisitions. All parties concerned, from breeders to remount station services and the army, would have done far better to harden their mounts and keep them tough by accustoming them to endure all sorts of weather from colthood. Theoretically, the fine feed our horses enjoyed in the piping days of peace was the best thing they could have, but in practice they were preposterously spoiled and were also made sensitive to contagions; mange alone made away with innumerable German animals, whereas the Russian panya ponies and the Ukrainian broncos were the joy of their German riders for their endurance. They were accustomed to every variety of feed and forage.

Maximum mobility, strong firing capacity, and readiness for united utilization are the postulates for an army cavalry. Not even the divisional cavalry, let alone the cavalry columns, were able to meet these requirements during the World War. In this respect the composition of the King William's Hussars Brigade proved highly advantageous:

Three cavalry regiments of four squadrons and one machine-gun squadron each, one battalion chasseurs on motor cars, one battalion cyclists, one section horse artillery of one battery field guns and one battery light field howitzers.

One battery heavy field howitzers, one pioneer section, one heavy and two light radio stations, and one heavy munitions column might well have been added to this formation with advantage, to give it an even better development for independent action than it was able to compass.

There was no need of keeping the divisional cavalry as strong as it was. Its initial composition when the war began was three to four squadrons per infantry division. The assignment of two cavalry squadrons with light machine-guns to each division of infantry would have been enough for all the problems which actually arose, provided the cavalry had been spared the drafts that were made on it by the mounted messenger details.

2. *Training:*

The special training of the cavalry regiments which took the field was, generally speaking, sufficient; but it would be a blunder to neglect this training in horsemanship hereafter by transforming the cavalry to a mounted infantry. The war certainly proved that the cavalry should have enjoyed much better training for dismounted warfare; but the future will continue to require a thorough schooling of man and beast in mounted work, more especially since a well-schooled and well-organized horse will always endure better than a raw horse. The war clearly proved this thesis: requisitioned and replacement horses not much ridden very generally used up faster than well-trained animals.

The ordinary ante-bellum idea that successes would be won by cavalry attacks, with rare occasions for using dismounted cavalry, proved erroneous. Attacks on horseback proved a rarity and were crowned with no success when they were conducted against infantry; as for large cavalry engagements, there was none; whereas the cavalry was often obliged to fight on foot. Here the cavalryman found himself handicapped by his insecurity with his fire-arms (carbine and machine-gun), by his inadequate mastery of open-order forms, by his lack of skill in utilizing varied terrains, no less than by his scant understanding of trench warfare and the fatigues that belong with it.

Reconnoitering and security patrolling, engineering enterprises, and intelligence service were other spheres in which the ante-bellum training of the German cavalry left it not fully equal to its tasks at the beginning of the war. Needless losses were incurred by the German cavalry by reason of a peace-time training in which the actual problems to be faced were poorly understood. Among other defects the training of officers and non-commissioned officers at the cavalry school of telegraphy had been inadequate, as well as the peace-time exercises provided for regimental intelligence work.

3. *Mounts:*

The German cavalry horse is a blooded animal and proved excellent. The middle-sized East Prussian horse proved a fine cavalry animal, while large

horses of less high-bred stock were more likely to fail. This is why hussar and dragoon regiments held out better than the other cavalry regiments, whose replacements of larger and heavier horses were intended to match their replacements in men.

Peace-time habits were the cause of horses giving out in many cases, owing to their enervating in warm, underventilated stables. The snobbery of keeping horses close-clipped, even in winter, and of valuing animals by the smoothness of their coats was cruelly punished in war-time, when many fine animals went worthless with colds of one kind and another. The gas mask that was distributed during the war was highly unsatisfactory. The sensitiveness of horses to poison gases is extreme.

4. *Equipment, etc.:*

The German cavalry began the campaign of 1914 without field kitchens—a wretched mistake. Men had no blankets, no entrenching tools, and no wire-cutters. The enemy should have been unable to tell cavalry from infantry by their uniforms. The later equipment of the cavalry with steel helmets was very properly made, for this reason. The German army saddle proved excellent.

Carbine or pistol, saber and lance composed the horseman's arms when the war began. Carbine and pistol rendered good service and never provoked their replacement by other weapons. In order not to leave the cavalry unequipped with a weapon of hew or thrust for dismounted combat, a short side-arm was carried instead of a saber, with doubtful advantage. The lance, which was rarely used and was in the way, should have been abandoned in favor of a saber.

5. *Replacements:*

There was no need of all the special-arm training that was given to men destined to be detailed to horse hospitals, etc., as so many were; and it was a blunder not to have replacement squadrons trained at home by experienced and able senior officers, instead of assigning officers to this duty whose unfitness for field service was frequently traceable to reasons with which their age had nothing to do.

The war proved the necessity of a much more extensive and harder schooling than former warfare demanded, for all arms, and this is more true of cavalry than it is of any other arm. The remarkable performances to the cavalry's credit would no doubt have made it count more heavily yet in the far-flung campaigns of 1914-1918, if peace-time instruction had possessed in greater measure the gift to recognize the demands which the future would make on man and beast, and if its training had been more freely modified to meet these varied burdens.

Organization and Supply*

BY

Major HARRY L. HODGES, General Staff

(Successor to General Dawes as American Member, Military Board of Allied Supply)

THE FASCINATING PART of the military profession is the study and practice of operations; but this is not the part which, in the last analysis, always decides the contests. It is the economic supply or the lack of it which causes war, makes possible its continuance, and finally brings peace. The operations, glorified in song and story, engage the public eye, for their toll in human lives strikes visibly into the life stream of the nation; but few of the vital achievements of supply have been pictured; for, although a greater comparative toll of lives is wrought when the supply of an essential item has been lacking, and more silent and even more deep are the benefits brought by well organized supply, they have not the same appeal to the imagination.

It was the desire for commercial development which brought about the World War; it was the failure of supply to keep up with operations that limited many offensives; it was the fairly perfect operation of supply over the trade routes of the world that made possible the operations of the Allied armies, and, finally, it was the lack of supply with reference to the civil population of Germany which rendered fertile the ground and made it receptive for the seeds of discontent in the civil population of Germany, which in the end caused the failure of German arms. Had the war continued, it is possible that the United States would have suffered a loss of morale which the privation of the necessities of life produced in Europe and always will produce.

It was the restriction on supply which in part caused the American Revolution. Now, no less than in the time of Napoleon, an army, or even a nation, moves on its belly; then it was the failure of his supply system that brought to naught Napoleon's invasion of Russia. It was the failure of supply that, to a great extent, caused the downfall of the Confederacy. The dictum of Napoleon referred to above expressed his appreciation of this subdivision not only of the military problem, but of the problem of existence; which appreciation has been lacking in the preparation of all armies for the inevitable conflicts which have occurred and will continue to occur between nations, on account of the conflicts in their commercial—in other words, their supply—interests.

Following all wars, great and small, there appear innumerable publications on the strategy and tactics employed. To read these alone, one would conclude

* In the preparation of this article acknowledgment is due for the assistance rendered by Haney, Sparling, Robinson, Hine, Mason, and Golloway in their works on business organization.—THE AUTHOR.

that armies spring into life armed and equipped, as if by magic, and that thereafter the commanders march and maneuver, limited only by tactical and strategic considerations. Yet the number of men concentrated is limited by the equipment which is available or which is manufactured to supply them, and their concentration is a function of the existence of railways and roads, the assembly and availability of rolling stock, motor transport, and horse, and their every movement is absolutely limited by questions of *supply*. To supply modern armies, the commercial life of the nation involved is remodeled, its every effort, including the work of women and children, is organized and mobilized, and to every man on the front lines there are many more engaged in industry directly essential to success on the battle line. The navy, either in war or peace, is builded primarily for the purpose of guarding these supply lines. Not only is every industry of the fighting nations involved, but neutrals must organize their industry to meet the demands of the combatants.

To one thought of operations a commander-in-chief must give dozens to his supply. The power of maneuver is based not so much upon the number of men and roads available as upon the means of moving, feeding, and equipping them—all questions of supply.

Having in mind the idea that supply should form as large a part in the instruction of the officer as operations, it has been deemed advisable to introduce to the cavalryman some of the more interesting developments in supply in the World War.

In each of our service schools there is room and a demand for a course in supply. This may begin, as did our old infantry and cavalry school, with a study of minor tactics; but here it is the minor tactics of supply. In the lower schools problems in supply should cover that needed for the patrol, the troop, the squadron, and by successive steps a co-ordinated system can be established which will end in the General Staff College in problems embracing the mobilization of the industries of the nation or even of the world at war.

No study of supply, which in its larger aspect is the business side of war, can be made logically without the consideration of the basic principles of organization, and especially business organization. There are two, and perhaps three, basic forms of organization, known to economists as departmental, divisional, and military; sometimes as centralized, decentralized, and military, and sometimes the departmental is called functional.

The divisional (decentralized) form of organization is defined as that organization which is subdivided along the lines of direct responsibility, each subordinate being supreme within his limited field, controlling and co-ordinating all the essential activities of the organization within the scope of his operations, the duties of his superior differentiated from his only by the amount and extent of power exercised. This system naturally tends toward territorial division, and may best be illustrated by the organization of the combat forces of a nation, divided into groups of armies, armies, corps, divisions,

brigades, regiments, battalions, companies, platoons, and squads. The commander of a division is supreme in his own local but restricted area, wherein he co-ordinates all activities, tactical and supply, under his particular jurisdiction. The next higher commander (of the corps) has a larger responsibility and a larger area of control. Above him in succession come the army commanders, the commander of groups of armies, and, finally, the commander-in-chief, each of whom exercises supreme control in his own particular area, co-ordinating all activities, tactical, supply, etc., incident to his command and differing from that of his subordinates only in the amount of authority exercised.

In the business world the typical example of this form of organization is the railroad, which is divided into operating divisions, whose interior organizations are identical. Over the operating divisions of the railroad there is one supreme commander, under whom operate the subordinate division commanders, each with similar duties but with more limited responsibility.

The departmental (centralized) system of organization is that organization which is subdivided by activities or departments, seeking to gain its object by the specialization of these activities, by the establishment of a group of parallel specialists,* each activity covering exactly the same area physically or in population as covered by the operation of the organization as a whole, with the co-ordination or control of each activity exercised at the central office. Under this form of organization, in any particular territorial subdivision of the organization as a whole, there will be found the agencies of each department of activity actually, if not physically, separated and responsible to no general local authority, but directly to the chief of the particular activity at the central office.

In the business world this form of organization is best exemplified by a corporation which sells its own manufactured products. Gathered in the central office are the vice-presidents, each in charge of one activity, such as purchasing or procurement, manufacturing, distribution or selling, accounts and finance. The activities of these several departments, while differing in their nature, cover exactly the same area. The various procurement agencies throughout the organization report directly to the vice-president in charge of procurement, the manufacturing agencies report to the vice-president in charge of manufacturing, and similarly for each of the other departments.

The military man can best appreciate the centralized form of organization when he considers the military organization in its subdivisions into services, namely, the medical corps, ordnance department, quartermaster corps, etc. Inasmuch as the department and divisional forms of organization are to a great degree complementary and not antagonistic, there is at first difficulty in appreciating the distinction between the two. To emphasize departmental

* Haney: Business Organization and Combination.

organization, consider the military organization organized on purely departmental lines. Under such system there would be found in each division, corps, or larger unit a surgeon not locally responsible to the divisional, corps, or larger unit commander, but directly responsible to his chief at the central office—that is to say, at general headquarters. Similarly, there would be with each division or larger unit a quartermaster, a signal officer, an ordnance officer, etc., owing at most but a limited allegiance to the division, corps, or higher unit commander in whose area he might be functioning, but owing allegiance primarily to his supreme chief at general headquarters. Together at general headquarters there would be found the chief quartermaster, the chief ordnance officer, and the chief signal officer, etc., each being supreme in all questions concerning his own particular activity, either at the general headquarters or in the lesser subdivisions. The activities of these chiefs would be co-ordinated only by the commander-in-chief. Although these activities cover the same territorial areas, in each area there would be found subordinates of each chief responsible only to the chief of that activity and not under the authority of the local representative of the supreme command, with the result that in order to obtain any final decision covering a matter of local co-ordination with other activities in a similar subdivision of the military organization, it would be necessary to take the matter, whether local or otherwise, to the centralized authority at general headquarters for final decision.

The divisional and departmental system of organization are the only two of the basic three to be found in the business world or in organizations in civil life. It is obvious that there are certain advantages and disadvantages peculiar to each. Before proceeding to a discussion of the military organization, it may be well to digress for a moment and consider them briefly.

The advantages and disadvantages of these two systems of organization are briefly stated as follows:

DIVISIONAL

Advantages:

1. Each local organization is more free to adapt itself to conditions.
2. It favors prompt action (speed), in that the officer in charge is local.
3. It makes for responsibility, the officer being responsible for all operating conditions in his organization as a unit.
4. It promotes unity of purpose.
5. It increases individual initiative and competition between similar units.
6. It develops all-round men.

Disadvantages:

1. The local directing head cannot be a technical expert in all activities.

DEPARTMENTAL

Advantages:

1. It secures "expertness," develops specialists.
2. It secures uniformity of method in each activity.

Disadvantages:

1. The chief of an activity will work for the showing of his service, even at the expense of some other service.

DIVISIONAL—Continued

Disadvantages:

2. The uniformity of operations as a whole is difficult, on account of the different experience and capacity of local commanders.

3. The responsibility of local representatives of an activity is divided. In some things they are responsible to the chief of the activity and in others (command) to the local commander; similarly, in procurement to the chief of service and in use to the local commander.

DEPARTMENTAL—Continued

Disadvantages:

2. While uniformity of method in an activity is secured, it is secured by direct responsibility to the chief of the service and by direct reports to this chief at the expense of time and power of local decision.
3. There is a lack of harmony locally, for no local commander has authority to give a decision involving all the services at one time. This can be secured only at the "central office," where alone is centralized enough authority to make decision affecting all services.
4. Responsibility is not so effective for
   (*a*) Authority is more remote.
   (*b*) It is not informed of local conditions.
   (*c*) There is difficulty in placing responsibility.

It is the opinion of students of organization that the departmental form of organization is preferable where expertness, economy, and certain technical features are more important than the executive, and that where large numbers are involved, where the territory is large, where isolated units must function, and where speed and rapidity is essential, the divisional form of organization is to be preferred.

In the A. E. F. the Commanding General of the services of supply exercised his control in large part through various territorial sections which grew up around the ports of entry or supplies, in the interior and in the advance. During the period of delimiting the duties of his various assistants, controversies arose which may be indicated as follows:

The commanders of sections were usually general officers appointed by the Commanding General, S. O. S. The Section Commander bore the same relation to the representatives of the various services in his section as the C. G., S. O. S., bore to the chiefs of the services at Tours. From time to time questions arose in sections between Section Commanders and representatives of services. These questions usually had reference to various projects carried on by the services in the section. Questions also arose regarding personnel pertaining to the various services serving in the section. *Chiefs of services at Tours considered that their representatives in section were the proper channels through which to give instructions.* Section Commanders considered that they, as the direct representatives of the C. G., S. O. S., were the proper channels. The approved policy covering these difficulties was that the Section Commander, in addition to his responsibility for attention to duty, discipline, supply, and sanitation of all personnel in his section, was the proper channel for all communications between chiefs of services and their representatives in the section, excepting

those of a purely routine and technical class (divisional organization). Section Commanders were informed by headquarters, S. O. S., of all policies, and acting upon these policies they commanded the sections. The tendency of growth was toward increasing the authority of Section Commanders, transmitting to them policies and holding them responsible for carrying them out. The S. O. S. was so large territorially and contained such a large personnel and involved so many different activities that decentralization (which is "divisional" organization) was necessary. The controversies were not, in reality, conflicts of personalities, but went even deeper than that and were the inevitable conflict between two basic systems of organization, the "divisional" and "departmental." This is only a single instance of the ever-recurring conflict between "centralization" and "decentralization."

The military organization is really a combination of the departmental and the divisional. The basic elements of the military organization are: first, direct responsibility; second, speed; and to secure these territorial command is established; and, third, expertness, but not at the expense of the other two. To secure these basic elements, the military organization must be largely "divisional"; so we have companies, regiments, brigades, divisions, corps, armies, all similarly and "divisionally" organized and each having control, within its specified limits, of all activities.

When fighting units were small, when the activities were not diverse nor extended, when nature provided each man his weapons or he provided them himself, the military organization could be purely "decentralized"; but the growth of armies and the growth of activities would have required each commander to be fully competent in all activities—in other words, to be a "Jack of all trades." As the weapons became more complicated and could not be provided by each individual, departments and services were formed. The more technical the weapons, the higher the degree of expertness the provider must possess. To secure this "expertness," "centralized" organization naturally resulted.

Between the numerous departments or services and the essentially military units divisionally organized, there is a necessity for local and immediate co-ordination, and it is the establishment of this local co-ordination which differentiates the "military" from either the "departmental" or "divisional" organizations. Such co-ordinating agency will be found to have existed in the military establishment or the military organization from time immemorial. The "adjutant" was the co-ordinator between the services and the units divisionally organized in the regiment and in the larger organizations. He, by this co-ordination, made it possible for the commander to exercise direct command over his units. With the growth of larger organizations larger co-ordinating agencies became necessary, and logically there followed the use of a chief of staff, and when his duties became too numerous, of an executive staff (call it general or otherwise) as the co-ordinating agency between the units "divisionally" organized and the services "departmentally" organized. This duty is

essentially a delicate one, in that the co-ordinator can in no sense take away the command of the units from the units "divisionally" organized, or the control of the services from the services departmentally organized.

There is a tendency for sections of the executive staff in the various units "divisionally" organized—that is to say, divisions, corps, armies, etc.—to communicate direct with similarly designated staff sections in the other units. This is an unconscious attempt on the part of members of the executive staff to establish within itself a "departmental" form of organization, to wit, to make of it a "service." In order that it may function without friction, it is necessary that the executive staff of each unit concern itself solely with co-ordination in the unit. All points which are not within the function of the commander of that unit should be taken up through the commander or with his consent and knowledge with the commander of the next higher unit.

As has been previously stated, the military organization binds together the "divisional" and "departmental" organization, so that in all military organizations there will be found these two elements in greater or less proportion: the "divisional" organization, to secure direct command and speed; the "departmental" organization, to insure expertness.

The most difficult feature in all military organizations is to determine where the "departmental" organization, which flourishes in time of peace, gives way to or merges into the "divisional" organization, which seems to be made necessary by the rapidity of operations in time of war. It will be found that there is a tendency toward the "departmental" system where distances are not great, and where local co-operation of capable men is therefore possible, where transversal shipment of troops or supplies is not a necessity, and where intercommunication can be rapidly established, as in stabilized warfare. It can be used in a "General Headquarters" or War Department, but, when distance places one remote from central authority and where celerity is an essential, the "divisional" system must be employed. In the field of supply, commodity procurement demands time, and can be effectively used where time is available, but procurement by and for a local organization must be employed where time is short and immediate use is demanded.

In none of the armies had there been failure of the supply system adequately to provide for the armies.* There is no record of a "Tommie," a "Poilu," or a "Yank" ever having been starved to death. The French supply system followed more closely the "divisional" than the "departmental" organi-

* An interesting incident illustrative of this fact is told of the 77th Division, which, when relieved from duty with the British, left a small guard in charge of a food dump, which, on account of a shortage of transportation, the division was unable to move. Several months afterward the division, having participated in most of the larger actions, found itself in the Meuse-Argonne. The division commander one day received a formidable-looking official document forwarded to him from the British High Command, informing him that the two men left in charge of the dump had eaten it up and requesting either another dump or the relief of the men.

zation. The British, on the contrary, favored the "departmental." This latter case may be illustrated by the way in which supplies were obtained and distributed to the armies. The "Q" representative of a unit made request to the "Q" representative of the next higher unit; this request finally found its way to the Quartermaster General at the British G. H. Q., and by him it was approved or disapproved in part and forwarded for compliance to the "Q" representative at the base. At the "Central Office," G. H. Q., the Quartermaster General gave such instructions to the Director General of Transport as to insure from the base the delivery of supplies to the railhead. Those supplies in their movement forward passed through a regulating officer, who was charged solely with the transportation and had no local control over quantity or distribution of supplies. The control of all of the services was centralized at G. H. Q. and at G. H. Q. only. This is a basic element in "departmental" organization.

No military organization can be entirely "departmental," for the unit commander in the armies must have control of all services in their organizations, to secure speed; but there was a greater tendency to follow "departmental" lines of communication in the procurement and distribution of supplies here and in the armies of Belgium and Italy than existed in other armies. Due to the short distances, and therefore ease of communication and conference, there was not the need of the exercise of complete "local control"; so that the British system could and did function perfectly; to decentralize, there would have been straining a point for the sake of a form and not because of any necessity. Greater distances would have necessitated greater "local control," the basis of "divisional" organization, as was evidenced by the British in handling their six expeditionary forces. The Italian Army organization, while divided territorially into the Zone of the Interior and the Zone of the Armies, in all other respects followed more closely the "departmental" system of organization. The American organization, through years of peace training in which the "departmental" system, due to the lack of necessity for speed and due to the desire for expertness and economy, had thrived, had a tendency at first to follow "departmental" lines of organization, but the long distances to be covered and the necessity for the exercise of speed by the local commander, and for immediate decision, caused this organization to become more "divisional" than "departmental."

In the United States, the World War demonstrated that in the formation at top speed of an immense army "divisional" organization must take precedence over "departmental," and that "military" organization, as heretofore defined, must become a necessity.

The Reserve Officers' Training Corps at a Large University

BY

Captain ROBERT W. GROW, Cavalry

THE UNIVERSITY OF ILLINOIS has the distinction of maintaining the largest Reserve Officers' Training Corps in the country. It also has the most units. Naturally it is looked to by many other schools of the same type for ideas and methods. Yet all officers who study the R. O. T. C. situation will agree that there are no two schools alike. Each has its local traditions and policies. Each has a class of students, whether by wealth, geography, environment, or what not, differing from the others. All land-grant schools had some type of military instruction prior to the National Defense Act of 1916 and built up cadet corps based on the Act of 1862. These corps were of necessity absorbed by and not cast aside by the R. O. T. C. Eventually the whole number of units in similar schools may be brought to the same standards, but this is very unlikely, and there is doubt if it would be wise. The old customs and usages and the local conditions are the life of many institutions. They bring variety, new problems, and better exchange of ideas. With proper supervision each school will turn out reserve officers as equal to an emergency as the others. I will dwell, then, on the R. O. T. C. at Illinois, not because it is a perfect example of the development of the idea in this type of school, or even because it is an average sample of this kind of work, but because I believe it has succeeded in raising the plane of military instruction in academic institutions, because it is disseminating among the people of the State of Illinois a feeling that a knowledge of military science is a good thing, and finally because it is giving, and will give to a much greater degree in the future, to the Army of the United States a body of reserve officers that know our problem of National Defense and know the fundamentals of military science and tactics as applied to their chosen arm.

Under an Act of Congress in 1862, in consideration of a fixed financial aid, certain State owned and operated colleges and universities are required to provide two years of military training to all able-bodied male students as a prerequisite to graduation. During these two years three hours per week are the minimum amount of instruction. With the usual course of thirty-two weeks this amounts in all to about 186 hours. This is about one-third of what a recruit should get before he is turned to duty. With the establishment of the R. O. T. C. these units were taken over or rather reorganized into reserve officers' training corps. The number of hours instruction remained the same in most schools for the first two years (known as the basic course), and an elective

course of five hours per week was added for the Juniors and Seniors. This is known as the advanced course.

With the amount of instruction as shown above, no one subject or group of subjects can be mastered. The college student is, however, very adaptable, and by small doses scattered over a period of four years he assimilates the fundamentals. Close-order drill is given, not to make a perfectly drilled organization (although they do excellently), but to show each man the how and why of close-order drill, and then it is repeated sufficiently so that he does not forget, and in four years it is thoroughly drilled into his system. He does not become an expert sketcher through a few hours of military map-making, but he knows how military maps are made, how they are read, and what their uses are; and he gets just enough of the actual work to enable the impressions to stick.

Last year at Illinois there were fourteen regular army officers; this year there will probably be twenty. Most of the officers of the service will think this excessive, but I shall try to show that there is at least as much, and probably more, work at school than there is in the line. The organization is shown as follows:

MILITARY DEPARTMENT—UNIVERSITY OF ILLINOIS, 1921.

President.
Dean of Men----------Academic Departments.
P. M. S. & T.
Executive Officer and Adjutant.

Training Branches
- 3 Infantry.
- 3 Field Artillery.
- 3 Cavalry.
- 1 Engineers.
- 1 Signal Corps.
- 1 Air Service.

Administration....
- 1 Students' Records.
- 1 Headquarters Enlisted Detachment.
- 1 Supply.

1 Storekeeper.
Detachment of 80 Non-commissioned Officers and 8 Privates.

There are about 7,000 male students at the University, about 3,600 of whom are members of the R. O. T. C. The cadet organization is a reinforced brigade of two regiments of infantry, one regiment of field artillery, one regiment of cavalry, one battalion of engineers, one battalion of signal corps, and two squadrons of air service. The equipment is complete. Besides uniforms and field equipment for all, and rifles for all men armed with the rifle, the infantry has machine guns, automatic rifles, 37 mm. and Stokes mortars; the field artillery a 3″ and a 75 mm. battery, a 155 howitzer and a 155 G. P. F., pistols, fire control instruments, tractors, trucks, and 90 horses; the cavalry has machine guns,

automatic rifles, pistols, sabers, pack equipment, horse equipment, and 60 horses; the engineers have a pontoon train, photographic, demolition, and entrenching outfits; the air service has airplane motors, models, and so forth; the signal corps has radio and wire outfits and pistols. The University has built stables to accommodate 150 horses and six mules. The armory is the second largest in the country, with an unobstructed floor space of 200′ by 400′, suitable for mounted and dismounted work. A parade ground 350 yards square adjoins and two drill fields are adjacent, one of which is used as a landing field by the air service. Class-room instruction is carried on in the academic class-rooms, several of which are assigned to the military department and some of which have been converted into military museums.

Due to the size of the brigade, each unit must drill at a different hour. Some form of military instruction is going on every hour from 8.00 until 5.30 every day of the week except Sunday; most of these hours find one unit at theoretical work and another at drill, and it even happens that the drill hours in many cases overlap and cause crowding.

Under the system of compulsory training for two years, each Freshman upon entering must be treated as a civilian concerned only with academic subjects and must be interested and shown. He knows before he registers that he must take "Military Drill." It is a "required" subject, but, so the older men tell him, not to be taken "seriously." This attitude is a result of the old "Military Science" pre-war course, the ideas of which have been handed down by the upper classmen. For the majority their last thought is that they may earn a reserve commission.

In trying to correct this my first talk to these men follows these lines: "The man that sits beside you in this class-room may lead you, or you may lead him, in the next war. You will both be there in one capacity or another, if by any misfortune history repeats itself within the next 15 or 20 years. You both come here with equal opportunities to acquire the essentials of military leadership. Without impairing your academic standing (in fact you will improve it), without constantly remaining under strict military discipline during your study hours, you can, nevertheless, seep up enough military knowledge to give you a start, an edge on those less fortunate, when the next emergency arrives. In short, you may fit yourself to be a leader of men in the greatest game that you will ever be called upon to play."

From the start the schedule must be built to interest the man. When time is as precious as it is in these schools, two weeks to a month spent on the study and the formulation of a schedule is not a bit too much. The exacting details of grooming, saddling, shooting, jumping, etc., must be taught by giving the student the fundamental principles and reasons as well as the details, and not just the bare facts that are usually given to soldiers. Variety is the best way to secure interest. All periods are short. Although the basic cavalrymen drill two consecutive hours, they never get the same work for more than 30 minutes. A

mixture of different kinds of mounted and dismounted work in short, snappy periods keep up physical and mental alertness and the student retains his knowledge remarkably well from one week to the next. The theoretical work aims to teach the fundamentals of drill, physical training, musketry, minor tactics, engineering, etc., the minutiæ being taught on the drill field. The class-room gives a chance for quizzes and examinations which show how well the student has grasped not only the principles and details of the movements, but also the way to command and instruct in them.

If, by the methods indicated above and practiced for two years, we can interest the student in the profession from a professional or patriotic standpoint, he is permitted, assuming his work to be satisfactory, to enter into a contract with the Government for a reserve commission. This contract requires five hours a week for the Junior and Senior years and a four to six weeks' summer camp between; and to assist the student the Government pays him commutation of rations at the existing rate and one dollar a day for the duration of the camp. In the cavalry unit at Illinois last spring half of the Sophomores applied to take the advanced course this fall. This is a remarkable record compared with the past and will unquestionably be exceeded each year for some time, as the course grows in interest and efficiency.

To secure a working organization all units are organized into regiments and companies, troops, or batteries. The advanced-course men hold the cadet commissions and the highest non-commissioned grades. In another year there will be no cavalry officers from other than the Senior class, although this year there are a number of Juniors. The Sophomores with basic camp experience are non-commissioned officers over the Freshmen, and the Juniors who are not commissioned are non-commissioned officers over the Sophomores who have not had camp experience. All advance-course men are competent to serve as cadet officers, since this is a prerequisite to admission to the advanced course. Commissioned grades in the cadet corps receive University scholarships and this proves a great incentive for hard work. Upon completion of two years advanced-course work and the necessary credits to receive a degree, the student is given a reserve commission as second lieutenant at commencement. The cavalry will get ten reserve officers from Illinois next spring, and after that at least thirty and very probably fifty a year. The other units will probably furnish 200 more. They all have been absorbing principles, fundamentals, and details of all subjects a cavalryman should know for four years. Their character and ability to command have been tested. They are educated from an academic point of view. They will make excellent junior officers whenever they may be called upon.

Aside from the viewpoint of military science and tactics, the R. O. T. C. fills a large part of the social and athletic life of the school. Each unit is sponsored by one or more sororities. These young ladies take great interest in their troops; they are the hostesses or guests of many social affairs, and are on hand to spur the men on in competition. The cavalry unit takes its sponsors on an annual

mounted picnic, which provides great sport and novelty for the girls. The other units have similar parties, the engineers taking their girls to a distant picnic ground in a pontoon train, the boats mounted on their wagons and pulled by artillery horses.

The different units have their athletic teams of all kinds, which compete in the intra-mural schedules. This phase of competition has just started, but will rapidly develop.

Each fall and spring the cavalry unit stages a gymkhana. The purposes are to provide an incentive for extra riding, to promote rivalry between squadrons, troops, and individuals, to raise money for polo equipment, prizes of different sorts and social functions, and finally to advertise the cavalry in particular and the R. O. T. C. in general. These exhibitions have all drawn more than 2,000 people, although held in competition with other University affairs. They result in close fights in mounted wrestling, Roman riding, jumping, and feature races.

There is an annual circus held by the University and staged by all campus organizations each spring. The R. O. T. C. is a prominent factor in this. The mounted gymnastics, jumping, and pyramid riding are the contributions of the cavalry, while the other branches stage a night battle with pyrotechnics and an exhibition of artillery, machine gun, and rifle fire to represent some battle of history.

Polo will be developed this year and is certain to be a recognized University sport. The athletic department will support the game in connection with intercollegiate athletics as soon as it is well organized. This sport is now authorized by the War Department for all cavalry units, and is to be included in the advanced course schedule.

A closing word about summer camps. I am just completing my duty with the cavalry camp at Fort Ethan Allen, Vt. Essentially military and essentially academic schools were both represented. The men who attend the basic camp from the latter schools will almost unanimously select the advanced course when they become Juniors. You might say that, although a side issue in their school work, military is their real hobby, and at camp they "eat it up." When they are commissioned I believe that they will be at least the equals of those from the essentially military school. The camps are a sort of post-graduate course at the end of the Freshman and Junior years, and the program attempts to include all subjects which cannot be properly covered in most schools. These are long-range rifle practice, hikes and camps of more than one day's duration, under field conditions and involving musketry exercises and minor tactics, and the drill of larger commands such as the squadron or higher. One of the big advantages of these camps is to bring the students of the different schools into competition. Illinois, not an essentially military school, and also without an outdoor range, won the rifle competition at this camp, and with it the opportunity to shoot in the National Matches at Camp Perry.

The Fort Ethan Allen R. O. T. C. Cavalry Camp

BY

Lieutenant-Colonel FRANK B. EDWARDS, Cavalry

WITH AN "Oskie Wow, Wow, Illinois," and many a Rah, Rah, Rah, for Georgia, V. M. I., Norwich, Michigan, and Massachusetts Aggie, 234 students shouted their farewell to Fort Ethan Allen on July 21. If one can judge by the enthusiasm of the students in all the work they did or by the many nice things they said as they were leaving, I should say that the camp was a success. After hearing all the school and college yells, one might be tempted to say that it was a howling success.

The camp was officially opened on June 16, but the cadets from Norwich did not arrive until the 18th, and those from V. M. I. the 24th. It was originally intended to have six weeks of instruction, but at the close of the second week information was received that the time was to be cut to five weeks on account of shortage of funds. This was very unfortunate, as it necessitated a change in the course as planned and a reduction in equitation and target practice and the elimination of the cross-country riding. The reduction in time also cut short the polo. Three road marches, with overnight in shelter-tent camp, had been planned for each troop, but this very valuable instruction had to be cut down to one march for each troop of the advanced course.

A week was spent in tent camp on Lake Champlain. During that week it was necessary to bring a troop in to the post each day in motor trucks in order to complete the record firing. The troops that remained at the tent camp had problems in minor tactics during the forenoon. The afternoons were spent in swimming and water sports.

I asked many of the young men what they considered the best features of the camp. In every case the answer was given without a moment's hesitation and it was always the same: "The practice marches, the tent camp on the lake, and the athletic and polo contests."

I believe that at this camp, as at the camps last year, we tried to cover too many subjects. These short periods of instruction should not be wasted in work that can be covered at the institutions from which the students come. From my two years' experience in these camps, I would say that the dismounted instruction should be limited to firing instruction and record practice with rifle, and a part, at least, of the mounted pistol course. All other instruction should be mounted and consist of road marches by platoon, troop,

and squadron of two days' duration each, with a shelter-tent camp; terrain rides and other elementary problems in minor tactics and lots of cross-country rides and polo.

While it is true that even the students of the advanced course that attend these camps do not have the seat and hands that they should have for cross-country riding and polo, yet if we would make the camps interesting and attractive, we must give the students work that is different and in advance of that which they receive at their schools and colleges. I have been told by officers stationed at some of the large colleges that were it not for the summer camps, it would be almost impossible to keep up the enrollment for the advanced course of the R. O. T. C.

Only one out of the six universities and colleges represented at the camp this summer had a polo team last year. It is almost certain that all of them will have teams during the next academic year, and all as a result of the interest created in polo at Fort Ethan Allen. About fifty students made application to become candidates for the six polo teams, and, after a short course of instruction, elimination contests were started, and twenty-four students were selected for the six teams. These teams represented the following institutions: University of Illinois, University of Georgia, V. M. I., Norwich, Culver, and a composite team representing Michigan Aggie, Massachusetts Aggie, University of Arizona, and New Mexico Military Institute.

Colonel Frank Tompkins, the Camp Commander, offered a cup for the winning team. The cup went to Norwich University. This team won all five games played. While Norwich University had a very successful team during the past academic year, there were no students at the camp from that colloge who had ever played polo. The final game of the tournament was between Norwich and V. M. I., the two essentially military colleges, and was the most exciting contest held during the camp. These two teams were very evenly matched, and Norwich won the game by one goal.

The 1920 R. O. T. C. Cavalry Camp at Fort Ethan Allen was attended by 105 advanced-course cadets from Norwich University and Culver Military Institute. At this year's camp there were 234 students from nine different schools and colleges, as follows: University of Illinois—Basic, 56; Advanced, 12; University of Georgia—Basic, 24; Advanced, 18; University of Arizona—Basic, 2; Virginia Military Institute—Basic, 12; Advanced, 19; Norwich University—Basic, 1; Advanced, 51; Massachusetts Aggie—Basic, 1; Advanced, 5; Michigan Aggie—Basic, 4; Advanced, 7; Culver Military Academy—Basic, 3; Advanced, 18; New Mexico Military Institute—Advanced, 1.

Three days were used at the opening of the camp for physical examinations, organization of troops, drawing of equipment, and getting ready for the instruction. The last three days were devoted to athletics, polo, and shooting competitions, turning in equipment, and paying the students. This left four weeks of actual instruction, three weeks of which was spent in the post and

one week in tent camp on Lake Champlain. Five weeks is certainly the shortest period out of which it could be hoped to accomplish anything in the way of instruction.

The day before camp closed a shooting competition was held to determine what team would go to Camp Perry. This match was won by the team representing the University of Illinois, with Norwich University a very close second.

The officers on duty with this camp were as follows:

Camp Commander, Colonel Frank Tompkins, U. S. A., retired.

Camp Adjutant, Major George C. Lawrason, Cavalry.

Personnel Adjutant, Major A. B. Dockery, Cavalry.

Camp Supply Officer, Lieutenant-Colonel William R. Taylor, Cavalry.

Chaplain and Morale Officer, Chaplain Harry C. Fraser.

Mess Officer, Captain Charles W. Jacobson, Cavalry.

Senior Instructor, Lieutenant-Colonel Frank B. Edwards, Cavalry.

Department of Musketry—Officer in Charge, Major F. E. Shnyder, Cavalry. Instructors, Major Mack Garr, First Lieutenants V. D. Mudge, Willis McDonald, and H. C. Hine, all of the Cavalry. Machine-Gun Officers, Captains Frank L. Whittaker and R. R. D. McCullough, Cavalry.

Department of Minor Tactics—Director, Lieutenant-Colonel R. M. Beck, Jr., Cavalry. Instructors, Captains Frank L. Whittaker, H. J. Fitzgerald, and J. W. Cunningham, Cavalry.

Department of Equitation and Polo—Officer in Charge, Major Ephraim F. Graham, Cavalry. Instructors, Major Herman Kobbé, Cavalry; First Lieutenant E. L. Hogan, Cavalry.

Department of Cavalry Training—Officer in Charge, Major H. M. Estes, Cavalry. Instructors, Major Harry A. Flint, Captain R. W. Grow, and First Lieutenants F. P. Tompkins and P. L. A. Dye, all Cavalry.

Department of Athletics—Captain S. G. Stewart, Cavalry.

Never before have I seen assembled as a corps of instructors such a hard-working and enthusiastic group of officers. From these officers the students must have formed a very favorable impression of the Army and of the Cavalry branch of the service.

THE PRACTICE MARCH

(Report by Major H. A. Flint, Cavalry)

Troop 3, under command of Lieutenant Tompkins and myself, left the post at 8.40 a. m., June 30. Usual halt was made at the end of the first hour, and thereafter gait of column was trot for 10 minutes, dismount and lead for 5 minutes, adjust equipment, etc. In spite of the heat, a rapid march was made and no sore backs developed. Horses were in fine condition.

Packs and saddles removed, horses' backs hand-massaged, and cadets went

to dinner. Stables held immediately after dinner, on completion of which one hour devoted to care of saddlery and equipment. The cleaning was especially good, inasmuch as the cadets used only the water they had in their canteens, and consequently made a proper lather. At conclusion of cleaning the equipment cadets were formed and marched to swimming, where the buddy system was employed, two cadets constantly swimming and playing in the water together. Following this, horses were removed from the line and again watered, after which they had 15 minutes' grazing. Evening feed was given and cadets went to dinner.

After dinner a demonstration of individual cooking was given, in which the cadets were called upon to assist. Several kinds of fires were illustrated, as were also home-made cooking utensils improvised on the spot from material picked up around camp.

The camp fire was built on the beach and a song-fest was had by the cadets, followed by a talk on the care of animals in the field and customs of the old army, paying especial attention to the relations existing between the officers and enlisted men.

Taps at 10.00 o'clock. Reveille at 5.00 a. m., when the cadets fell in in birthday clothes and marched to the beach, where five minutes' brisk calisthenics was held; then the command was given, "Forward, guide center, double time." The cadets rushed for a plunge in the water. Cadets returned to camp and got into proper uniform, when the morning stables was held and feed given. After breakfast, camp was policed, saddles packed, and march for the post commenced at 8.30 a. m. This was conducted in the same manner as the march out, and horses arrived in the same excellent condition.

Throughout the march, strict discipline prevailed, and the cadets exhibited the most exemplary interest and attention that could possibly be desired.

SABER SLASHES

At the Battle of Eske-Shehr, July 21, in which the Greeks successfully met a strong Turkish counter-attack and drove the Turkish Army to the heights of Ujuz Tepe and Boz Dagh, the Greek 1st Cavalry Brigade charged the 41st Caucasus Division, mounted, and killed over 400 with the saber.

The R. O. T. C. Cavalry Camp at Presidio of Monterey, California

BY

Major CUSHMAN HARTWELL, Cavalry

THE R. O. T. C. Camp for the Cavalry units located west of the Mississippi River was held at the Presidio of Monterey, California, from June 16 to July 31, 1921.

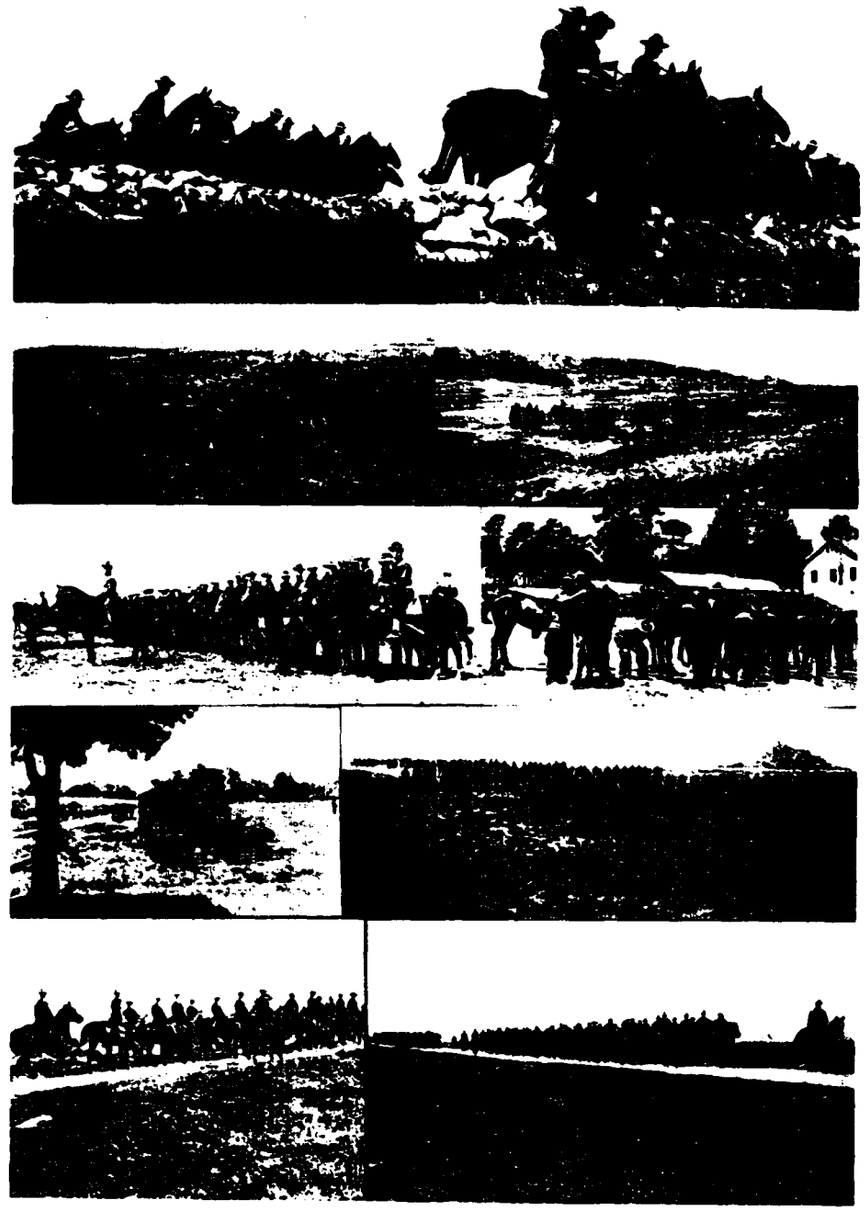
There were 75 students enrolled in the Advanced Camp and 82 in the Basic Camp, making a total of 157, of which 35 were from the Agricultural and Mechanical College of Texas, 30 from the Oregon Agricultural College, 80 from the New Mexico Military Institute, and 12 from the University of Arizona.

The camp was ideally located on the parade ground in the post and overlooked the beautiful Monterey Bay.

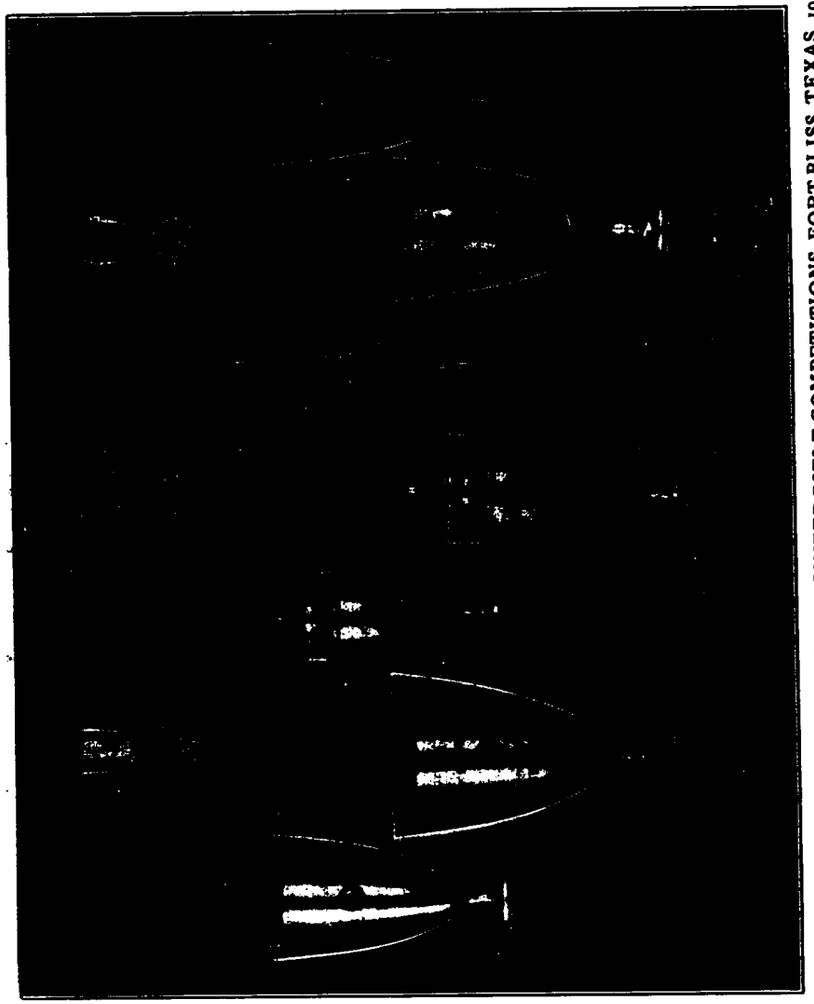
The students were housed in pyramidal tents that were floored, heated, and electrically lighted, and a frame kitchen and double mess hall was especially constructed for their mess, which was conducted by personnel of the Regular Army. Regimental Color Sergeant Schneider, 11th Cavalry, acted as Mess Sergeant, and to his untiring zeal and ability is due the credit for the best Army mess I have ever seen.

During the first three weeks the instruction was greatly handicapped, due to the fact that sufficient instructors were not provided until the beginning of a new fiscal year made mileage funds available to send instructors to the camp. The students in the Advanced Camp (juniors and seniors in the colleges) were organized into one troop for administrative and instructional purposes and the Basic Camp students (freshmen and sophomores) were organized into a separate troop.

It was soon discovered that all the students needed a thorough course of training in the very rudiments, and neither time nor pains were spared in teaching them the things that a cavalry recruit gets hammered into him. They were taught how to saddle, unsaddle, and care for their mounts, the principles of riding and rifle-shooting and some elementary work in musketry and minor tactics, and it is believed that not a man who attended the camp left it without feeling that it had been of inestimable value to him. Many of the students probably thought they were worked too hard. They *were* worked hard, and there were few idle moments between first call for reveille, at 5.15 a. m., and retreat, at 6 p. m.; but the time was short and the amount of work to be covered was great, and with all the hard work and long hours the spirit displayed was excellent, and every instructor that had anything to do with the camp was impressed by the way the instruction was absorbed. At the end of three weeks both troops could execute a cavalry drill in close and extended order under their own officers that would do credit to any troop in the Regular Army. It is true



MOUNTED WORK AT THE R. O. T. C. CAMP, PRESIDIO OF MONTEREY, JULY, 1921



MEDALS AND TROPHIES, CAVALRY-ENGINEER RIFLE COMPETITIONS, FORT BLISS, TEXAS, 1921

Medals: Cavalry-Engineer, Cavalry, Engineer

These medals were awarded, a gold medal for first place, a silver medal for second place, and a bronze medal for third place for each trophy competed for.

Trophies: Engineer Individual, Engineer Team, Cavalry-Engineer Individual, Cavalry-Engineer Team, Holbrook Trophy, Cavalry Team, Cavalry Individual.

See page 128

the students were far from being first-class horsemen, but they were getting "shaken down" into a seat and could control their mounts and displayed a proper boldness in their riding.

The time element in a six weeks' summer camp absolutely prohibits carrying out thoroughly a program of instruction such as was furnished by the War Department. It is believed that secondary subjects should be eliminated from the camp course, and that the entire six weeks be devoted to giving these future reserve cavalry officers an insight into the proper conduct of a cavalry troop in the field. It is further believed that during the college year more attention should be paid to details, and whatever the student is taught let him be taught thoroughly. Let us get away from a beautiful and comprehensive program that looks fine in reports, etc., and that is impossible to carry out.

If our camps are to fulfill their objective, they must be made to cover the practical phases of training that lack of facilities and continuous hours render impossible during the school year. The students attending camp should be required to perform all duties of a cavalry soldier, except those connected with the policing of latrines and messing. You cannot learn the cavalry game by letting John do it. You can never make a cavalryman by skipping the worthwhile essentials and allowing the candidates to participate in the kid-glove features only.

The discipline that is worth while is loyal obedience. Socialistic ideas of participation on the part of students in the conduct of training and interior economy of camps is folly.

The Administrative Training Staff of the camp was as follows:

Major Frank K. Ross, Cav. D. O. L., Camp Commander; Major Alex. W. Cleary, Inf. D. O. L., Executive Officer; Major Cushman Hartwell, Cav. D. O. L., Senior Instructor; Major Francis R. Hunter, U. S. Army, ret., Adjutant; Major J. C. F. Tillson, Jr., Cav. D. O. L., Instructor; Captain Leo B. Conner, Cav. D. O. L., Instructor; Captain Norman Fiske, Cav. D. O. L., Troop Commander; 1st Lieutenant W. C. Scott, Cav. D. O. L., Troop Commander.

In addition to the above the following graduates from the general and special service schools reported at camp after July 5 as specialists in the subjects enumerated after their names:

Lieutenant-Colonel L. W. Oliver, Cav. D. O. L., Director of Minor Tactics; Captain Charles Wharton, 5th Cav., Equitation and Polo; Captain Rexford E. Willoughby, 16th Cav., Minor Tactics; Captain Charles H. Unger, 5th Cav., Minor Tactics; 1st Lieutenant L. G. Smith, 14th Cav., Musketry; 1st Lieutenant William P. Withers, 12th Cav., Musketry; 1st Lieutenant Hugh G. Culton, 11th Cav., the Pistol; 1st Lieutenant Fred L. Hamilton, 3d Cav., the Saber.

It might be added in closing that the scope and caliber of the training imparted at the Cavalry School, as indicated by its graduates, created a most favorable impression on all with whom they came in contact, and it is to be regretted that they were not present during the entire camp.

Cavalry on the Front

BY

General N. N. GOLOVINE

Translation by Colonel A. M. Nikolaieff

(Second Part)

As STATED in the previous article,* the task of slowing down the enemy's advance at a distance of one day's march away from our front can be accomplished only by the cavalry. Deploying on a wide front, equal or longer than the front of the enemy, the cavalry can cover our maneuver by drawing an elastic curtain in the enemy's face.

Here again it is of importance to point out the aid which the infantry can give to the cavalry at that point of the operation. Infantry units when attached to the cavalry divisions increase the "stability" of the curtain; but the fundamental principle of such aid should be the distribution of small groups of infantry all along the wide front of the cavalry. In that case the infantry changes its rôle of the main arm to the rôle of an auxiliary arm of the service. All the disadvantages resulting from the breaking up, for that purpose, of infantry regiments charged with such a rôle should be avoided; in that respect the World War showed plainly the importance of having for such a rôle independent infantry battalions (sharpshooter, Jaeger, Fusz battalions or groups of two battalions attached to cavalry divisions).

I am of the opinion that it would be best to have in peace time independent sharpshooter battalions trained to work in conjunction with the cavalry. These battalions, having to work on wide fronts, should be abundantly equipped with matériel needed for rapid establishment of liaison. In that respect, first of all should be named the telephone, regular and wireless, and the motorcycles. Each company should be so equipped as to make detachment from its battalion possible and easy. Some of them should be on bicycles. Motorcycle machine-gun sections should form part of every such battalion. Their training should differ from the training of the infantry of the line. Main attention should be attached to the methods of fighting in combat "de rencontre" and to the use of long-range fire. Every year, during the period of summer training, such battalions should take part in maneuvers of cavalry divisions; thus will be created a morale liaison between the two arms which in time of war will manifest itself in various forms of teamwork.

The modern development of technics puts at the disposal of the cavalry many means by which the latter arm increases its stability, as well as its driving

* CAVALRY JOURNAL, July, 1921.

power. Cavalry should use all those means as much as possible. We can see clearly through what an evolution the modern infantry battle front has passed. That front has tended to become more and more characterized by technics, and has become in the course of its stabilization what was formerly the battle front of a besieged fortress. The artillery, in order to give an effective support to the infantry, has to be made up of many various kinds, beginning with the smallest calibers carried by the assaulting troops in their hands and ending with the large ones, capable of smashing with one projectile strong concrete covers. Chemistry gave a new means of destruction, the poison gas, which can be thrown against the enemy either in waves or in shells. And that is not all. Trench-mortars, "minenwerfers," make their appearance; grenades are fixed to the rifles. Finally, onto the war arena crawl out the tanks.

The modern cavalry has to pass through an entirely analogous evolution. The only difference lies in the fact that the cavalry's front is a mobile one. On a highway, cavalry can send out an armored car; on a railroad line, an armored train.

On the Russian front, owing to the small number of roads, it was impossible to take advantage, on an extensive scale, of all the resources of modern technics. That will not be the case in countries where conditions are different. The Germans understood it in the very beginning of the war, and, on that account, our cavalry, after it had invaded East Prussia, was greatly hampered by the German cavalry, less numerous, but supported by Jaeger battalions, cyclists, armored cars, and even Zeppelins.

Some writers, basing their premise on such a state of things, arrive at a conclusion which is not correct. They say: If the cavalry has to use so many auxiliary means, does not it show that the cavalry has outlived its usefulness? At present, that opinion is a very common one.

But think it over. If this argument is valid, then this parallel argument should be sound: In modern wars the front of the infantry requires not less than the cavalry the applying of all kinds of technics; therefore the infantry, too, has outlived itself and its place has been taken by the "machine."

But the World War showed very clearly that, although the infantry requires full co-operation from the "machine," nevertheless the "rank and file," who were given by a French author an excellent nickname, "Piéttaille," are wholly indispensable; because the rank and file only can "occupy" the ground that has been taken. The "machine" can clear up, the "machine" can pass over or fly over the ground, but the actual "possession" of the ground can be only achieved by occupying it with infantry.

Now, if you will approach the question of cavalry action from the same point of view, the inference will be identical. Modern cavalry, in no less degree than the modern infantry, requires the use of the "machine." But just the same as the "holding" of the front can be achieved only by infantry, so the "maintenance" of the contact with the enemy, who are at a certain distance,

can be achieved only by cavalry; no inventions whatever will change that. Even the airplane, that most important invention in the domain of reconnaissance, with its possibilities beyond those which could be foreseen before the war, is powerless to take the place of cavalry in the latter's work of "holding the contour line" of the enemy front.

There is one law of warfare which is everlasting: *the man is, was, and will be the chief instrument of warfare.*

We should adopt the following principle: the "technics" are not the enemy; they are the allies of the cavalry. The cavalry's enemy is the thickening of the infantry's front and its conversion into an uninterrupted one, protected by barbed wire. A further stabilization of the front of the army, turning it into the front of a besieged fortress, puts an end not only to the cavalry's, but also to the infantry's, maneuvering. The war of movement ends; the war in the trenches begins. To the side wishing to take the offensive, there is left only one task which can be accomplished: to break the front. But the breaking requires machines and machines. As far back as in 1915, the following formula was already adopted on the French front: The infantry occupies only what has been cleared up by the artillery.

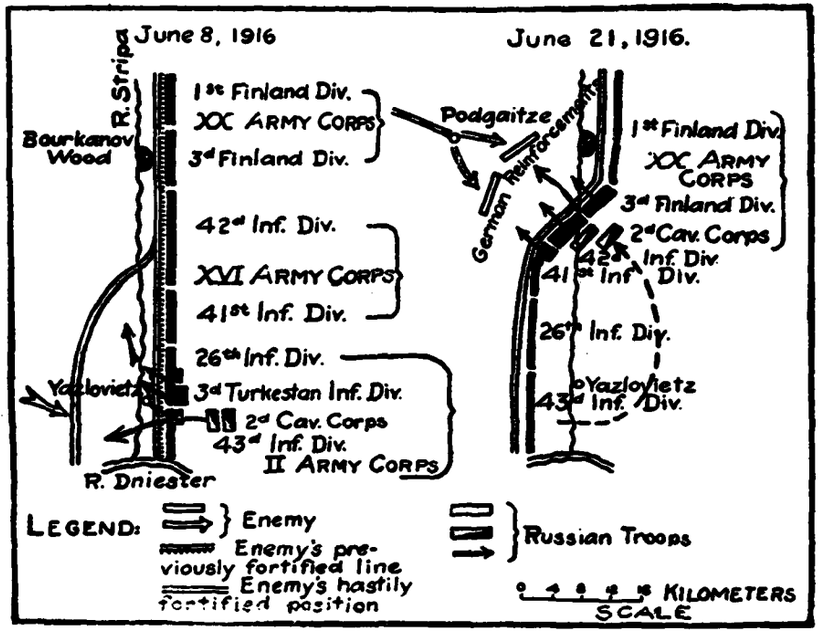
It is self-evident that during the period of operations when the main rôle is played by artillery and technical troops and when even the infantry becomes temporarily an auxiliary arm, there is no room on the front for the cavalry. But the invincibility of the modern fortified front proves to be that soft of exaggeration which always befalls the human mind when it becomes confronted with a new phenomenon of an overwhelming size. Whatever will be the means invented for the defense of the front by technical science, the latter will also invent means to break the front.

The first arm to be brought into action after the "machine" (be it the cannon, the tank, the gas, or some other device) has broken the enemy positions is the infantry. But, after the breach in the front becomes wider and the enemy gets out of the cobweb of trenches, their retreat will increase in speed and unoccupied spaces will be left between our front and that of the enemy, where the enemy has succeeded in breaking away from our pursuing infantry. Into those empty spaces small cavalry units can be pushed with the object of preventing the enemy from breaking away from us altogether, whereby he may renew subsequently his resistance.

If the enemy is retreating on a large scale, the small empty spaces will gradually overlap and form an area large enough for cavalry masses. There is one thing only that should be feared, namely, that those masses do not come up too late. The war showed that the cavalry masses were nearly always too late, and that the whole difficulty of exploiting the breach in the front by the cavalry was due primarily to that fact.

By the winter of 1915-1916 the entire Russian front got stabilized. It was possible then on our side, as well as on the enemy's, to walk from the Baltic coast down to Rumania, following a continual line of trenches. Although from the technical point of view the eastern lines of trenches were not equipped as well as those in France, the difference was only one of quality. Both were fronts of a besieged fortress, in the full meaning of that word.

In particular the Austro-Hungarian front in Galicia, opposite the Russian Seventh Army, of which army I was at that time the chief of staff, was con-



SKETCH No. 1
Cavalry break the Stripa position.

sidered the most impregnable. In the Prater, that beautiful park in Vienna, where the Austrian bourgeois like to take a walk on Sunday and to enjoy their glass of beer, there was placed on exhibition a model of a part of the Austrian fortified line on the river Stripa. By exhibiting that model the Austrian high command wished to remove the fear caused among the citizens by the "Russian peril," and to convince them that it was impossible to break through such models of the most modern fortification. That was the very same front which had to be broken by us in order to make the start, in the summer of 1916, of the so-called "Broussiloff offensive" in Galicia.

That front was broken by the Seventh Russian Army in the region of the village of Yazlovietz (see sketch 1). After a close study of the photographs of the enemy fortified zone, we were able to see that, with a view to widen the breach, cavalry masses could be used only to the south of Yazlovietz. As to the development of the attack in the direction of the town of Bouchach, it could be accomplished only by the infantry, because it would be necessary to storm a whole system of fortified lines, separated one from another by a distance not greater than the range of a field gun.

Although the forces which the Seventh Russian Army could concentrate for the breaking of the enemy front were not large (about three infantry divisions, with 40 heavy guns), still the bringing forward, up to the place of the planned attack, of the Second Cavalry Corps (two cavalry divisions, the 9th and the Mixed) was inconvenient, because the cavalry mass would encumber the immediate rear of the attacking troops. On that account we decided to bring up in the night, when the artillery bombardment would be ended (the infantry attack took place on the 6th of June, at dawn, after a two days' artillery bombardment), only one cavalry brigade, placing it in the immediate vicinity of the front line, and to leave the remaining three brigades of the cavalry corps some seven miles behind.

The commander of the cavalry brigade that was to take up its position near the front line did not comprehend that the fact of placing his brigade on the very battlefield required a dismemberment of the brigade into groups of squadrons. Therefore, not finding room enough to keep his unit together, he moved somewhat backward. Moreover, he made a grave error in omitting to establish direct contact with the infantry units occupying the battle line. The result was that the cavalry was late. Nevertheless, the two divisions of the cavalry corps succeeded in coming forward, crossed the river Stripa to its western side, and there, on the 8th of June, took place the charge on horseback of a whole cavalry division (the 9th); an avalanche of 24 squadrons came down upon the Austrian infantry reinforcements, speeding up to close the breach in the front. Those squadrons galloped a few miles, took 10 guns, and made 2,000 prisoners.

In the night of June 8-9 the Austrians, having received more reinforcements, succeeded in covering the breach, and our cavalry corps, as well as the left flank of the Second Army Corps, were brought to a standstill before a new front of the enemy, who rapidly dug themselves in.

The fundamental idea of the operation of the Seventh Russian Army consisted in breaking the well-fortified Stripa position near Yazlovietz and in further developing the attack by the storming troops in a northerly direction, at the same time bringing gradually into action the divisions the advance of which had been held up on their front by those sections of the Stripa fortified line that were still in the hands of the enemy. Our forces, being not strong enough to overthrow the fortified front of the enemy at one stroke and on a

long line, bit it off, if such expression may be used, piece by piece, making use of the opening, through which they came in after the initial assault near Yazlovietz had been successfully accomplished. It was at the beginning the work of artillery and of infantry, because it had to be achieved under conditions of siege warfare. But after the breach in the enemy front had become a wide one, and there remained only the last piece to be bitten off, possibilities of cavalry action could be foreseen.

Of great importance, in that last piece of the front, was the Bourkanov wood. Being extremely well fortified, it formed the main point of resistance. The direction of our main blow had been planned so as to envelop the wood from its flank and rear (see sketch 1). Our operations in that direction would be outside of the zone of the previously fortified positions of the enemy. In preparation for this operation we called back the cavalry corps from the left flank of the army and, having moved it near the 22d Army Corps, placed it at the disposal of the commander of that corps.

On June 21st, at dawn, the commander of the 22d Army Corps concentrated two infantry divisions with a view to deal the enemy a blow in the general direction of Podgaitze. As the development of fighting in that direction might assume the character of a battle in the open, it was necessary to bring forward the cavalry as near the battle line as possible. Topographical conditions (the depth of the valley of the river Stripa) made it possible to keep concealed a whole cavalry division on the line of the divisional infantry reserves.

Immediately after the infantry had broken the enemy positions, the regiments of the 9th Cavalry Division were brought into action. Dashing forward at a gallop for two miles, they took more than 1,000 prisoners and several field pieces. A farther advance of our cavalry was stopped by German troops which had been sent by rail to help out the Austrians. The Germans deployed at a distance of three miles from the section where the Austrian front had been broken and formed, with the help of their artillery, an encircling position.

In connection with these two instances of the part taken by cavalry in the breaking of a fortified line, there arise two cardinal questions, a consideration of which is necessary.

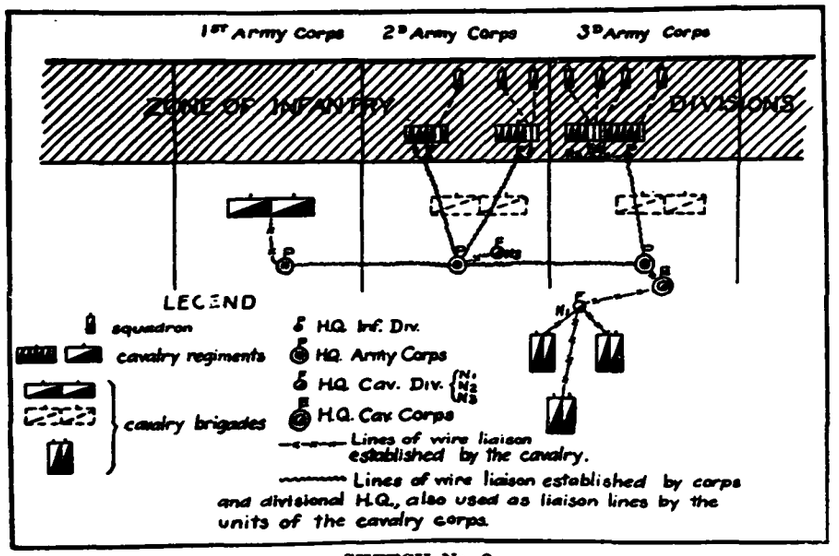
The first question is, how to avoid the tardiness of the cavalry, in order that the latter may without any delay take advantage of the moment when the enemy's infantry attempts to break away, when in the lines of our infantry our men, seeing the enemy get away, shout, as often happens in the war, "Cavalry, cavalry to the front."

The cavalrymen of the former days used to say, Cavalry's opportunity comes in a minute. The same remains true now.

There is only one way out of that situation: It is necessary that the cavalry coming up to the section where the enemy front has been broken should be dismembered into groups, covering a wide interval. The groups into which the cavalry are broken up should not only establish contact with the infantry

that occupies the battle line, but also should fall under its control. A decision should be taken similar to that which has been recommended for the solution of the problem of supporting by infantry units the cavalry which is sent forward to cover the line of our front: the cavalry in this case must be placed under the control of the infantry chiefs.

The adoption of such a solution would enable individual squadrons to take advantage of the enemy's retreat from its beginning. Should the retreat continue, larger and larger cavalry units, placed in echelons behind the front, would gradually come into action. If the individual squadrons are stopped by the enemy, our infantry units to which those squadrons are attached would take up the attack again.



SKETCH No. 2

NOTE.—The cavalry units which had been put under direct control of the division and army corps commanders (the divisional or army corps cavalry) are not shown on sketch.

In sketch 2 is shown the manner in which large cavalry masses should be brought into action in order to make use of the breach in the enemy front.*

Let us suppose that we want to break the enemy front in the sector of three army corps (I, II, III). It is necessary that, at the moment when our infantry starts out for the labyrinth of trenches, small cavalry units should already make part of the battle line; the commanders of infantry regiments and

* On the sketch is shown a Russian cavalry corps consisting of three divisions; each division has two brigades of two regiments; each regiment has six squadrons.

brigades should have a few squadrons near at hand. First of all, the cavalry units which have been put under the direct control of the army corps and division commanders serve that purpose.

With the object of developing immediate cavalry action where the retreat of enemy infantry is expected to assume large proportions, a cavalry corps (shown on sketch 2) has placed one brigade at the disposal of each of the three army corps commanders. The latter, in their turn, can put the regiments of their cavalry brigade, both together or singly, under the control of the chiefs of those infantry divisions on the front of which action of larger cavalry units is likely to take place.

The remaining three brigades of the cavalry corps are kept in hand by the commander of that corps and are placed in echelon with a view to enable him to throw them quickly into action, all at once or in succession, in accordance with the circumstances.

The commander of the cavalry corps himself should remain at the headquarters of that army corps in the zone of which the action of a large cavalry mass is most likely to take place. The contact with the cavalry units temporarily designated to be under the control of the infantry chiefs ought to be maintained by the headquarters of the cavalry corps through liaison officers sent by that headquarters to the headquarters of the infantry chiefs.

As soon as the cavalry units succeed in getting forward and assembling, the leadership will pass into the hands of the senior cavalry officers and finally will be again concentrated in the hands of the cavalry corps commander.

With the increasing of the distance between the enemy and our infantry, the control over the infantry troops that take part, together with the cavalry, in the pursuit of the enemy must also be taken by the cavalry chiefs. Gradually there will be restored the same "cavalry front" (front of maneuvering) which existed before the stabilization of the fronts. But it should be remembered that the fundamental rule for bringing cavalry into action after the breaking of the enemy front is: to pass the cavalry through the hands of the infantry chiefs who executed the breach.

The second important question to be solved in connection with the cavalry action after the breaking of the enemy front is the following: Although the use of the cavalry becomes possible only after the enemy are driven out by the attacking troops from the cobweb of trenches and wire, it should be borne in mind that in practice there does not exist a distinct line, drawn between the "open field" and the fortified zone. Behind the zone of the densely interwoven net of trenches and wire, there lies the zone cut by individual sections of trenches, finished and unfinished. To wait until the attack definitely comes out into the open field would be equivalent to giving up the use of cavalry at a time when it could render good service.

Cavalry's mobility, enabling the cavalry to keep the retreating enemy under continual pressure and preventing them from taking up successive

positions, can reduce to naught the whole series of their fortified rear lines. After the infantry, whose morale is weakened, has lost its elbow-to-elbow cohesion, it will not always be able to make a stop for the defense even of a well-fortified line.

At the end of July, 1917, when the Russian army, the front of which had been broken to the west of Tarnopol, began its retreat, the infantry overran three zones of previously fortified positions and stopped only after having crossed the river Zbrouch, when it was at a distance of two days' march away from the enemy.

When such a period comes up during an operation, the attacking troops should exert their whole energy to continue pressure on the enemy, bearing in mind that the uninterrupted continuance of such a pressure causes among the enemy demoralization in progressive proportion.

Naturally, the enemy will take all measures to stop our pursuit; they will use to that end all the troops that are still in good condition, as well as the reinforcements that will be coming up. Our pursuing cavalry will inevitably encounter a series of obstacles in all directions. Those obstacles must be swept away without delay—at one swoop, if such expression may be used; otherwise the enemy, holding those obstacles, will gradually build up a front line, while in the meantime the main enemy forces will break away from us.

For such occasions the cavalry derives powerful aid from the modern "technics." One of those means are tanks. Another means are the armored airplanes, which, armed with machine-guns, can take the enemy under fire from a low altitude. Flying above the enemy groups which are trying to assemble and offer resistance here and there, the airplanes will assist the cavalry in driving off those groups.

If the Germans and the Austrians, during their pursuit of our armies in July, 1917, had possessed such means, our cavalry, aided only by cyclists companies and individual infantry units, would not have succeeded in holding up the enemy on fortified lines, where the masses of our infantry, the discipline of which after the revolution was destroyed, were unable to put up a defense; the main body of our armies would not have succeeded in breaking away from the enemy, and the whole operation might have ended in a complete annihilation of the Russian armies.

To conclude this discussion of cavalry action on the front, it remains to mention the period which did not exist on the western theater in the World War, because the Armistice was signed before the German front got broken up into small sections. Such breaking up was bound to happen, because the law of warfare requires it in the final act of war. That period is of especial interest to the cavalry.

In that connection we would like to repeat, that not the modern tactics, but the uninterrupted front of the infantry, is the enemy of the cavalry.

Now, if we remember that the broken front is made up of men whose confidence in themselves and in their chiefs is lost, whose imagination is abnormally strained, it will be easily understood that this is the period of war when cavalry becomes *the main arm.*

In that period also the "technics," in the shape of armored airplanes, armored cars, and armored trains, become cavalry's powerful aids. First of all, the enemy will try to put up an organized resistance in positions along railroads and highways; but armored trains and armored cars, rushed forward with their guns and machine-guns, will be of great help to the cavalry in breaking up any resistance.

In the civil war in Russia there are many examples of cavalry's work on a front consisting of small sectors and against troops whose morale is not high. Mamontoff's raid against the rear of the Bolsheviks, in September, 1919, presents a picture of a cavalry operation on a large scale, equaling the actions of the American cavalry in the war of 1860-1864. Mamontoff's raid made the Bolsheviks issue their battle-cry: "Proletarians, to the horses!" And there you have it: a cavalry—badly equipped, badly trained, badly led by leaders like Budenny, but nevertheless cavalry—makes the press of the whole world speak of it.

Col. George H. Cameron—An Appreciation

BY

H. LA T. CAVENAUGH, Colonel, Cavalry

It is sometimes the case that the history of a place becomes so involved with that of an individual that the mention of one unconsciously calls to mind the other.

This is the relation that Colonel George H. Cameron bears to Fort Riley. From the hour that he, then a tall, slender officer in his twenties, set foot in Riley it is only a slight exaggeration to say that the history of one is the history of the other. As a young athlete, it was but a short time before Lieutenant Cameron was taking a leading part in sports—riding, baseball, tennis, etc. To this day he has kept up this interest and is now no mean antagonist at either tennis or golf, while baseball and football never lack his support.

As time passed his interests became more and more involved with those of Fort Riley. Commandants came and Commandants left, but there was a Cameron usually occupying the chair of the Assistant Commandant, the Executive Officer, or the Secretary. It was in great part his work that formulated and carried on the policies under which the school has been conducted since 1901.

Until 1905 the commissioned students attending the school were drawn from those officers on duty at the post. In that year eight young graduates from the Academy were ordered to Fort Riley, and Cameron was directed to train them for one year. This training touched on all phases of a young officer's career, socially as well as professionally. So successful were the results that it was only a step to plan a similar school on a larger plan. With Cameron, to plan was to act, and gradually was evolved the school as it existed at the time of our entrance into the World War.

In the early days the school had been nothing more or less than the garrison school of today. By gradual elimination and change, the school became in reality a school of equitation and horsemanship (though other matters were taught), while our mounted officers were carried through the stages, first, of a complacent self-conceit as to our profound knowledge of all that concerned a horse, including a tolerantly superior attitude toward the horsemen of all other nations; next, a horrified realization that we were decidedly behind said horsemen, and, finally, a determination to equal, at least, the results obtained by other nations. Today, thanks to our school, we have riders and horsemen as good as the best.

Meanwhile Fort Riley, the post, had not stood still. A gradual but steady growth followed the growth of the school. To the field artillery the school was just as important as it was to the cavalry. In such a mixed garrison a tactful

administration was essential to successful progress. Many perplexing questions arose and were settled; policies became fixed; pleasant relations and close coordination with the surrounding civilian population were firmly established. Through all the changes, quietly, often in the background, stood the personality of one man—Cameron. His deep interest in all that concerned the school, his wide knowledge with regard to conflicting interests, his keen eye, and clear brain—all were bent to making the school a success. Without him it is hardly going too far to say that there would hardly have been a school worthy of the name.

His well-known ability as a topographer was called upon, and his map of the 17,000 acres has not been improved upon. Every foot of those acres is known to him, and he can take any man out on the reservation and "lose him." Naturally, his services as an instructor were in demand, and we find him instructing not only in topography, but in other subjects also.

For ten years, 1901-1910, during which time the school was making great strides and its influence was extending more and more throughout the service, Cameron's was the "guiding hand behind the throne." Annual reports of Commandants, reports of inspectors, letters, and statements of contemporaries, all bear witness to his work. It is a record to be proud of. The results continued during the years that followed down to 1917. From that time until 1920 the school was closed.

Following the World War, in 1920, a new school—"The Cavalry School"—was started at Fort Riley. It was only natural and appropriate that Cameron should be the Commandant. His mind, keen as ever, broadened by experience, was applied to the new problems presented, and for two years he has directed and guided the work of the school. In addition, other important responsibilities were his—commanding the post, President of the Cavalry Board during a critical period of reconstruction, and other work. Always his clear, far-seeing mind, his intense interest in all that concerned the school, his literary ability, his intimate knowledge of the peculiar conditions, his *human-ness*, were everywhere felt.

On September 1 Colonel Cameron turned over the reins of government. Regret at his departure was sincere and heartfelt from the "higher-ups" down through the entire garrison, commissioned and enlisted, and including even the small colony of toddlers old enough to walk, each of whom believed that "General Cameron" belonged to him in particular.

Throughout the country-side the same regret was expressed. As one of the oldest and best-known residents of Junction City put it: "There has never been a man at Fort Riley who has had more cordial relations with this town than has had George Cameron. It is with great feeling of regret on our part that the ties of friendship are to be disrupted. He has always been closely connected with and has always taken great interest in the affairs of the town and has often been consulted in matters relating to the running of it. Always he stood

ready to lend advice and co-operation. Due a great deal to Cameron's facility for creating and maintaining friendly relations, the business men of this town are most free and anxious in their desire to meet the military and to maintain the cordial relations."

The above paragraph reveals the key-note of General Cameron's success—co-operation, deep interest in all concerning those with whom he comes in contact, together with a high standard, which he himself lives up to, and which cannot help but be reflected in the attitude of those near him.

May his fields lead into larger pastures, and may long life and happiness be his, are the heartfelt wishes of his army of friends.

A RECORD

1887-1888. On duty at Fort Riley.
1901-1905. Executive Officer and Secretary of the School. (Sent to the Philippines in 1905 for three months, then recalled to continue his work at the school.)
1905-1906. Instructor.
1905-1907. Secretary.
1907-1910. Assistant Commandant.
1920-1922. Commandant.

A Field Ration for Army Horses

BY

NATHAN C. SHIVERICK, Lieutenant-Colonel, Cavalry, R. C.

CAVALRY may possess in the highest degree all of the qualifications necessary to success on campaign, to wit, selected troopers thoroughly trained in discipline, horsemanship, marching, field service, practical use and care of weapons, care of equipment, and, in addition, may be superbly mounted; but all these will avail little, if anything, in cavalry operations, if forage supplies should be cut off for a few days. In order to reduce the possibility of interrupted forage supplies, the development of the field ration for horses is a matter of great importance to the cavalry.

The problem of transporting the normal components of the horse ration, namely, whole oats and hay, has always been, and unquestionably always will be, a difficult problem in war, and past wars show it is often impossible to deliver forage supplies on campaign. The demands for transport in war time usually exceed the facilities. In the recent war, the quick and remarkable development of the submarine seriously menaced overseas transport, and in the next war aëroplanes, equipped with heavy bombs and with star shells for night operations, will probably make transport more difficult at night than has hitherto been the case. The surest way to insure forage supplies in the field is to reduce the number of transport units normally required, and, with this in mind, the compressed forage was designed to supplant the oats component of the horse ration in the field.

The delivery of forage to cavalry must be contemplated in any operations against the modern enemy, as it is not reasonable to expect that an enemy will leave behind crops either standing in the field or in storage. In the days when our cavalry pursued Indians, there was ample grass in the mountains and generally on the plains. At that time the present-day herds of sheep and cattle did not exist to deplete the range of field supplies, and our cavalry was no worse off than the Indians in depending upon native grasses; but to meet the modern enemy, which feeds grain to its horses, we also must feed grain.

The shortage of transportation in past wars resulted in the starvation of animals on a scale which is not generally realized. During the Civil War, in the winter of 1863-64, the Union forces lost 180,000 remounts from starvation, due to the fact that forage supplies could not be transported to the animals. The war had been in progress for more than two years; the supply of remounts was diminishing and their purchase price had advanced. After the Boer War the British reported a loss of 320,000 horses, mules, and oxen, of which the principal losses occurred from starvation. The British Empire was very rich,

and ample forage supplies were to be had in various parts of the world, but it was not feasible to operate sufficient transport to maintain an uninterrupted flow of forage supplies to animals at the front. In the recent war, there were instances of batteries, battalions, and even whole regiments of artillery which could not be moved forward in attack because of animal losses incidental to starvation and of the lack of replacement animals.

Disregarding any sentimentalism about the starvation of war horses and viewing the matter purely from the points of view of military efficiency and of economy, it is manifest that the development of a field ration, which could be supplied in quantity more easily and with less transportation than bulk rations, is worthy of earnest thought and persevering experiment.

A field ration, to be fit for continued use during long periods of time, must be palatable as well as nutritious. Were it possible to supply oats in reduced bulk, it would be acceptable to the service, but mechanical difficulties prevent this. Whole oats, under a pressure of 5,300 pounds per square inch, have been reduced to one-fifth their normal bulk, but upon releasing the pressure, the oats immediately returned to their normal bulk. Therefore, it is necessary to use a binder which will retain the oats in compressed form. Such a binder should possess a feed value and be of such a nature as to withstand deterioration during periods of long storage in any climate. Cane molasses fulfills all requirements of an ideal binding substance.

As oats is the best general all-year feed for horses which may be required to move at fast gaits, oats should form the base of the field ration. They should be preserved against germination and deterioration and be prepared for complete digestion, so as to require the least expenditure of digestive energy, and at the same time to exact a healthful exercise of the digestive functions. Compressed forage was designed to meet the above conditions and is produced by the following process:

Whole oats of high quality, weighing not less than 34 pounds per bushel, are cleaned, crushed, and roasted at a high temperature. They are then mixed in the proportion of 87 per cent oats to 13 per cent of cane molasses, which has been cooked to an exceedingly high temperature. The oats and molasses are mixed while both are hot. This mixture is then weighed out into three-pound portions, and each three pounds is formed into a cake, under great pressure. These cakes are then baled under pressure, wrapped with a water-proof covering, and delivered for use or storage. In Government purchases, all raw materials and all stages in the process of manufacture are under constant inspection of an officer of the Army.

It may be interesting to consider the reasons for the various steps in the process of manufacture. The reasons for cleaning are obvious. Crushed oats are more difficult to swallow than whole oats; hence they require a more thorough mixture with saliva, and this is accomplished by slower feeding and increased mastication. Furthermore, crushing insures the certainty of diges-

tion of each oat. Roasting the oats at proper temperatures expels unnecessary moisture and prevents germination by rendering the germ inert, but without destroying it. Molasses is used in the minimum quantity which will bind the oats in compression. Pure cane molasses is used because of its high percentage of sugar and because it contains no deleterious salts. It is a most valuable coefficient of digestion, is mildy stimulating, has a tendency to discourage intestinal parasites, and has a very high nutritive value. By cooking the molasses at temperatures exceeding 260 degrees Fahrenheit, the sugar content is concentrated, excess moisture is expelled, and it becomes a thin caramel not subject to fermentation or deterioration, and no fears need ever be entertained of its liquefying in hot climates.

Compressed forage is the grain component of a field ration suitable for continuous feeding whenever transportation difficulties make its use economical. It is in no sense an emergency ration comparable to the soldier's emergency ration, which is intended for use only when nothing else is obtainable. The normal bulk grain and hay rations supplied to horses may be considered as the animal garrison ration, and the compressed forage as the grain component of their field ration. Thus far, no horse *emergency* ration has been tested in the Army.

In cold climates and during periods of slow work, a compressed forage containing a component of corn, linseed meal, or other elements could be used, and this could be so prepared as to analyze chemically higher in feed value than compressed-oats forage. However, such a mixture would be too rich for any sustained feeding on general field service, and in warm weather it would prove too heating.

Chemical analyses of feed-stuffs are guides of real value, but they can never be the controlling factor in the determination of practical feeding value. Chemical analyses cannot determine the consumption of digestive energy necessary in the conversion of feed-stuffs to animal energy. Digestive energy is the most vital factor in the relation of feed to nutrition, and it can be determined only by practical feeding, carefully and intelligently observed. Often feed-stuffs analyzing very high in nutritive value do not produce as good results as others which analyze lower but require less digestive energy. Compressed forage, like oats, should be fed, when possible, with the full allowance of 14 pounds of hay or its equivalent in grazing. The feeding of hay, grass, or some roughage with grain is necessary to maintain animal health. Recently a highly compressed alfalfa cake has been produced by a process similar to that used in the manufacture of compressed forage. The compressed alfalfa is to supplement the compressed forage, and in combination the two provide a complete ration. This compressed alfalfa will stand indefinite storage and is compact and portable. Its savings in weight exceed 30 per cent and in bulk exceed 55 per cent.

It is interesting to note the value of the oat hull in oats feeding. The hull

could be removed, as in oatmeal, and the oatmeal fed, but this cannot be successfully fed to horses for any continued length of time. The purpose of the oat hull is to make possible the distribution and penetration of the digestive juices after the oats have reached the animal's stomach. The hulls act as small drain-pipes, carrying the juices into all parts of the mass to be digested, thus insuring quickly what might be termed digestive combustion. If oats with hulls removed were fed, as soon as the masticated and insalivated mass reached the stomach it would, with the aid of peristaltic action, form a too compact mass and the digestive juices would be effective only on the outside of it, instead of all through it. This would prolong the process of digestion and impose a burden on the animal's digestive energy which, if indulged in for several successive days, would produce bad results.

The relation of bulk to weight is the controlling factor in all transportation practice, and in overseas and aëro transportation this factor is intensified. Ocean-going vessels are built on an allowance of 43 cubic feet space per long-ton weight of cargo. Oats stow in from 78 cubic feet to 90 cubic feet per long ton; hence it is apparent that no ship can carry its dead-weight capacity in a cargo of bulk or sacked oats. Baled hay requires even more space per ton weight than oats. In contrast to oats, compressed forage stows in less than 43 cubic feet per ton, and a ship can, therefore, be loaded with it to her dead-weight capacity. Furthermore, as nine pounds of compressed forage is the equivalent, in feeding results, to 12 pounds of whole oats, one ton of compressed forage contains one-third more rations than one ton of bulk oats. On good roads, escort wagons and motor trucks may possibly carry their weight capacity in sacked oats; but the load is always bulky and on bad roads tends to be top-heavy. Compressed forage can be loaded in escort wagons to their full weight carrying capacity and the load will lie entirely within the wagon body; likewise, in trucks, compressed forage provides a compact load.

Members of the expeditionary force which entered Mexico in 1916, under command of General Pershing, had much difficulty at various times in obtaining sufficient feed for their animals, and the value of the field ration for horses became apparent to many soldiers. Experiences of the World War made clear to those charged with the care of animals in zones of active operation the advisability of having a field ration for horses. The service prefers sacked oats and baled hay for animals whenever obtainable, and long practice has proved that as a standard ration they are satisfactory.

Likewise, the service prefers garrison rations for soldiers at all times when obtainable, but campaign service long since proved the necessity for providing a field ration for soldiers, and it has long been apparent to some soldiers that their animals deserved equal consideration. Compressed forage is to horses what canned meats are to soldiers, the only difference being that compressed forage is made of materials of better quality than the quality of materials generally fed in garrison stables.

A study of any campaign in which animals have been used invariably reveals the failure to keep them supplied with full forage allowances. It may be assumed as a foregone conclusion that in any serious campaign the supply of sacked oats and baled hay will always be fraught with great difficulty, and at times these difficulties will become insurmountable. Animals will then become emaciated from lack of feed, operations necessarily will be slowed down, and demands for replacement animals will have to be met.

The British campaign in Palestine, which was principally a cavalry affair under General Allenby, affords an example of transport difficulties in maintaining cavalry operating at a considerable distance from its base. Even in this period of self-propelled vehicles, camels were used as transports to supply this command, and their number ultimately grew to 60,000. Much of their burden was the transport of forage supplies. Under such conditions, the use of feed materials which would have maintained their horses in fit condition, and which would have saved 25 per cent in weight and 50 per cent in bulk, would indeed have been a real benefit. Supply officers in Egypt did develop a makeshift compressed camel feed by using cotton baling presses to reduce the bulk of forage; but while this proved useful, it was never fully satisfactory.

In the Mesopotamian campaign cavalry was also an important factor, and the supply of forage was a difficult problem to solve. It may be of general interest to soldier-folk to know that at times the British Government was supplying for considerable periods more than 200,000 tons of oats, or that equivalent, per month during the late war. To transport 200,000 tons of oats per month by ships would require the space capacity of more than 70 5,000-ton ships, whereas by the use of compressed forage the equivalent could be carried in less than 35 ships of equal tonnage.

A serious campaign in Mexico would involve our transport service in great difficulty in the effort to supply forage to active cavalry units, as was found in 1916, when our force was not large and did not penetrate far, by comparison with what might have to be undertaken at a future date.

If a field ration for horses has a place in war, its development must be undertaken in peace, and as cavalry would be the arm to benefit most through the use of such a feed-stuff in war, it should in peace time be the most willing of any branch to gladly persevere in the work necessary to develop a satisfactory field ration for horses. The subject should be approached with an open mind, and a proper sense of proportion should be maintained in comparing the relative merits of the garrison forage issues and the field ration for horses. One's perspective may easily become dimmed by magnifying minor difficulties and losing sight of the fact that even "flies" and "soiled equipment" fade into obscurity on campaign, in the face of well-fed animals facing combat.

Starvation, we know, has been the cause of the greatest losses of animals in past wars; but until recently no serious effort on the part of the service generally has been made to reduce this factor of loss, although great advances have

been made in the methods of purchase, fitting, and conditioning them for service, in their transportation, in general sanitation, and in their veterinary care.

The development of a field ration for horses has, perhaps, been delayed, due to the fact that the combat branches are not concerned with the purchase and transport of supplies, and quite naturally the Supply Service has demurred from forcing an issue of a new type of forage on those branches, and until the Line whole-heartedly co-operates with the Quartermaster Corps in finding a satisfactory field ration for horses, no definite conclusion on this subject can be reached, and war may again find us dependent upon issues of sacked oats and baled hay, which we know, from past experiences, often become impossible on campaign.

During the past year a considerable quantity of compressed forage was issued to the service for feeding, in order that its effects might be observed and its advantages and disadvantages reported upon. It may properly be assumed that comments in favor of and opposed to compressed forage will fall under the following heads, viz:

DISADVANTAGES.

1. *Expense:*

Due to manufacturing costs, compressed forage is necessarily more expensive per ton than bulk oats. However, as the use of compressed forage is recommended only when the sum of its initial cost plus its transportation charges is less than the sum of the initial cost of oats plus their transportation charges, "it is easily shown" (apologies to C. Smith) that when used under conditions for which intended it becomes an economy instead of an extravagance.

2. *Attraction of flies:*

The molasses in compressed forage does attract flies if they are in the vicinity, but it does not produce them. Much of this objection can be overcome by a prompt policing of the wrappings about the bales and the papers between the cakes, as soon as the bales are opened for feeding. Furthermore, flies are not an all-year problem. The sugar in the soldier's ration also attracts flies, but its value outweighs this disadvantage. Flies, therefore, can hardly be viewed as a controlling feature.

3. *Soiling feed-bags and clothing:*

Molasses in compressed forage has been so concentrated by great heat that it does not flow, even in the tropics. Animals find molasses exceedingly palatable, and they lick their feed-bags quite clean. Saliva always leaves a stickiness in feed-bags, whether oats or compressed forage has been fed, and in all cases feed-bags should be washed at frequent intervals. With reference to

soiling clothing, this depends on the individual's natural tendencies for cleanliness and neatness. There would seem slight reason to condemn good food because some sloppy individual smeared it on his shirt front, and for the same reason it would seem rather far-fetched to condemn compressed forage because some careless individual wiped sticky fingers on his clothes.

4. *Difficulty in feeding:*

It is not believed that the spirit of cavalry would consider this objection in the field, when the only alternative might be pursuing phantom hopes of finding forage in an enemy country. Any soldier can prepare a feed of compressed forage in less than five minutes, as it only requires being broken into small pieces. Furthermore, there are times when national economy should supersede the individual's convenience in feeding whole oats, such as in 1916, when the ultimate cost of feeding animals of the expedition into Mexico reached a figure of $5.26 per horse per day, of which at least $4.56 was absorbed in transportation charges.

5. *Possibility of adulteration:*

To even discuss this contention seems like a reflection upon the honesty and integrity of the service, because compressed forage for Army use never has been and never would be manufactured except under the inspection and supervision of an Army officer.

ADVANTAGES.

1. *Saving in transportation:*

This is the fundamental reason for the development of a compressed forage, and once the nutritive value has been established, transportation should be viewed as the controlling factor. Compressed forage reduces the bulk 50 per cent and the weight 25 per cent.

2. *Digestibility:*

Much more easily digested and assimilated than whole oats.

3. *Wastage:*

There is no wastage through punctured sacks, undigested oats, or of digestive energy.

4. *Storage:*

If stored under cover, compressed forage will stand indefinite storage without deterioration. This has been demonstrated by feeding compressed forage which had been in storage for more than seven years.

Exposed to the elements, compressed forage will stand conditions which would ruin sacked oats and render them unfit for feeding.

5. *Inspection:*

Inspection of raw materials and the finished product in plants of responsible manufacturers can be more efficiently done than the inspection of bulk oats at widely separated points.

6. *Military value:*

A non-deteriorating forage which is more certain to be present in the zone of operations, due to its portability and compactness, than sacked oats is of such value as to be self-evident.

In the preceding comparisons of pros and cons, an effort has been made to clearly set forth the facts without "prejudice, favor, or affection."

In addition to the idea of providing a field ration in which the grain component and the hay component have been separately compressed, a complete balanced ration, comprising both components, has been successfully produced by the process used in compressed forage. This ration is not recommended for service uses for the reason that under various circumstances on campaign, when transportation is reduced to a minimum, it may be desirable to carry more grain and less hay, or *vice versa,* and if the grain and hay have been compressed together in cakes, it is impossible for the responsible officer to exercise any discretion in the matter of what proportion of either grain or hay will be forwarded, whereas he may control the proportion when the grain and the hay are put up separately. Furthermore, there is no reduction in expense, weight, or bulk in compressing both components together, as compared to compressing each separately.

The principle of a field ration for horses is of such definite value to the entire Army that it deserves whatever study and expense is necessary to develop its successful application.

The Army's Friend

BY

Colonel JOHN C. GRESHAM, U. S. Army, Retired

OUR OLD FRIEND, the Army Mutual Aid, like the good soldier, gives honest and faithful service. Brushing aside technicalities of law and tricks of lawyers and speeding at the call of distress, it brings instant help to our widows and orphans. Its ways are plain and simple. The Adjutant General gets a wire and communicates with the treasurer a few yards away, who mails the whole benefit or, if preferred, wires half and mails the rest. No surer, swifter way can be found.

In this respect, *so vital,* how great the gulf between it and other companies! For, tangled in meshes of legal delays, these limp on leaden feet through wretched months till the last inch of red tape is unwound. Before the widow can touch the life-saving benefit she must be put on the witness stand, be harassed with all sorts of questions about facts and data, and, through the slow grinding mill of legalism, bring forth the utmost grain of evidence to make good her claim, which in justice is already as clear as the noonday sun. Was she truly married? When, where, by whom? Who were the witnesses? Are they still alive? Where do they live? Has she her marriage certificate or is it in the strong box across the Pacific? Are the children truly hers and his? When, where, in whose presence were they born? Had she been divorced or separated?, etc., etc., *ad infinitum.* Letters must be sent to places far away and answers waited for. Cruel waste of precious time, lawyers' fees, mental perplexity, physical weariness, and all heavy burdens are laid upon her.

It is hoped that Uncle Sam in his War Risk plans will be more prompt; and maybe he will. And yet he will ask for facts and data often hard to give, but without which payment will be delayed many months. Moreover, inadvertence, lack of forethought, ignorance of legal toils, or other venial neglects of her husband may weave a net of circumstance which, unseen before, but laid bare after his death, will obscure the legality of her claim, which otherwise would be gladly allowed, but must now be deferred, maybe, for years.

As to rates per thousand in the Army Mutual Aid and in the War Risk plans, comparison of the following tables shows the difference to be negligible. It will be agreed, I think, that the extreme limit of 45 years for membership is wise.

(1) Rates per $1,000, Army Mutual Aid Insurance (1920)

Age 21	$13.77	Age 34	$19.63
Age 22	14.11	Age 35	20.24
Age 23	14.51	Age 36	20.88
Age 24	14.85	Age 37	21.55
Age 25	15.24	Age 38	22.27
Age 26	15.65	Age 39	23.03
Age 27	16.08	Age 40	23.83
Age 28	16.52	Age 41	24.66
Age 29	16.98	Age 42	25.55
Age 30	17.47	Age 43	26.48
Age 31	17.97	Age 44	27.46
Age 32	18.50	Age 45	28.48
Age 33	19.05		

(2) Rates per $1,000 (Ordinary Life), War Risk

Age 21	$13.82	Age 34	$19.49
Age 22	14.18	Age 35	20.08
Age 23	14.53	Age 36	20.79
Age 24	14.88	Age 37	21.38
Age 25	15.24	Age 38	22.33
Age 26	15.59	Age 39	22.92
Age 27	15.95	Age 40	23.74
Age 28	16.42	Age 41	24.69
Age 29	16.89	Age 42	25.52
Age 30	17.36	Age 43	26.58
Age 31	17.84	Age 44	27.64
Age 32	18.31	Age 45	28.71
Age 33	18.90		

The well-being and morale of the Army in coming years will be helped in no small degree by the prosperity of the Army Mutual Aid. For how many cares, how many worries, how many anxious days, will be cast out of its daily life if *all* eligible officers become members? They will then see with their own eyes its deeds of love and hold in their own hands its sure promises of swift charity. There will be more peaceful minds, more cheery hearts, more willing workers, more happy families, more smiling faces, a more thankful and satisfied Army. Not one sound reason can be given why all eligible officers should not be members, but many can be urged why they should. If "one touch of nature makes the whole world kin," it will surely make all members of the Association brothers, and the general principle of mutual aid, which gives its name and declares its purpose, will in time bind together the hearts of the Army in a federation of love.

In all its long life, even in the World War, the Army Mutual Aid has never failed. And yet, like all institutions—*and especially the best ones*—it needs in this cold world the loyal support of friends. Does not nature itself teach us that

disloyalty here would be a shameful thing to the whole Army? It would show a narrow selfishness dangerous to the noble spirit that quickens comradeship, morale, and esprit. And in view of what is said above, it would in too many instances heap greater distress upon our widows and orphans.

To shun the evil and further the good, let us launch a lively, perpetual propaganda to make known the virtues of the Army Mutual Aid and to persuade by clear, logical facts that all can do good not only to themselves, but to their comrades also, and, above all, to the service, if they will but stand shoulder to shoulder in this organization of mutual kindness.

To educate potential members, let us build up a great academy, to have as branches the War Department itself, all headquarters, all service schools, all service journals, all regiments and corps, all military posts and stations, the patriotic press, and, last but not least, the Military Academy at West Point, and, best of all, our women and children. Its purpose must be to unite in the Army Mutual Aid Association all the eligible officers of the Army. Its fulfillment will create not only the strongest insurance organization in the world, but also, as a by-product, a spirit of comradeship, a morale, an esprit till then unknown.

As our old friend has given millions in the past, so let us hold up his hands and resolve he shall not be disabled from giving millions in the future.

"I count myself in nothing else so happy
As in my soul remembering my good friends."

The Army Mutual Aid Association

THE ARMY MUTUAL AID ASSOCIATION desires to announce through the columns of the CAVALRY JOURNAL that it has started a campaign for new membership, and that as a result of three months' effort more than one hundred and fifty new members have been added to its lists, with applications coming in at an increasing rate.

Perhaps a few words as to the history of this Association may be of interest to the Army, in view of the larger commissioned personnel now in the military service, many of whom have entered since our participation in the World War and have had little opportunity to learn of the Mutual Aid's existence and purposes.

The Association was organized in 1879, to meet two characteristic needs in the life of the Regular Army officer: The first of these was to provide a moderate amount of life protection for his family, at low cost, while the officer lived, and the other, and by far the more important, was to insure an infallible and immediate payment of the benefit when he died.

Until 1918, or for a period of thirty-nine years, the Association fully accomplished both these purposes, with a growing membership and a steadily

increasing reserve, having during this time paid 852 benefits to the widows or other heirs of deceased officers.

The Association has no salaried officials; its officers are themselves merely members, who work for the common interest of all, and the costs of operation are restricted to the clerical services of one person and to the necessary printing, stationery, and postage.

The reserve, which has now reached $600,000, is invested only in those securities legal for savings banks and provident institutions.

In 1918 the Government War Risk Insurance seemed to fulfill the needs for which the Army Mutual Aid was originally organized, and the absorbing activities of the war prevented any effort to obtain new members.

After the Armistice the opinion was formed by some that it would be wise to merge the Army Mutual Aid in the War Risk Bureau, and this suggestion was followed to the point of seeking congressional enactment with such an end in view. Consideration of this course of action occupied much time, and during the period involved no effort was made to increase the membership.

Finally it was determined that the necessary legislation would be difficult to obtain and would involve unfavorable conditions, and that if the merger were consummated the Army Mutual Aid would surrender the more important of its two original purposes, namely, the immediate payment of the benefit at the time of death, that critical moment when worry and distress are greatest. Furthermore, it was found that a great majority of the members had faith in the future and preferred to see the Association retain its independent status and continue the good work it has done in the past and can do in the years to come.

As a result of the determination to continue alone, a campaign, started in March of this year, is now on for new membership, and with such genuine success that the Association desires the service at large to know of it and to consider seriously whether or not the Association shall include only a part of the commissioned personnel of the military service or shall eventually include all those officers who have families or dependents for whom by the dictates of human affection they desire to provide in that dark hour which must eventually come to all.

At Corps Area headquarters, at the Service Schools, and at nearly all troop stations, officers have volunteered and been designated as active representatives of the Army Mutual Aid Association and will be glad to give full information on the subject.

Tables of Organization

REDUCED PEACE STRENGTH

CAVALRY—REGULAR ARMY

THESE TABLES, due to shortage of funds, will not be published by the War Department except in the very inconvenient form of changes to apply to former tables. They will not, therefore, be available except as published here by the CAVALRY JOURNAL. Tables of Organization for the Cavalry Brigade and Division will be published in the CAVALRY JOURNAL for January, 1922.

TABLE I—TROOP, CAVALRY REGIMENT (Reduced Peace Strength).

				One Rifle Platoon.				Machine Rifle Platoon.			
	Specialist rating.	Symbol number.	Troop headquarters.	Platoon headquarters.	Rifle squad.	Total rifle platoon (two squads).	Total two-rifle platoons.	Platoon headquarters.	Machine rifle squad.	Machine rifle platoon (two squads).	Total troop.
Captains			1								1
Lieutenants				(1)		(1)	1	(1)		1	2
Total Commissioned			1	(1)		(1)	1	(1)		1	3
First Sergeants			1								1
Sergeants, incl.			3	(1)		(1)	2	(2)		2	7
Mess			(1)								
Stable †			(1)								
Supply			(1)								
Miscellaneous				(1)*		(1)	(2)	(2)*		(2)	
Corporals, incl.			1		(1)	(2)	4		(1)	2	7
Company Clerk			(1)								
Miscellaneous					(1)	(2)	(4)		(1)‡	(2)	
Privates, First Class, and Privates, incl.			7	(2)	(7)	(16)	32	(1)	(7)	15	54
Buglers			(2)								
Cooks, Assistant	5th		(1)								
Cooks, First	4th		(1)								
Gunners, Machine Rifle	6th								(1)‡	(2)	
Horseshoers	4th		(1)								
			(1)								
Orderlies				(2)*		(2)	(4)	(1)		(1)	
Saddler	5th		(1)								
Miscellaneous					(7)	(14)	(28)		(6)	(12)	
Total Enlisted			12	(3)	(8)	(19)	38	(3)	(8)	19	69
Aggregate			13	(4)	(8)	(20)	39	(4)	(8)	20	72
Horses, Riding			9	(5)	(8)	(20)	39	(5)	(8)	20	68
Horses, Pack			2§						(2)	4	6
Total Animals			11	(5)	(8)	(20)	39	(5)	(10)	24	74
Machine Rifles									(2)	4	4
Rifles			7	(3)	(8)	(19)	38	(1)	(2)	7	52
Pistols			13	(4)	(8)	(20)	39	(4)	(8)	20	72
Sabers			7	(4)	(8)	(20)	39	(1)		1	47

* The sergeant is second in command or in the absence of the lieutenant commands the platoon. One of the orderlies acts as runner, one in charge of led horses of platoon. In Machine Rifle Platoon the second sergeant has charge of the led horses.

† In charge of led horses of entire troop and carries the guidon.

‡ One gunner is a corporal and one is a rated private.

§ One picket line and pannier and one kitchen outfit.

‖ The troop includes: 17 privates, first class; 37 privates.

Summary of specialists ratings: 2, 4th class; 2, 5th class; 2, 6th class.

TABLE II—HEADQUARTERS, AND HEADQUARTERS TROOP, CAVALRY REGIMENT (Reduced Peace Strength).

				Headquarters Troop.											
					Staff Platoon.					Communications Platoon.					
	Specialist rating.	Symbol number.	Regimental headquarters.	Troop headquarters.	Staff and orderly section.	Intelligence section.	Plans and training section.	Pioneer and demolition section.	Total platoon.	Message center.	Radio and panel section.	Wire section.	Total platoon.	Total troop.	Aggregate.
Colonel			1												1
Lieutenant-Colonel or Major			1												1
Captain or Lieutenant			3	1										1	4
Lieutenants									1				1‡	2	2
Total Commissioned			5	1					1				1	3	8
Master Sergeants, incl.					1				1					1	1
Sergeant-Major					(1)										
First Sergeants				1										1	1
Staff Sergeants, incl.					2				2					2	2
Color Sergeants					(2)										
Sergeants, incl.				3	1	1	1	1	4	1	2		3	10	10
Bugler					(1)										
Mess				(1)											
Stable				(1)											
Supply				(1)											
Miscellaneous						(1)	(1)	(1)		(1)	(2)				
Corporals, incl.				1				2	2		1	2	3	6	6
Company Clerk				(1)											
Miscellaneous								(2)			(1)	(2)			
Privates, and Privates First Class, incl.				12	10	6	2	9	27	9	11	7	27	66	66
Chauffeur	6th				(1)										
Clerks	5th				(1)										
Clerks										(2)					
Cooks, Assistant	5th			(1)											
Cooks, First	4th			(1)											
Operator, Radio and Switchboard	4th										(1)	(1)			
Operator, Radio											(1)				
Horseshoers	4th			(1)											
Horseshoers				(1)											
Messengers										(4)					
Motorcyclist	6th				(1)					(1)					
Motorcyclist					(1)					(1)					
Orderlies				(1)	(5)			(1)		(1)					
Saddlers	5th			(1)											
Scouts	6th					(3)									
Scouts						(3)									
Miscellaneous				(6)	(1)†		(2)	(8)			(9)	(6)			
Total Enlisted				17	14	7	3	12	36	10	14	9	33	86	86
Aggregate			5	18	14	7	3	12	37	10	14	9	34	89	94
Horses, Riding			5	18	11	7	3	12	35	8	14	8	32	85	90
Horses, Pack *				2				8	8		6		6	16	16
Total Animals			5	20	11	7	3	20	43	8	20	8	38	101	106
Car, Motor					1				1					1	1
Motorcycle with side car					2				2	2			2	4	4
Rifles				14	9	7	3	12	31	10	14	9	33	78	78
Pistols			5	18	14	7	3	12	37	10	14	9	34	89	94
Sabers			5	16	10	7	3		21	8			9	46	51

* One for picket line and pannier, one for kitchen outfit.
† Chaplain's Assistant.
‡ Regimental Signal Officer.
Summary of Specialist Ratings: 4th Class, 4; 5th Class, 3; 6th Class, 6.
The troop includes: 22 Privates, First Class; 44 Privates.

TABLE III—SERVICE TROOP, CAVALRY REGIMENT (Reduced Peace Strength).

				Headquarters Platoon.				Transportation Platoon.					
	Specialist rating.	Symbol number.	Troop headquarters.	Personnel section.	Supply section.	Band section.	Total platoon.	Platoon headquarters.	First squadron section.	Second squadron section.	Regimental headquarters and headquarters troop section.	Total platoon.	Total troop.
Captain or Lieutenant			1										1
Lieutenants				1	1		2	1				1	3
Total Commissioned			1	1	1		2	1				1	4
Warrant Officer						1	1						1
Master Sergeants, incl.					1		1						1
Regimental Supply Sergeant					(1)								
First Sergeant			1										1
Staff Sergeants, incl.						1	1						1
Band, Assistant Leader						(1)							
Sergeants, incl.			2	3		2	5	2				2	9
Band						(2)							
Mess			(1)										
Regimental Personnel Sergeant				(1)									
Stable								(1)					
Supply			(1)										
Wagonmaster								(1)					
Miscellaneous				(2)									
Corporals, incl.			1	1		4	5		1	1		2	8
Assistant Wagonmaster									(1)	(1)			
Band						(4)							
Company Clerk			(1)										
Mail				(1)									
Privates, First Class, and Privates, incl.			10	2	2	21	25	11	13	13	7	44	79
Clerks	5th			(1)	(1)								
Cobbler, Regimental	5th		(1)										
Cobbler, Regimental			(1)										
Cooks, Assistant	5th		(1)										
Cooks, First	4th		(1)										
Horseshoers	4th								(1)	(1)			
Horseshoers								(1)					
Mechanic, Chief	4th							(1)					
Mechanics, Painter and Carpenter	6th		(2)										
Musicians	2d					(4)							
Musicians	3d					(5)							
Musicians	5th					(3)							
Musicians						(9)							
Orderlies			(1)	(1)	(1)			(1)					
Saddlers	5th							(2)					
Wagoners	6th		(1)					(2)	(6)	(6)	(3)		
Wagoners			(1)					(2)	(6)	(6)	(4)		
Miscellaneous			(1)					(2)					
Total Enlisted			14	6	3	28	37	13	14	14	7	48	99
Aggregate			15	7	4	29	40	14	14	14	7	49	104
Horses, Riding §			5	8	5	29	42	3				3	50
Horses, Draft			2						8	8	6	22	24
Mules, Riding			7					6	2	2		10	17
Mules, Draft			4					16*	20	20	12	68	72
Total Animals			18	8	5	29	42	25	30	30	18	103	163
Wagons, Escort (Combat)									1	1		2	2
Wagons, Escort (Ration and Baggage)			1						4	4	2	10	11
Wagons, Spring			1						4	4	3	11	12
Wagons, Escort (Forage and Pioneer)								3†			1‡	4	4
Rifles			11	5	2		7	13	14	14	7	48	66
Pistols			15	7	4	29	40	14	14	14	7	49	104
Sabers			3	7	4	1	12	1				1	16

* Four extra mules for Regimental Train.
† For forage and blacksmith supplies.
‡ For pioneer supplies.
§ Two horses per officer.
The troop includes: 24 privates, first class; 55 privates.
Summary of specialist ratings: 2d class, 4; 3d class, 5; 4th class, 4; 5th class, 9; 6th class, 20.

TABLE IV—SQUADRON, CAVALRY REGIMENT (Consolidated Table). (Reduced Peace Strength.)

	Specialist rating.	Symbol number.	Squadron Headquarters and Headquarters Detachment: Squadron headquarters.	Staff and orderly section.	Radio section.	Wire section.	Total.	Three troops.	Total squadron.
Lieutenant-Colonel or Major			1				1		1
Captains								3	3
Lieutenants			3†				3	6	9
Total Commissioned			4				4	9	13
First Sergeants								3	3
Staff Sergeants, incl.				1			1		1
Squadron Sergeant-Major				(1)					
Sergeants, incl.				1	1		2	21	23
Squadron Supply Sergeant				(1)					
Miscellaneous					(1)				
Corporals, incl.				1		1	2	21	23
Bugler				(1)					
Miscellaneous						(1)			
Privates, First Class, and Privates, incl.				10	5	1	16‡	162	178§
Cooks, Assistant	5th							(3)	
Cooks, First	4th							(3)	
Cook				(1)					
Gunners, Machine Rifle	6th							(6)	
Horseshoers	4th							(3)	
Horseshoers								(3)	
Messengers and Scouts	6th			(1)					
Messengers and Scouts				(2)					
Motorcyclists	6th			(1)					
Orderlies				(4)					
Radio Operators	4th				(1)				
Saddlers	5th							(3)	
Miscellaneous				(1)	(4)	(1)			
Total Enlisted				13	6	2	21	207	228
Aggregate			4	13	6	2	25	216	241
Horses, Riding			4	12	6	2	24	204	228
Horses, Pack					3	1	4	18	22
Total Animals			4	12	9	3	28	222	250
Motorcycle with side car				1			1		1
Machine Rifles (Browning Automatic)								12	12
Rifles				9	6	2	17	156	173
Pistols			4	13	6	2	25	216	241
Sabers			4	9			13	141	154

† Squadron Staff consists of: Adjutant, Intelligence Officer, Plans and Training Officer, Supply Officer. In peace, one of the squadron staff officers is Adjutant, one combines the duties of Intelligence Officer and Plans and Training Officer, and one is Supply Officer.
‡ The Squadron Detachment includes: 6 privates, first class; 10 privates.
§ Total Squadron includes: 57 privates, first class; 121 privates.
Summary of specialist ratings: 4th class, 7; 5th class, 6; 6th class, 8.

TABLE V—CAVALRY REGIMENT (Reduced Peace Strength).

	Specialist rating.	Symbol number.	Regimental headquarters and Headquarters troop.	Service troop.	Two squadrons.	Total regiment.	Attached medical department.	Attached chaplain.	Aggregate.
Colonel			1			1			1
Lieutenant-Colonel or Major			1†		2	3			3
Major							1‖		1
Captains					6	6			6
Captains or Lieutenants			3*	1		5	5‖(1‡)(2¶)	1	11
Lieutenants				2	3	18	23		23
Total Commissioned			5	3	4	26	38	6	1	45
Warrant Officer					1		1			1
Master Sergeants				1	1		2			2
First Sergeants				1	1	6	8			8
Staff Sergeants				2	1	2	5	2‖(1¶)		7
Sergeants				10	9	46	65	4‖(1¶)		69
Corporals				6	8	46	60	1‖		61
Privates, First Class, and Privates, incl.				66	79	356	501	25(10‖)(1¶‖)		526
Miscellaneous	2d				(4)		(4)			(4)
Miscellaneous	3d				(5)		(5)	2‖(1¶)		(7)
Miscellaneous	4th			(5)	(4)	(14)	(23)	2‖(1¶)		(25)
Miscellaneous	5th			(3)	(9)	(12)	(24)			(24)
Miscellaneous	6th			(6)	(20)	(16)	(42)	11‖(1¶)(1‡)		(53)
Total Enlisted				86	99	456	641	32		673
Aggregate			5	89	104	482	680	38	1	719
Horses, Riding			5	85	50	456	596	31	2	629
Horses, Pack				16		44	60			60
Horses, Draft					24		24			24
Mules, Riding					17		17			17
Mules, Draft					72		72	12		84
Total Animals			5	101	163	500	769	43	2	814
Wagons, Escort (Combat)					2		2			2
Wagons, Escort (Ration and Baggage)					11		11			11
Wagons, Spring					12		12			12
Wagons, Escort (Forage and Pioneer)					4		4			4
Wagons, Medical, Four Mule								3		3
Motor Cars, Passenger				1			1			1
Motorcycles with side car				4		2	6	1		7
Machine Rifles (Browning Automatic)						24	24			24
Rifles				78	66	346	490			490
Pistols			5	89	104	482	680			680
Sabers			5	46	16	308	375			375

* The Regimental Staff consists of: Adjutant, Intelligence Officer, Plans and Training Officer, Supply Officer. In peace, one of the regimental staff officers is Adjutant, one combines the duties of Intelligence Officer and Plans and Training Officer, and one is Supply Officer.
† Second in command and Executive Officer.
‡ Dental.
§ Medical Technicians, except two wagoners with 6th class rating.
‖ Mounted on horse.
¶ Veterinary.
The regiment includes: 160 privates, first class; 341 privates.

TABLE VI—MACHINE-GUN TROOP, CAVALRY MACHINE-GUN SQUADRON.
(Reduced Peace Strength.)

	Specialist rating.	Symbol number.	Troop headquarters.	Platoon headquarters.	One squad.	Total platoon (two squads).	Total two platoons.	Total troop.
Captains			1					1
Lieutenants			1‡	1		1	2	3
Total Commissioned			2	1		1	2	4
First Sergeant			1					1
Sergeants, incl.			3	1‖		1	2	5
Mess			(1)§					
Stable			(1)†					
Supply			(1)§					
Miscellaneous				(1)				
Corporals, incl.			4	1‖	1	3	6	10
Troop Clerk			(1)§					
Liaison Agents			(2)§					
Range Finder			(1)					
Privates, First Class, and Privates, incl.			12	2	10¶	22	44	56*
Bugler			(2)					
Cooks, Assistant	5th		(1)					
Cooks, First	4th		(1)					
Gunners, Assistant	5th				(1)	(2)	(4)	
Horseshoers	4th		(2)					
Mechanics, Chief	4th		(1)					
Mechanics	6th		(1)					
Messengers	6th		(2)§					
Messengers				(1)§		(1)	(2)	
Orderlies				(1)§		(1)	(2)	
Saddler	5th		(2)					
Miscellaneous					(9)(5§)			
Total Enlisted			20	(4)	(11)	(26)	52	72
Aggregate			22	(5)	(11)	(27)	54	76
Horses, Riding			18	(6)	(11)	(27)	54	72
Horses, Pack			2**		(5)	(10)	20	22
Total Animals			20	(6)	(16)	(37)	74	94
Bolos					(2)	(4)	8	8
Machine-Gun, Heavy					(1)	(2)	4	4
Rifles			7	(2)	(5)	(12)	24	31
Pistols			22	(5)	(11)	(27)	54	76
Sabers			2			1	2	4

* The troop includes: 17 privates, first class; 39 privates.
Summary of specialist ratings: 4th class, 4; 5th class, 7; 6th class, 3.
† Carries the guidon and has charge of led horses.
‡ Liaison Officer.
§ Armed with rifle.
‖ Sergeant, second in command; corporal, file closer, is in charge of led horses of platoon.
¶ Five as horse leaders.
** One for picket line and panniers; one for kitchen outfit.
NOTE.—In Machine Gun Troop on foreign service add two horses draft and one spring wagon and subtract one horse riding from Troop Headquarters.

TABLE VII—CAVALRY MACHINE-GUN SQUADRON. (Reduced Peace Strength.)

	Specialist rating.	Symbol number.	Squadron Headquarters and Headquarters Detachment: Squadron headquarters.	Staff and orderly section.	Communications section.	Transportation Section: Squadron hdqrs., and squadron hdqrs. detachment.	Three troops.	Total.	Three machine-gun troops.	Total machine-gun squadron.	Attached medical department.	Aggregate.
Lieutenant-Colonel or Major			1					1		1		1
Captains									3	3		3
Captains or Lieutenants			2*					2		2	2†(1‖)	4
Lieutenants									9	9		9
Total Commissioned			3					3	12	15	2	17
First Sergeants									3	3		3
Staff Sergeants, incl.				1				1		1		1
Squadron Sergeant-Major				(1)								
Sergeants, incl.				2		1		3	15	18	2†(1‖)	20
Personnel				(1)								
Squadron Supply Sergeant				(1)								
Wagon-master						(1)‡						
Corporals, incl.					1			1	30	31		31
Signal, wire					(1)							
Privates, First Class, and Privates, incl.				7	2	7	12	28	168	196	8(2† 3§†)	204
Buglers									(6)			
Cooks, Assistant	5th								(3)			
Cooks, First	4th			(1)					(3)			
Gunners, Assistant	5th								(12)			
Horseshoers	4th					(1)‡			(6)			
Mechanics, Chief	4th								(3)			
Mechanics	6th								(3)			
Medical Dep't Technicians	4th										(1)	
Medical Dep't Technicians	6th										((3)(1‡))	
Messengers	6th								(6)			
Messengers									(6)			
Motorcyclists	6th			(1)								
Orderlies				(3)					(6)			
Saddlers	5th								(6)			
Scouts	6th			(2)								
Wagoners	6th					(2)	(4)					
Wagoners						(3)	(6)					
Miscellaneous					(2)	(1)	(2)		(108)			
Total Enlisted				10	3	8	12	33	216	249	10	259
Aggregate			3	10	3	8	12	36	228	264	12	276
Horses, Riding			4	9	3			16	216	232	9	241
Horses, Pack					1			1	66	67		67
Horses, Draft						2	6	8		8		8
Mules, Riding						2		2		2		2
Mules, Draft						16	24	40		40	4	44
Total Animals			4	9	4	20	30	67	282	349	13	362
Wagons, Escort (Combat)							3	3		3		3
Wagons, Escort (Ration and Baggage)						1	3	4		4		4
Wagons, Escort (Forage and Pioneer)						3		3		3		3
Wagons, Spring						1	3	4		4		4
Wagons, Medical, Four Mule											1	1
Motorcycle with side car				1				1		1		1
Bolos									24	24		24
Machine Guns, Heavy									12	12		12
Rifles				6	3	8	12	29	93	122		122
Pistols			3	10	3	8	12	36	228	264		264
Sabers			3	2				5	12	17		17

The Squadron Headquarters Detachment includes: 9 privates, first class; 19 privates.
Total Squadron (Cavalry Personnel) includes: 60 privates, first class; 136 privates.
Summary of Specialist Ratings for total Squadron (Cavalry Personnel): 4th class, 14; 5th class, 21; 6th class, 18.
* The Squadron Staff consists of: Adjutant, Intelligence Officer, Plans and Training Officer, Supply Officer. In peace, one of the squadron staff officers combines the duties of Adjutant and Supply Officer, and one the duties of Intelligence Officer and Plans and Training Officer.
† Mounted on horse. ‡ Mounted on mule. § Veterinary.

Editorial Comment

THE TASK OF TEACHING

THE WORLD WAR has brought home to us the necessity under which an officer lies in time of war to give the maximum of instruction in the minimum of time. In the pleasant garrison days we can count on months—many of them—in which to turn a recruit into a non-commissioned officer; but in war-time we get ten weeks in which to turn out a lieutenant. Even in peace training, while we fortunately do not have to crowd our labor under pressure, we should not cease to strive for efficiency. Also, by reason of the new plans for developing the Organized Reserves and the establishment of R. O. T. C. units in practically all colleges, we have entered upon a large field that may be characterized as "teaching duty," as distinguished from duty with troops.

The Army profession is saturated with teaching. When he is not giving instruction, the Army officer is usually receiving it. So it is not out of place to call attention to the art of teaching, that being one of the things that, in the Army, is not taught. Every officer has to teach, at some time or other. In ante-bellum days the Regular Army was concerned almost exclusively with its own instruction, leaving the military education of the civil contingent of the war army almost entirely to the feverish, inadequate days following the outbreak of war. Now it is entrusted with the instruction of that important contingent simultaneously with its own. Our officer will today be giving instruction to his men and non-commissioned officers. Then tomorrow he will suddenly be ordered to duty as instructor of an R. O. T. C. unit at one of our educational institutions. It is all one and the same. It is teaching. And he has not been taught how to teach. He has had no normal course. The matter is not much altered with increasing years of service. These years may have taught much of the profession of arms, something of leadership. They will not have taught much of the art of teaching.

Our officers, a large proportion of them, are taking up duties in association with trained professional teachers in our finest schools. How do they "stack up"? In these early years of the entrance of military instruction into our colleges and schools on a large and nation-wide scale, the lack of efficiency of our teaching P. M. S. and T.'s *et al.* is not likely to excite much unfavorable criticism; but it will not be long before the question will come to a head, "How do they stack up?" How *can* they, without some adequate preparation?

Ability to do is not the equivalent of ability to teach how to do. A good shot is not always a good instructor of rifle marksmanship. The ability to train troops does not include the ability to train others to train troops. Many an officer who has made a fine organization has failed to give his subordinates

any clear conception of how it is done. It is time for us to learn something about the art of teaching. To most, the art of teaching, the science of pedagogy, are unknown and unplumbed. Telling is not teaching. Reading a lecture is an anachronism in these days of printing-presses and mimeographs. Demonstration of a process does not teach its principles.

Many a man may know his subject in a practical fashion. But this is not enough. The teacher must be full to the brim with it; so that no new angle presented by some questioner, no new facet suddenly sparkling out of the fertile brain of a youngster unfettered by tradition, shall startle him. He must, moreover, command a vocabulary adequate to his subject. He must aim at accuracy of expression.

The teacher must cultivate poise and freedom from diverting eccentricities. He must study the tones of his voice, and learn to adapt tone and manner and glance of eye, all to the task of commanding attention, concentrated attention and interest.

The science of pedagogy is not a new one. We still talk about the Socratic method. Johann Friedrich Herbart was laying the foundations of the modern science a century ago. Plato, John Stuart Mill, Herbert Spencer, Jean Jacques Rousseau, Pestalozzi are only a few of the masters at whose knees we might acquire some knowledge of it. "The method which practical teachers of today use," to quote from one of the more modern writers on the subject, "leading, by judicious questions, the young pupil to discover his own errors." This is of universal application. Would it not be a happy method for the conduct of the terrain ride, for instance? Leading, by judicious questions! And the critique! What a relief if the umpire would, out of the wealth of his study and training and experience, lead, by judicious questions, the young embryo general to discover his own errors! It is very natural for the Army officer, more than any other class of the *genus* teacher, to abuse his position and run a one-man show. If he will be a good teacher, however, he must direct the thoughts of his hearers, not do their thinking for them. He must learn, moreover, how to make his instruction of permanent value, how to make the old thought masses apperceive the new idea, conquer and subdue it, and make it tributary to their power.

Inseparable from the art of teaching is the art of learning—the one the complement of the other. In military instruction we have to deal with developed minds, at least with minds well past the infantile stage. Nevertheless, all types are found, possessing very different degrees of teachableness. So this phase of the business cannot be ignored. One must have at command a multitude of methods and devices for holding the student's attention, and must, further than this, be able to point out to a backward student means whereby he can increase his own powers of concentration and reception. In a word, he must be able to open wide the mental processes of all the individuals of his class to receive the instruction.

The most witless numskull will learn much from a newly fledged, inexperienced officer who may happily have learned something of the art of teaching. The best mind will become case-hardened in a section where the instructor, whatever his rank and titles, reads a lecture from which the class scribble incoherent notes.

REDUCTION MUST NOT AFFECT CAVALRY SPIRIT

THE LONG-IMPENDING REDUCTION in the Army has come, and with it the reorganization of the cavalry. Now we will have fewer active regiments and they will be composed of fewer units. The reduction—well, we must accept it as the fortune of peace. Now, the important matter is this: To what extent shall we suffer a material setback to affect our morale, our cavalry spirit, our potential capacity? These should be affected very little.

Conjure up in your mind an artisan at work in his private workshop, surrounded with a full assortment of well-nigh perfect tools of his trade, happy in his task of turning out finished products of which he is justly proud. Suppose that by some unfortunate circumstance our skilled artisan loses most of his fine stock of tools and has to give up some of the production in which he takes such a keen joy; but finds instead an opportunity to give elementary instruction in his trade to apprentices and school-boys. He has no longer a full equipment of fine tools at his command, but no one can rob him of his knowledge of his trade. And who shall say that the broadening and stimulating of his powers that will surely accompany the giving of instruction to many young men of many kinds will not more than compensate for any little loss of facility, of manual skill, which the habitual use of his former gear once developed?

The Army officer, and our trained non-commissioned officer as well, is in a similar position. Our stock of fine instruments is diminished; but, on the other hand, our opportunity to give scope to our powers of instruction, organization, and administration is enormously increased. Where formerly we had only the Regular Army as our workshop, now we can go as far as we will into the undeveloped and unlimited field of the to-be-organized reserves.

This high task will tax our powers and our professional knowledge and ability to the full. Only for him who is too short of vision to see the newly opened avenues of expansion is there any danger of loss of spirit and enthusiasm as a result of the present reduction of the active army.

A CAVALRY ARMY

OUR POOR mutilated organizations are not very impressive. Here is a captain at drill with his little corporal's guard of a troop. It looks so pitiably small that a combat exercise would be ridiculous. He runs through a patrol problem and "calls it a day." It will be better presently. We are reducing the number of our organizations and making the few remaining active units of a

working strength; but the weakening of our arm is depressing, and one may easily drift into a frame of mind that can conceive of the cavalry as good for nothing after all but minor operations, reconnaissance and escort. Let us not be fooled in this. Our cavalry is weak because Congress has so ordered. But Congress cannot enact military principles. Even at this unpropitious moment, there is astir a promise of a great future for the mounted arm. While yet on the eve of the world's greatest conflict, which is painted in the minds of most Americans as quite exclusively a history of long and rigorous trench war, siege operations, in which the splendid record of the cavalry was lost sight of in the welter of blood that was shed for so long on the Hindenburg line—even while still under the stultifying influence of the war of the trenches, the military mind is opening to the immense possibilities that lie ahead of the cavalry.

None of the great leaders of the World War have found in its experiences any grounds for attributing a secondary importance to the cavalry. I believe Balck has come forth with a criticism of Field Marshal Haig's encomium on the British Cavalry of 1918, but it is probably more in the spirit of a beaten opponent's retort to a successful commander's claims than in the usual judicious vein of that respected authority. Regimental officers who served for two or three years in the trenches with never a glimpse of a cavalryman might conceive that cavalry's day is past, but none of the leaders of larger units have fallen into this error.

Upon them the lessons drawn from the war, particularly from the operations of the last year of the war, were indelibly impressed. Those lessons are with time getting expounded. The allied cavalry was not used in masses. The cavalry corps and divisions, even brigades, were dismembered. No one would dream of using infantry in this manner. An infantry division, united with its sister divisions into a powerful group, goes in with all its complement of artillery, light and heavy, its air service, its tanks. The cavalry was sent in by handfuls.

The efficacy of modern cavalry lies in its great capacity for maneuver and the possibility of transporting great fire power rapidly over all kinds of country. Deprived of its artillery, of the assistance of tanks and air craft, robbed of higher direction by a tragic dismemberment on the eve of conflict, lacking its signal service, the cavalry was thrown in against the tide of exulting, victorious Germans. No infantry would have been so sacrificed.

It is not in point to seek to attach blame for this circumstance, and it is interesting to note that—too late—in April or May, 1918, a note from General Headquarters called to the attention of the armies that it was to their interest to refrain from breaking up the large cavalry units.

The Germans, with their customary thoroughness of preparation, had their cavalry corps—four of them—ready organized at the outbreak of hostilities. Other nations have habitually formed their cavalry masses after the necessity for them was felt. The French quickly organized the corps of Sordet, Conneau,

and Abonneau in 1914 and employed them to infinite advantage, but by 1918 the principle that cavalry must be employed in masses to get big results was again forgotten. Except for German forehandedness, it seems to take the actual experience of warfare to drive home this fact. Strange, for in the case of no other arm is such an error permitted to vitiate its power!

Napoleon, toward the end of his campaigns, created powerful organizations of maneuver which took the name of cavalry corps. The Army of the Potomac did not form its cavalry into a corps until the spring of 1863. Then at once, with the battle of Brandy Station, it entered upon a history of successive victories. Thereafter to the end of the war the cavalry was employed in divisions and corps. In the Russo-Japanese War the Japanese, finally, in the course of the battle of Mukden found it necessary to constitute a cavalry corps to extend their turning movement so as to cut off the Russian retreat. Allenby's Desert Mounted Corps, that did such splendid work in Palestine, was a cavalry corps, comprising the 4th and 5th Cavalry Divisions, the Australian Mounted Division, and the Anzac Mounted Division, each division being composed of nine regiments of cavalry with divisional troops. Finally, in the Russian successes against the Poles, we see as the foremost instrument Budenny's *Cavalry Army* of four cavalry divisions, with a complement of artillery and auxiliary troops.

The present-day military student is considering cavalry in terms of cavalry masses. Bernhardi in his latest writings comes out strongly in favor of cavalry masses. He would even sacrifice mobility somewhat in favor of strength. In his belief, there is no doubt that a well-organized, well-handled, independent force of cavalry will obtain great successes of much strategic importance. But it must have its complementary services, to be independent. He recommends, in the way of artillery, a battery for each brigade, and, of course, no end of machine-guns and automatic rifles. These same views are being pronounced, moreover, by the foremost leaders of French military thought.

In these days of the army's eclipse (which will not last for long, there is reason to hope) and we have for a period to conduct our training with fragments of troops, for which, in their present strength, combat is scarcely to be thought of, we must keep alive the sense of true cavalry values. The cavalry is destined to a splendid future of glorious achievement. We must not permit a transitory predominance of gasoline and technical novelties to obscure that truth. But if we believe we are good for nothing but remount depots and reconnaissance, Heaven will never send us any higher task.

NOTICE

Annual Meeting of the United States Cavalry Association

The annual meeting of the United States Cavalry Association will be held at Washington, D. C., on Monday, January 16, 1922.

Amendment of the constitution of the Association has been duly proposed, and will be voted upon at this meeting. Copies of the proposed amendment will be distributed to members for consideration in advance of the meeting.

The election of officers, and of members of the Executive Council, will take place at this meeting.

All members of the Association who are not certain to be present in person are urgently requested to execute and forward to the Secretary a proxy, form for which will be found below.

PROXY

I hereby constitute and appoint the Secretary of the United States Cavalry Association, or_____, my proxy, for me and in my name and behalf, to vote at any election for officers and members of the Executive Council of the United States Cavalry Association upon any and all proposed amendments to the constitution of the said Association, and upon any and all other matters which may properly come before the annual meeting of the United States Cavalry Association in January, 1922, or any adjourned meeting thereof.

_____

Topics of the Day

REORGANIZATION OF THE CAVALRY

THE FIRST CAVALRY DIVISION, with headquarters at Fort Bliss, Texas, is composed of Division Headquarters, Headquarters Troop, Signal Troop, Ordnance and Veterinary Companies (the last three to be organized later); 1st Cavalry Brigade, with headquarters and Headquarters Troop at Douglas, Arizona; 1st Cavalry, at the same station; 10th Cavalry, at Fort Huachuca, Arizona; 1st M. G. Squadron, at Douglas; 2d Cavalry Brigade, with headquarters and Headquarters Troop at Fort Bliss, Texas; 7th Cavalry and 8th Cavalry and 2d M. G. Squadron, at the same station; 1st Field Artillery Battalion (Horse), formerly the 82d Field Artillery, the 8th Engineer Battalion (mounted), and Ambulance Company No. 43, at Fort Bliss, Texas.

The 15th, 16th, and 17th Regiments become inactive. Headquarters troops of all regiments remain Headquarters troops of their regiments. Supply troops become service troops. Headquarters of all 3d Squadrons are demobilized. Troops A, B, and C, constituting the 1st Squadron, and E, F, and G, constituting the 2d Squadron, continue present organizations, except that, in the 3d Cavalry, Troops I, K, and L become Troops E, F, and G, and Troops E, F, and G are demobilized or otherwise disposed of. Other troops are reorganized or demobilized as follows:

Old designation.	New designation.
Troop D, 1st Cav	Sq. Hq. Det., 1st M. G. Sqdn.
Troop H, 1st Cav	Hq. Troop, 1st Cav. Brigade.
Troops I and K, 1st Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 1.
Troops L and M, 1st Cav	Demobilized.
M. G. Troop, 1st Cav	Troop A, 1st M. G. Sqdn.
Troops D and H, 2d Cav	Demobilized.
Troops I and K, 2d Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 7.
Troop L, 2d Cav	Troop L, Tr. Center Sqdn. No. 7.
Troop M, 2d Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 7.
M. G. Troop, 2d Cav	M. G. Troop No. 1.
Troop D, 3d Cav., inactive as	Troop B, 3d M. G. Sqdn.
Troop E, 3d Cav	Troop L, Tr. Center Sqdn. No. 1.
Troop F, 3d Cav	Troop L, Tr. Center Sqdn. No. 2.
Troop G, 3d Cav	Demobilized.
Troop H, 3d Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 1.
Troop M, 3d Cav	Troop L, Tr. Center Sqdn. No. 3.
M. G. Troop, 3d Cav., inactive as	Troop A, 3d M. G. Sqdn.
Troop D, 4th Cav., inactive as	Hq. Troop, 2d Cav. Div.
Troop H, 4th Cav	Demobilized.
Troops I and K, 4th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 2.
Troop L, 4th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 2.

Old designation.	New designation.
Troop M, 4th Cav	Demobilized.
M. G. Troop, 4th Cav., inactive as	Troop C, 6th M. G. Sqdn.
Troops D and H, 5th Cav., inactive as	Hq. Troops 3d and 4th Cav. Brig., resp.
Troops I and K, 5th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 3.
Troop L, 5th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 3.
Troop M, 5th Cav., inactive as	Sq. Hq. Det., 3d M. G. Sqdn.
M. G. Troop, 5th Cav	Troop C, 1st M. G. Sqdn.
Troop D, 6th Cav., inactive as	Troop B, 6th M. G. Sqdn.
Troop H, 6th Cav	Troop L, Tr. Center Sqdn. No. 5.
Troops I and K, 6th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 4.
Troop L, 6th Cav	Troop L, Tr. Center Sqdn. No. 4.
Troop M, 6th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 4.
M. G. Troop, 6th Cav., inactive as	Troop A, 6th M. G. Sqdn.
Troops D and H, 7th Cav	Hq. Troops 1st and 2d Cav. Brig., resp.
Troops I and K, 7th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 5.
Troop L, 7th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 5.
Troop M, 7th Cav	Demobilized.
M. G. Troop, 7th Cav	Troop A, 2d M. G. Sqdn.
Troop D, 8th Cav., inactive as	Troop C, 3d M. G. Sqdn.
Troop H, 8th Cav	Sq. Hq. 2d M. G. Sqdn.
Troops I, K, L, M, 8th Cav	Demobilized.
M. G. Troop, 8th Cav	Troop B, 2d M. G. Sqdn.
Troops D, H, I, K, L, M, 9th Cav	Demobilized.
M. G. Troop, 9th Cav	M. G. Troop No. 2.
Troops D, H, I, K, L, M, and M. G., 10th Cav.	Demobilized.
Troops D and H, 11th Cav	Demobilized.
Troops I and K, 11th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 9.
Troop L, 11th Cav	Troop L, Tr. Center Sqdn. No. 9.
Troop M, 11th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 9.
M. G. Troop, 11th Cav., inactive as	Troop A, 4th M. G. Sqdn.
Troop D, 12th Cav., inactive as	Sq. Hq. Det., 6th M. G. Sqdn.
Troops H, I, K, L, M, 12th Cav	Demobilized.
M. G. Troop, 12th Cav	Troop B, 1st M. G. Sqdn.
Troop D, 13th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 8.
Troops H, I, K, L, M, 13th Cav	Demobilized.
M. G. Troop, 13th Cav	Troop C, 2d M. G. Sqdn.
Troop D, 14th Cav., inactive as	Sq. Hq. Det., 4th M. G. Sqdn.
Troop H. 14th Cav	Demobilized.
Troops I and K, 14th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 6.
Troop L, 14th Cav	Troop L, Tr. Center Sqdn. No. 6.
Troop M, 14th Cav., inactive as	Sq. Hq. Det., Tr. Center Sqdn. No. 6.
M. G. Troop, 14th Cav., inactive as	Troop C, 4th M. G. Sqdn.
Troops D, H, I, K, L, M, 15th Cav	Demobilized.
M. G. Troop, 15th Cav., inactive as	Troop B, 4th M. G. Sqdn.
Troops D and H, 16th Cav., inactive as	Troops A and C, 5th M. G. Sqdn., resp.
Troops I and K, 16th Cav., inactive as	Troops I and K, Tr. Center Sqdn. No. 8.
Troop L, 16th Cav	Troop L, Tr. Center Sqdn. No. 8.
Troop M, 16th Cav., inactive as	Sq. Hq. Det., 5th M. G. Sqdn.
M. G. Troop, 16th Cav., inactive as	Troop B, 5th M. G. Sqdn.
Troops D, H, I, K, L, M, 17th Cav	Demobilized.
M. G. Troop, 17th Cav., inactive as	M. G. Troop No. 3.

The following organizations change stations as indicated, by marching:

Organization.	From—	To—
Troop L, Tr. Center Sqdn. No. 7	Fort Riley	Fort Snelling.
Troop L, Tr. Center Sqdn. No. 2	Fort Ethan Allen	Camp Dix.
Troop L, Tr. Center Sqdn. No. 3	Fort Myer	Camp Meade.
Troop C, 1st M. G. Sqdn	Marfa, Texas	Douglas, Arizona.
Troop L, Tr. Center Sqdn. No. 5	Fort Oglethorpe	Camp Knox.
Troop L, Tr. Center Sqdn. No. 9	Presidio of Monterey	Presidio of San Francisco.
Troop B, 1st M. G. Sqdn	Del Rio, Texas	Douglas, Arizona.
Troop C, 2d M. G. Sqdn	Fort Clark	Fort Bliss.
Troop L, Tr. Center Sqdn. No. 6	Fort Des Moines	Fort Sheridan.

IMPORTANT LEGISLATION

PUBLIC DOCUMENT No. 47, 67th Congress, H. R. 6611, approved August 9, 1921, establishing the Veterans' Bureau, is very important legislation to all those who have been discharged from the service and to all officers and enlisted men now in the service as well.

The act very clearly outlines the Government's liability to those discharged from and those still in the service, and has provided very liberal insurance reinstatement privileges to those whose disability is the result of an injury or disease or of an aggravation thereof, suffered or contracted in the active military or naval service during the World War, and in certain instances provides for the taking care of worthy claims for insurance benefits. In fact, the legislation is generally accepted as evidence of a desire to give the soldier and sailor his just due. But there is one portion of this bill that it seems should be brought to the attention of all those now in the service; that is Section 22, by which a new section is added to Article III of the War Risk Insurance Act, known as Section 315, which is as follows:

> "That no person admitted into the military or naval forces of the United States after six months from the passage of this amendatory act shall be entitled to the compensation or any other benefits or privileges provided under the provisions of Article III of the War Risk Insurance Act, as amended."

The result of this is that any man entering the service after February 9, 1922, shall not be entitled to compensation or any other benefits or privileges provided under the provisions of Article III. He will, however, be entitled to privileges of insurance under Article IV of the War Risk Insurance Act. All of those who are now midshipmen at the Naval Academy and will graduate and be commissioned next year and all of those who will graduate from West Point next year are eliminated from the benefits of compensation. (See above: Compensation for Dependents.)

In view of the fact that the War Risk Insurance Act repealed the Pension Law (Section 321, Article III, Public Document No. 90, 65th Congress, H. R. 5723), so far as it related to those then in the service or those who entered the

service subsequently to the passage of the act, those who are now eliminated by this provision are without any guarantee that the Government will compensate them for loss due to disability, or their beneficiaries for loss on account of death.

COMPENSATION FOR DEPENDENTS

IT IS BELIEVED that it is not generally understood throughout the service what benefits the dependents of an officer or enlisted man are entitled to in the event of his death or disability incident to the service.

The benefits listed below are included in the compensation clauses of the War Risk Insurance Act, and are separate from the six months' pay to which the widow of an officer is entitled and separate from any War Risk Insurance benefits she may be entitled to through a War Risk Insurance contract. They take the place of any pension which formerly might have been obtained through operation of the Pension Bureau.

In the event of death of an officer or enlisted man caused by injury or disease contracted in line of duty, not the result of his own willful misconduct, the dependents are entitled to monthly compensation as follows:

Widow	$25 00
Widow and one minor child	35 00
Widow and two minor children	42 50
For each additional minor child up to two	5 00
If no widow is left:	
For one minor child	20 00
For two minor children	30 00
For three minor children	40 00
For each additional child up to two	5 00
Dependent father or mother	20 00
Dependent father and mother	30 00

A widow is entitled to payment of the benefit until death or remarriage. A dependent child is entitled to payment of the benefit until the age of 18 years or during certain incapacities.

The dependents of an officer or enlisted man deceased in line of duty are entitled to $100.00 reimbursement of funeral expenses. This has been ruled inapplicable in the case of death of a retired officer; but a test case is now in preparation which it is hoped will result in a ruling favorable to retired officers.

If an officer or enlisted man is totally disabled in line of duty, he is entitled to compensation as follows:

For self alone	$30 00
For self and wife	45 00
For self and wife and one child	55 00
For self and wife and two children	65 00
For self and wife and 3 or more children	75 00

The above in addition to retired pay.

In case of total disability also, if services of a nurse be required, $20.00 may be paid per month for such purpose.

THE NEW CAVALRY OFFICERS IN THE COMMISSIONED PERSONNEL OF THE REGULAR ARMY

THIRTY-FIVE vacancies, out of 2,585, were allotted to the cavalry to be filled by examination April 25, 1921. Nine hundred and ninety-two applicants were examined, of whom 208 qualified for appointment. Of these, 14 were from the group of 63 that expressed a first choice for the cavalry branch. Nine were appointed in the cavalry. The small Military Academy graduating class contributed two additions to the cavalry officer personnel.

DISTRIBUTION OF THE CAVALRY OFFICER PERSONNEL
AUGUST 20, 1921

COLONELS, 116; lieutenant-colonels, 120; majors, 248; captains, 508; 1st lieutenants, 233; 2d lieutenants, 9; total, 1,234. Of these, 123 are serving in other branches, 228 are on the Detached Officers' List, and 876 are charged to their own branch, the authorized strength being 951.

Of the 876 cavalry officers charged to the cavalry branch, 22 are on duty at the General Service schools, 30 are on miscellaneous duty, 12 are on duty in the office of the Chief of Cavalry, 77 are on duty at the special schools (including cavalry school), and 735 are on duty with organizations.

ON THE MEXICAN BORDER

THERE WERE serving on the Mexican border August 1, 1921, 337 officers and 4,468 enlisted men of cavalry out of a total of 760 officers and 11,713 enlisted men of all branches, combat and staff. The largest cavalry garrison is at Fort Bliss, El Paso, Texas. On the date given above it numbered 85 officers and 971 enlisted men. In addition it should be remarked that the 1st Cavalry Division's Field Artillery Battalion, numbering 35 officers and 274 men, are also stationed here.

PROPOSED DISTRIBUTION OF CAVALRY ENLISTED PERSONNEL

FOREIGN garrisons, 713; Expeditionary forces, 8,465; training centers, 621; school detachments and troops, 1,369; overhead, 16; total, 11,184.

THE ARMIES OF OCCUPATION ATHLETIC AND SHOOTING MEETS

AT THE Interallied Small Arms Competition at Aix-la-Chapelle, July 18-20, the American team score was 10,353; the Belgian, 8,729; the British, 7,586; the French, 7,148. American Rifle and Pistol and Automatic teams won first place, while the American Machine-Gun Team won second place. Individuals

from the American team won the first six places in the Rifle, Pistol, and Automatic Machine Rifle competitions.

On July 25, 26, and 27 the big Armies of Occupation Championships meet was held at Coblenz, on the fields and tracks built by the U. S. Army and the Y. M. C. A. The athletes of the American Forces in Germany won the meet by a total score of 200 points. The French total was 106; the British, 58; the Belgian, 38. The British team was weak, owing to depletion in its ranks of athletes consequent upon the dispatch of re-enforcements to Silesia. The French had a stronger team than in the previous meet at Mayence. Fourteen records were smashed during the meet. The American organizers of the show, say their British rivals, displayed all the good qualities that could be desired in carrying out the arrangements, and the British competitors, at all events, will not cease talking of the excellence of this entertainment for a long time to come.

CAVALRY SUCCESS IN THE EIGHTH CORPS AREA RIFLE AND PISTOL COMPETITION

IN THIS competition, held in July, the 10th Cavalry team won the Pistol Championship, the 15th Field Artillery and 16th Cavalry taking second and third places. In the rifle competition the 10th Cavalry took third place, this competition being won by the 23d Infantry, with the 9th Infantry in second place.

RESIGNATIONS

RESIGNATIONS of Regular Officers are getting back to a normal level. Having reached a peak of over 300 a month in August and September of 1919, they have declined in number steadily since that time, until the monthly totals can be expressed by one digit.

The Cavalry Officers' Reserve Corps numbered 859 on August 1, 1921. Of them a comparatively small number—a score or so—are due to be dropped from the rolls, as all touch with them seems to be lost.

CAVALRY STRENGTH AT STATIONS ON THE BORDER

Station.	Officers.	Enlisted men.	Station.	Officers.	Enlisted men.
Fort Apache	3	34	Camp McAllen	8	165
Camp John H. Beacon	3	46	Camp Marfa	45	759
Fort Bliss	85	971	Camp Mercedes	8	163
Fort Brown	19	331	Camp Robert E. L. Michie	34	457
Fort Clark	32	374	Fort Ringold	8	86
Douglas	48	350	San Diego Barracks	..	1
Camp Lawrence J. Hearn	3	43			
Fort Huachuca	41	688		337	4,468

Figures as of August 1, 1921.

THE CAVALRY-ENGINEER RIFLE COMPETITIONS

THERE were assembled at Fort Bliss, Texas, in July, 25 regimental or separate battalion teams from all the Cavalry and Engineer units within the continental limits of the United States, for the purpose of trying out for positions on the United States Cavalry-Engineer Rifle Team. Incidental to these try-outs, competitions between the teams and individuals were conducted with the purpose of making the effort of all keener and more enthusiastic. Through the loyal support of practically all cavalry and engineer officers, a fund was accumulated to provide a suitable number of handsome medals and trophy cups. In addition to these, Major-General W. A. Holbrook, Chief of Cavalry, donated The Holbrook Trophy Cup for the highest individual aggregate score made by a cavalryman, and the officers and enlisted men of Fort Bliss, Texas, contributed a cup to be awarded to the competitor making the highest score at a thousand yards.

The medals and trophies, with the exception of the Fort Bliss Cup, which, unfortunately, was not photographed with the rest, are illustrated in this number of the CAVALRY JOURNAL. The U. S. Cavalry-Engineer Regimental Championship and the U. S. Cavalry Regimental Team Championship were won by the 7th Cavalry. The U. S. Cavalry-Engineer Individual Championship and the U. S. Cavalry Individual Championships were won by Warrant Officer Michael Fody, 13th Cavalry, with Sergeant Jens Jensen, 16th Cavalry, and Major I. S. Martin, 2d Cavalry, taking second and third places respectively. Warrant Officer Fody was also awarded the Holbrook Trophy, with Sergeant Jensen and Captain A. H. Norton, 7th Cavalry, taking second and third places in this championship.

These trophies will be competed for each year.

Upon the termination of the competitions at Fort Bliss the successful competitors to the number of 28 proceeded to Camp Perry, where the work in preparation for the national matches has been in progress. Those matches started September 15. At the time this issue went to press the team had not been selected.

On the third time over the course Warrant Officer Fody led, with a total of 340 out of a possible 50 each at 200 yards s. f., 200 yards r. f., 300 r. f., and 100 each at 600 yards s. f., and 1,000 yards s. f. Sergeant Butler, Sergeant H. L. Adams, Major Sturdevant, Sergeant White, Captain Norton, Captain Ross, Sergeant Lafever, Captain Lambert, and Lieutenant Nettleton held the next nine places in that day's firing. The team as finally selected will consist of ten men.

HIGH RECORDS

A SELF-CONGRATULATORY note appeared recently in the *Army and Navy Journal*. Item: Company I, 9th Infantry, qualified 80.43 per cent of its members. That may sound big to the "doughs." Headquarters Troop, 10th Cavalry, reports 87.8 per cent qualified.

A NEW MACHINE-GUN JAM

BY

CHARLES R. JOHNSON, Captain, Eleventh Cavalry

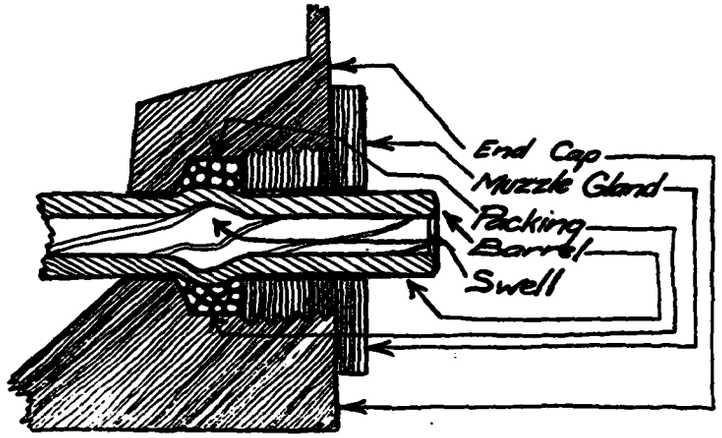
THE FOLLOWING is the report of a machine-gun jam that I believe has never before been encountered:

OCCURRENCE

In record firing at a thousand inches, a heavy Browning jammed in the second position, with the bolt handle a quarter of an inch in rear of the first position. All efforts to move the handle to the rear, even by resort to a reasonable amount of force, failed.

IMMEDIATE ACTION FOLLOWED

The back plate was accordingly removed by forcing the driving spring rod forward and holding it in that position with a combination tool. To remove the plate, it was found necessary to loosen the adjusting screw to such an extent



as to allow the buffer plate to clear the driving-spring rod, and then to insert a knife blade between the back plate and the top plate to hold the driving-spring rod forward. The bolt was then removed. All attempts to press the barrel to the rear then failed, and no other resort could be had than to place a block on the muzzle, and to tap the latter with a hammer. The trigger pin was held in in the usual way while this was being done.

It required a considerable number of heavy blows on the muzzle before the barrel could be moved to the rear, and then the latter gave but a small distance to each blow.

OBSERVATIONS

When the barrel was removed, there was seen to be a marked swell a short distance from the muzzle, in exactly the place where the front packing would

come were the barrel fully forward. On examining the target, I found that one bullet had tumbled.

The accompanying drawing will show what had taken place. This drawing is of necessity exaggerated.

CAUSE

Judging from the tumbled bullet in the target, the second shot prior to the jam had left a bullet exactly in the muzzle, and the next shot had caused the swelling. Naturally, the bulge was greatest at the point of least resistance—*i. e.*, the front packing. This acute swelling could not pass to the rear through the bearing in the end cap; hence the jam.

EFFECT ON GUN

It is not known exactly how much damage was done by forcing the swelling through the end cap. With a new barrel, the gun has continued to fire accurately, as the true bearing of the muzzle is in the muzzle gland. There can have been no damage done to the latter. There is not an increased amount of leakage at the muzzle. I do not think that such use of force was a mistake, and believe that it was the only way to reduce the jam, and that the same course would have had to be followed at the arsenal.

TABLE OF ALLOTMENTS UNDER BASIC PLAN FOR SIX FIELD ARMIES AND THE G. H. Q. RESERVE

Units.	Taken by Regular Army.	Taken by National Guard. Corps areas.									Allocation of Organized Reserve for second three field armies. Corps areas.					
		1	2	3	4	5	6	7	8	9	2	3	4	5	6	7
Cavalry Divs.:																
Cav. Div. Hdqrs....	2	..	..	..	..	..	1	1	..	..	1	1	1	1	1	1
Cav. Brig. Hdqrs...	4	..	1	1	..	1	1	1	1	1	3	2	1	2	2	2
Cav. Regts.	14	1	2	2	2	1	2	2	2	2	6	4	2	4	4	4
M. G. Sqdns.....	4	..	1	1	1	2	..	1	1	1	3	2	1	2	2	2
F. A. Btns. (Horse)	2	..	..	..	..	..	1	1	..	..	1	1	1	1	1	1
Eng. Btns.	2	..	..	1	..	1	1	1	..	..	1	1	1	1	1	1
Ambulance Cos.	2	..	..	..	..	..	1	1	..	..	1	1	1	1	1	1
Div. Trains	2	..	..	..	..	..	1	1	..	..	1	1	1	1	1	1
Special Div. Tr.:																
Div. Hdq. Troops...	2	..	..	..	1	..	1	1	..	..	1	1	1	1	1	1
Div. Sig. Troops....	2	..	..	..	..	1	..	1	..	..	1	1	1	1	1	1
Veterinary Cos.	2	..	..	..	..	1	..	1	..	..	1	1	1	1	1	1
Ordnance Cos.	3	..	..	..	..	..	1	1	..	..	1	1	1	1	1	1

No cavalry allotted to the Organized Reserve in 1st, 8th, and 9th Corps Areas.

New Books Reviewed

The Book Department of the U. S. Cavalry Association can furnish any of the new books reviewed or referred to in this department, and will give prompt attention to any orders submitted by the readers of the Journal.

ALLENBY'S FINAL TRIUMPH. By W. T. Massey, official correspondent of the London newspapers with the Egyptian Expeditionary Force. E. P. Dutton & Company, New York. (Price, $8.00 net.)

This book was very evidently written for those who participated in the campaigns of Marshal Allenby's forces. Its multiplicity of minor details obscures in places the main ideas and makes it difficult to follow.

It is worthy of study, however, for it brings out very clearly the necessity for cavalry in certain terrains and the very vital part that supply plays in all operations; for in such countries the difficulties of supply are most evident. This book is a narrative of the final operations only of the Palestine campaigns after the capture of Jerusalem.

No better characterization can be given of the part cavalry took in this campaign than that which is given in the author's own words:

> "No engine has yet been devised which could capture more than 400 miles of country in six weeks—the feat which General Allenby's cavalry accomplished. Only a cavalry force could have done it; and though infantry, after smashing the whole of the Turkish line, could have kept the enemy on the move, they could not have captured the three Turkish armies, even if they had had the support of many squadrons of armoured cars and tanks. It was General Allenby's cavalry that was responsible for the complete overthrow of the Turk. . . .
>
> "Nothing but the splendid mobility of the cavalry could have closed all the roads by which the enemy might have escaped; and, while it is equally true that without the infantry and artillery the cavalry could not have gained a passage through the entrenched line, the big results of the last months of the campaign were obtained by mounted troops. They accomplished in six weeks what the infantry would have taken at least a year, and perhaps two years, to do. . . .
>
> "Three Turkish armies were wholly destroyed by the cavalry passing round the flank to their rear and sitting astride every road the enemy could take to the north. No reinforcements could replace them; no new armies, if they had been available, could, in the existing state of the Turkish communications, have prevented our cavalry getting to Damascus and Aleppo and holding the ground they won. The two hours' work of the infantry on the morning of the attack was all that was required to enable the mounted men to finish the war with Turkey." . . .

HARRY L. HODGES,
Major, General Staff.

COURTS-MARTIAL PROCEDURE. U. S. Infantry Association. (Price, $1.50 net.)

I have reviewed the book, "Courts-Martial Procedure," put out by the Infantry Association, and, as indicated in the preface of the book, it seems to me to be little more than a publication of excerpts from the Manual for Courts-Martial. I think the book will prove of assistance to the lazy officer rather than to the busy officer. My experience has been that busy officers are usually of a type who find time to acquaint themselves with the requirements of War Department publications. The Manual for Courts-Martial was, in my mind, made as short and concise as was consistent with a proper presentation of the law in its application to persons subject to military law. If the book is intended as supplemental to the Manual for Courts-Martial, it falls short of the aim, because it is largely a compilation of excerpts from the Manual and is not, in fact, supplemental. The book may serve a useful purpose to officers who desire only to skim over a subject which they should understand thoroughly, and this is a dangerous course for any officer to take.

JOS. I. MCMULLEN,
Major, J. A.

OUR RIFLES, 1800 TO 1920. By Charles Winthrop Sawyer. The Cornhill Company, Boston, Mass. (Price, $4.50 net.)

The purpose of this publication is to reawaken the former American sentiment for arms. Officers and men in service can find in this book a vast amount of interesting historical matter concerning our rifles that is not printed elsewhere. The contents are subdivided into chapters as follows: Flint Lock; Cap Lock; Metallic Cartridge; Our Military Rifles, from first to last; Rifles Used Against Us; Rifled Carbines; Carbines Used Against Us; Present Manufacturers; The Interested Rifleman; Making Rifles the Modern Way; Forward, March; Directory; Past and Present. There are 52 excellent plates, showing practically all the different makes of rifles, and many other diagrams and plates on various subjects. The author is peculiarly well qualified to deal with this subject, and any one interested in "Our Rifles" will be glad to possess this attractive work.

HOMER M. GRONINGER.
Major, Cavalry.

AS TO MILITARY TRAINING. Arranged by Major John F. Wall, U. S. Cavalry. George Banta Publishing Co. (Price, $2.50 net.)

The remarkable thing about this little volume is the author's candid disavowal of the charge of having created anything new. "Arranged by" saves the reviewer a heap of trouble. As to the arrangement, it is probable that, in view of the expansion of the Army to include the Organized Reserves, there is need for a compilation of elementary information and instruction which will meet the average demands of the military tyro; and here it is. Here the young Reserve Officer, if he hasn't already learned such things in his R. O. T. C. unit, may be instructed how to manage his saber, how to address his superior officers, conduct the target practice of his troop, and play polo. The book is remarkably replete with useful things. For example: a full list of horseshoer's tools, illustrated; Colonel Henry's "Methods of the Mounted Service School applied to the Enlisted Man and the Service Mount," taken over entire; a brief survey of our military history. That the book is up to date, up to the minute, is assured by the fact that the new cavalry organization which is just going into effect is

the one given. As might be expected from the labors of a mounted officer, this compilation is particularly useful to officers of the mounted services, and might indeed be recommended as a sort of *vade mecum* for the field use of officers of experience.

THE SQUADROON. By Ardern Beaman (pseudonym). John Lane Co., New York and London, 1920. Price, $2.50 net.

Would you live with the British Cavalry, learn at first hand how they relieved in the trenches, how they cared for their lean nags in billets, how they "stood by" for the gap which was always going to be made, and how, in the dreadful days of March, 1918, they laid down the thin and ever-thinner barrier of men against the onrush of the victorious Hun and stopped him? Get "The Squadroon" and live with that brave handful of fellows whom the author—their "padre"—has pictured so vividly, so humanly. This is no treatise on tactics, but it is a splendid story of the cavalry and what they did to help win the war. You will come to love the "Skipper" and "Jimmie" and the rest of the rugged crew of this Hussar Squadron.

SOME BOOKS OF INTEREST TO CAVALRYMEN

MENTION is made here of several notable books which it has not been practicable to review for this issue of the CAVALRY JOURNAL, but which should be called to the attention of every cavalryman.

The first of these is *The Desert Mounted Corps: an account of the cavalry operations in Palestine and Syria,* 1917-1918, by Lieutenant-Colonel the Hon. R. M. Preston. London. Price $4.50 (net). The title is sufficiently descriptive of the contents, which, judging from a most complimentary review in *The Spectator* of August 13, forms a valuable contribution to cavalry literature, besides being very interesting and readable.

The next most significant publication from a cavalryman's standpoint is *Die Deutsche Kavallerie in Belgium und Frankreich,* 1914, by M. von Poseck, Lieutenant-General and Inspector of Cavalry. Berlin, 1921. This is a very instructive, illuminating, and highly authoritative work, but unfortunately does not exist in an English edition.

If Japan and America Fight, by Kojiro Sato, Lieutenant-General, Japanese Army, translated and published in Tokyo a few months ago, will, of course, be read with considerable interest by members of the service. The writer has a poor opinion of the moral force to be expected of an American army in comparison to that inherent in the Japanese. The price (subject to some variation) is $4.00.

One of the finest pieces of book-making we have seen in some time is General Charles G. Dawes' *A Journal of the Great War.* Two volumes. Houghton & Mifflin Co., Price, $10.00 (net). This work, replete with photographs of most of the big leaders of the late conflict who were in any way connected with the American participation in the World War, comprises the richly interpretive day-by-day commentary of Dawes upon the tremendous events which he, close to the Commander-in-Chief, responsible himself to a high degree for much of our activity, was surely in an exceptional position to study. This beautiful work will be a useful and ornamental addition to any man's library.

Colonel V. A. Caldwell, retired, has published an original little brochure on *Elementary Tactical Science.* George Banta Publishing Co. Price, 50 cents.

National Guard Hand-book for Company Commanders, by John A. Bechtel—Press of Caustic-Claflin Co., Cambridge, Mass., $2.00—is a compilation

of regulations, forms, instructions, etc., arranged especially for the use of the National Guard.

Let 'er Buck, by Charles Wellington Furlong. G. P. Putnam's Sons. Price, $2.25 (net). This book, a story of the passing of the old West by one who has been himself a famous buckaroo, tells in a lively way the vigorous story of that wide, wild West that most cavalrymen know from personal contact. It is profusely illustrated.

The Management of Men, by Colonel Edward L. Munson. Henry Holt & Co. Price $5.00 (net). This valuable and exhaustive study would be a source of inspiration and help to every officer. Among its chapters may be mentioned one on the "Elements of Leadership," and others on "Training," "The Recruit," "Personnel Problems," "Rewards and Punishments." This is, for the military man, largely an untrodden field, and it can be safely predicted that Colonel Munson's book will have a wide and continuing distribution.

PERIODICALS

Revista Militar (Argentine Republic), May, 1921.

The leading article by Lieutenant-General Fortmüller, retired, is entitled "Commentaries on the instructions for the organization and service of the divisional staff in campaign."

Journal of the United Service Institution of India, January, 1921.

Contains an excellent prize essay on the subject of the "Army Officers' School System," by Lieutenant-Colonel F. S. Keen, D. S. O. Part II of "The Mutiny Day by Day" comprises the edited letters of General Sir Archdale Wilson to his wife, narrating the events of the protracted siege of Delhi in 1857. These letters are very human and vastly interesting. Major-General Sir John Moore has an article on "The Disposal of Animals Wasted by War." By the same author, who is Director of Veterinary Services in India, is an exhaustive study of "The Merits and Demerits of the Various Breeds of Animals Used in War." In view of the fact that our cavalry may be accompanied on some future campaign by mountain artillery, the article on the "Mountain Artillery in Waziristan, 1919-1920," should have some interest for our cavalry officers.

Journal of the United Service Institution of India, April, 1921.

Gives the splendid war record of "Variety," a polo pony. Lieutenant-General F. H. Tyrrell reviews the historical background of the Adriatic question. Among other articles in this number are: "Tactical Use of Lewis Guns" and "The Mutiny Day by Day."

The Cavalry Journal (British), July, 1921.

The contribution in this number to the continuing account of the Operations of the Mounted Troops of the Egyptian Expeditionary Force is from the pen of Lieutenant-Colonel J. G. Browne and comprises a narrative of the two attacks on Gaza. In these attacks the mounted troops played a predominant part, and from the point of view of tactics, conduct of approach marches and retreat, this account forms an excellent study.

Other notable articles are: "The Co-operation of Armoured Cars with Cavalry," by Major A. J. Clifton; "Swordmanship," "Training in the Use of

the Bayonet," "Observations by an Elephant Hunter," and "The Machine-Gun Corps (Cavalry) in the Great German Offensive of March, 1918." This account brings forcibly to attention the costly (though natural) error made by the British in using the cavalry and machine-gun squadrons separated by great distance from their horses.

A short study of the employment of Hotchkiss guns in the cavalry, by Brevet Lieutenant-Colonel C. B. D. Strettel, is quite applicable to our own service. The advantages and disadvantages of combining the automatic guns into a troop and of assigning them to the cavalry troops are succinctly stated. Colonel C. D. Miller gives an interesting analysis of the two international polo games played in June.

Revue Militaire Générale, May-June, 1921.

The following articles are the principal contributions to this number:

"Study of the System of Military Intelligence under Napoleon." The writer points out that, contrary to popular conception, the cavalry of that day did little in the way of reconnaissance; that it was Von Moltke who first used cavalry extensively in reconnaissance against a singularly inactive enemy. This point is only incidental to a study of considerable length which goes exhaustively into its subject.

"Comparative Study of the Tactics of Infantry Fire Before and After the War of 1914-1918," by Captain Laffargue.

"The Great German Offensive," by Commandante de Cossé Brissac. This is a remarkably interesting narrative of the desperate effort to stop up the gap against the German drive which drove a wedge between the French and British armies in the Montdidier region in March, 1918. The writer, who acted as liaison officer between the French and British, was in singularly fortunate position to see with his own eyes this heroic intervention of French dismounted cavalry, cyclists, and finally French divisions. The account consists of extracts from his journal.

Evolution of field fortification during the course of the last war.

An article on the war regulation of the railroads.

Chronicle of the Swiss Army during the war.

Revue Militaire Generale, July, 1921.

This number contains a very complete account of the operations of the 2d Cavalry Corps in Flanders from April 9 to May 3, 1918.

Infantry Journal, August, 1921.

Major-General William H. Carter's essay on "Selection of Military Leaders" is an interesting review of the harmful political selection of our officers in the wars of the past.

A review of the Meuse-Argonne operation, starting in this number and embracing the operations of the first four days with the enforced breathing spell prior to the resumption of the attack on October 4, written by the Chief of Staff of the 16th German Army Corps, presents this important battle from the opponent's viewpoint. It can hardly be said to throw much additional light onto that already well-studied offensive. The article is accompanied by an excellent folder-map.

An interesting contribution to this number is the "History of the World Revolution," text of a lecture by Mrs. Arthur Webster before the British Royal

Artillery Institution, at Woolwich, England. It sketches the course of revolutionary movements from the first French Revolution.

Revue de Cavalerie, May-June, 1921.

The final instalment of *La Cavalerie d'Hier et Demain* deals principally with the employment of large units, of cavalry divisions and corps, and also calls attention to the necessity of making large use of the other supporting arms—artillery, tanks, aircraft, etc. Hark to the concluding words of this important series of articles: "Thus the cavalry, transformed into an organ of rapid transport of fire-power ever and ever more tremendous, tends to become again the arm *par excellence* of offensive and of the decision, because it reunites anew to its profit the very conditions of success in war—mobility, maneuver, power and offensive ardor. Is it not demonstrated that the continual progress of armament, far from diminishing the future rôle of cavalry in battle, augments appreciably its field of action?"

In an inspiring *Essai sur le Moral,* Lieutenant-Colonel Breant seeks to drive home the lessons of the war with respect to the sources of morale and lays particular stress upon the part played by the spirit and traditions and mutual confidence and affections within the small unit—the troop, the regiment.

An article entitled "Le Tir au Pistolet et au Revolver," by Captain de Castelbajas, concluded in the July-August number, gives a history of the development of the pistol and revolver and goes on to discuss characteristics of the several makes of these arms. It is well illustrated.

In this number is told the heroic attempt of a couple of squadrons to follow up an infantry advance and get through a breach in the trenches to the enemy's rear and guns. The attempt failed in the main, but the successful charge they made against a German redoubt and machine-guns is highly dramatic.

Commandant Prioux contributes an excellent account of the cavalry engagement at Haelen, in Belgium, on August 12, 1914, in which two of Von Marwitz' cavalry divisions attempted to force the position held by a Belgian cavalry division under command of Major-General de Witte. This combat is of great significance in the history of cavalry operations, as it was the occasion of the Germans' determined attempt to use cavalry mounted against prepared positions—an attempt in which several squadrons were sacrificed to no purpose. In this connection the account of this same engagement, as related by General Von Poseck (*Die Deutsche Kavallerie in Belgien und Frankreich, 1914*), is highly interesting. It is rare that we find authentic accounts of the same engagement by two such well-informed and competent antagonists, both agreeing as to essential facts.

The author of this article concludes: "We have been much struck by the fact that (the German) cavalry put so seldom in practice, as compared to ours, the mounted offensive theories of peace-time. . . . After having studied the combat of the 12th of August, 1914, we can ask ourselves if the German cavalry chiefs, when afterwards they had to engage their divisions, were not many times haunted by the memory of the fine field-gray squadrons laid low in bleeding heaps on the roads from Haelen to Yzerebeck." As if in response, General von Poseck, in conclusion of his comments on this battle, remarks: "On the other hand, this day taught that with the effect of present-day weapons such positions could not be attacked mounted, and that only fire fight in such cases can achieve its object."

Colonel de Tessieres contributes an article on the Anglo-Arab breed of horse.

Revue de Cavalerie, July-August, 1921.

The article on "L'Orientation de la Cavalerie," by General Brécard, is a fair sample of the trend of French thought with respect to the employment of cavalry as influenced by the World War. A significant sentence of the article reads: "But even under disadvantageous conditions, I have heard more than one army corps commander, cognizant of the service which could be expected from a maneuver body of cavalry, regret not to have had several squadrons at his disposition at the moment when the German infantry were in full retreat." The whole article is instructive and interesting. "Les Autos-mitrailleuses de Cavalerie" (perhaps some one will suggest the Yankee for automobiles mounting machine-guns) affords a comprehensive survey of this new cavalry adjunct.

"Pistol and Revolver Firing," by Captain de Castelbajas, and the study of the Anglo-Arab horse, by Colonel de Tessieres, are continued from the preceding number.

In this number is also presented a study of the Bolshevik cavalry operations of 1920, given in greater detail than Major Farman's article covering the same subject in the U. S. CAVALRY JOURNAL for April, but, perhaps, giving no clearer or more instructive conception of these interesting cavalry campaigns.

The Army and Navy Journal, August 20, 1921.

This edition of *The Army and Navy Journal* was the first under the new management of *The American Army and Navy Journal, Inc.,* of which Brigadier-General Henry J. Reilly is the president. All previous issues were gotten out by the Church family, the original founders, who have been conducting the paper for the past 58 years.

No one appreciates the value of an old institution with a long and honorable career more than the new editor, who, born and brought up in the Regular Army and afterwards a cadet at the U. S. M. A. and an officer of the Regular Army, fully appreciates the value of tradition. For this reason the reader will find all the old features to which he has been accustomed for so many years. The old customs, helpful to the services, will be continued.

Under present-day conditions it is necessary for *The Army and Navy Journal,* if it is to fulfill the largest service to its readers, to cover a much larger field than has been the case up to the present. Therefore the reader may expect to find, along with everything he has been accustomed to, additions from time to time.

The editor states that the mission of this paper is to be to help the officer and enlisted man, Regular and Reservist, on land and on sea, the National Guardsman, the student in the Reserve Officers' Training Corps, the citizen in the training camp, and the civilian to understand each other and the problems with which they all, as citizens of the United States, are confronted.

Revista del Ejercito y de la Marina (Mexico), May-June, 1921.

This number includes a reprint from "Memorial de Caballeria," Spain, entitled Las "Enseñanzas de la Guerra" y la Caballeria. There is running serially in this periodical a somewhat comprehensive study of infantry and cavalry tactics, by Colonel Rodolfo Casillas. In this number also appears an interesting study of "La Noche en la Guerra," by General Miguel S. Gonzales. Some thirty-odd pages are devoted to the military history of Napoleon.

Polo

FIRST CAVALRY

The polo situation has improved to such an extent that its future in the regiment is assured. The entire regiment is interested and actively supporting the team. Fifteen officers have taken up the game, practice being held daily, and on Sundays match games are played between the first and other teams.

During the month of July the regiment played two games with the 10th Cavalry, one on the 10th Cavalry field at Fort Huachuca and one on the 1st Cavalry field at Douglas. The scores were 4 to 3 and 9 to 8, both in favor of the 10th Cavalry.

The first two games of a four-game tournament between the 10th and 1st Cavalry was played on the Douglas field, on August 19 and 21, for the First National Bank of Douglas trophy, a handsome silver cup. Both games were won by the 1st Cavalry, the first by a score of 8 to 7 and the second by a score of 14 to 4. The final games will be played some time in October.

The polo string at present consists of 30 ponies. Culls are being eliminated and faster and better mounts added from time to time. The training is going on apace and the improvement is marked.

SIXTH CAVALRY

Polo in the 6th Cavalry is now in full swing. The arrival recently of the regiment's quota of graduates from the Cavalry School has released for practice many officers who hitherto have not been able to turn out regularly, and the practice is now progressing more rapidly.

No matches have been undertaken as yet, but several are in prospect with both Army and civilian teams for September and October. Meanwhile one full period game is played on the post parade ground every Sunday afternoon.

Efforts are being made to improve the string of ponies. It consists at present of twenty-eight mounts, drawn from the several troops. A few of these are fairly handy, but the remainder are not all that could be desired. It is hoped that a number of horses may be obtained from Camp Jackson upon the abandonment of that post.

The Regimental Polo Association recently elected as its officers for the ensuing year: Colonel Robert R. Wallach, president; Major Daniel D. Tompkins, field manager; Captain Oliver I. Holman, assistant field manager, and Captain Vernon McT. Shell, secretary and treasurer.

TWELFTH CAVALRY

Interest and enthusiasm in polo continue unabated, though only one game has been played recently, on July 27, at Fort Clark, at which time the 13th Cavalry defeated the 12th by a score of 16 to 0. Every member of the team played at least one inning. Owing to the prospective movement of troops in this area, it is impossible to plan definitely for games, but it is hoped that we may be able to play the 5th Cavalry in the near future; and should it be possible to carry out such a plan, there is contemplated a tournament, including the 46th Infantry, the 5th Cavalry, the 13th Cavalry, and this regiment, at this station some time in October, at which time both polo and baseball games will be played.

THIRTEENTH CAVALRY

During the past quarter polo enthusiasm has reached the highest standard yet experienced in the regiment. Sunday mornings four teams play round robin tournaments, which are witnessed by a creditable audience, and during the week routine practice and scrimmages are indulged in.

On August 3 the 12th Cavalry visited us for a game, which resulted in a victory for our team.

Our team captain, Chester E. Davis, has been detailed to the Cavalry School, which is a great loss; however, some good material has recently joined and also the recent Riley men, who are keen for the sport; so we will be ready to enter the Corps Area Tournament this fall, if it is held.

The experience gained at last year's Corps Area Tournament was the making of our team, and this year we are looking forward to a final tuning up to be gained by playing experienced teams.

SIXTEENTH CAVALRY

History of Polo in the Sixteenth Cavalry

Polo had its real beginning in the 16th Cavalry in January, 1920, while the regiment was stationed in the Brownsville district, where it garrisoned Fort Brown, San Benito, and Mercedes, Texas. Previous to this, during the war, polo had been played spasmodically, but there was little interest displayed, due to the rigorous border patrolling and the lack of time and good mounts.

In 1920 the regiment was fortunate in securing four polo enthusiasts, namely, Lieutenant-Colonel Daniel Van Voorhis, Lieutenant-Colonel Philip Corbusier, Major H. E. Taylor, and Major H. J. M. Smith. These four officers commanded squadrons at their respective stations, and the first official duty of each officer after joining was to establish polo upon a firmer basis.

Teams were organized at each station and a playing schedule was arranged. Practically all officers played, and in several of the stations enough officers were present to form two teams. Inter-squadron games were played at each garrison, which tended to bring the regiment, which had long been split into three factions, together, and promote the old-time cavalry spirit. The ponies used were cavalry horses that had been in the hands of the troops and were necessarily green and untrained. Each officer trained three or four ponies, which were later concentrated in polo stables at each station and were assigned to members of the first team of that squadron. The ponies developed wonderfully, and many of the original mounts are still used by the regimental team, even though opportunity for replacement has been had.

About this time Major H. J. M. Smith joined the 16th Cavalry and was assigned to station at San Benito, at which place he joined the 3d Squadron team. Major Smith was an old, experienced player and he, together with Lieutenant-Colonel Corbusier, so strengthened the San Benito team that that station had very little trouble in winning the regimental championship.

When the regiment left the border and was concentrated at Fort Sam Houston, Texas, in May, 1920, a first and second team were formed and both teams were entered in the Summer Handicap Tournament in August.

The regimental first team had little difficulty in winning the tournament, for it consisted of a new star, Major J. P. Yancey, as No. 1, with the old stars, Major H. J. M. Smith, No. 2; Major H. E. Taylor, No. 3, and Lieutenant-Colonel Corbusier, No. 4. Along with the glory of winning this tournament came a large silver cup donated by the "San Antonio Light."

The Corps Area Tournament was held in October, 1920, and although the 16th Cavalry did not win the championship, it was not due to poor playing, but merely to the fact that the 7th Cavalry had accumulated more points in the series of games. The 16th Cavalry, 7th Cavalry, and Headquarters 8th Corps Area each lost one game, and in the course of events the 16th Cavalry defeated the fast 7th Cavalry team by the score of 8 to 7 in a nine-chukker game, but lost to the 8th Corps Area team 5 to 3, thus forming a triangular tie which was not played off, but the championship was arbitrarily decided in favor of the 7th Cavalry.

In the fall of 1920 the team lost Major Yancey and Lieutenant-Colonel Corbusier and it became necessary to fill the important positions of Nos. 1 and 4. The regiment was lucky to still retain Major H. E. Taylor, who, although practically a newcomer to polo, had developed into one of the best No. 3's in the area, and Major Smith, the veteran, always a top-notch player and the backbone of strength to the team.

About this time Major H. W. Hall, an old cavalryman who had served a four-year detail in the Signal Corps, during which time he had never swung a mallet, started to warm up, and he eventually fell into Colonel Corbusier's old place as No. 4. Lieutenant T. T. Thornburgh, who had always been a substitute, fell heir to Major Yancey's position at No. 1, and the team resumed its winning stride.

In May, 1921, the above-named officers, forming the regimental team, captured the Spring Handicap Tournament for the Kyle Cup. The polo machine worked as well as ever with its new players. The team-work and system of play as devised by Major H. J. M. Smith was probably the salient feature in this tournament.

The summer tournament for the "Light Cup," played in August, 1921, resulted in the same old story. The 16th Cavalry easily defeated all opponents in the preliminary games, even though heavily handicapped. The scores were as follows: 16th Cavalry, 9; Camp Travis, 7; 16th Cavalry, 11; Kelly Field, 10; 16th Cavalry, 8; Headquarters 8th Corps Area, 5. The final game of the tournament with the 8th Corps Area team is one which will probably remain longest in the minds of the spectators. It was played August 14, before a large and enthusiastic crowd, both military and civil. The result of the game was always in doubt, and it was not until the last whistle that the winner was really decided. In this game, as in all others, the great team play, supplemented by hard riding and hard hitting, was the feature.

Although the regiment has only been organized since 1916, it is believed that its reputation in polo is one of which to be proud, and its record will stand for many years. The 16th Cavalry may cease to function as an organization, but the old-time cavalry spirit, developed alike by both officers and men, for their regiment will never die, but will be as a spur, ever urging them on to greater heights.

FORT ETHAN ALLEN, VERMONT

A polo game held at this post July 6, 1921, between the officers on duty at this post with the R. O. T. C. Camp and a team consisting of the members of the Fort Ethan Allen first and second teams, resulted in a score of 8-2 in favor of Fort Ethan Allen. Four full periods were played.

LINE UP

R. O. T. C.		Fort Ethan Allen	
Edwards	No. 1	Herren	No. 1
Cunningham	No. 2	McChesney	No. 2
Flint	No. 3	Baylies	No. 3
Estes	No. 4	Herman	No. 4

Substitute, Daly.

The game was interesting, especially the first and second periods.

The R. O. T. C. Team got away toward their goal to a happy start through the good hitting of their No. 2, but the aggressiveness of Captain Herren and Lieutenant McChesney brought the home team out of danger.

Major Estes, No. 4, for the R. O. T. C. Team, played a splendid game at back. He saved at least five goals by his consistent hitting.

Goals.—McChesney, 3; Herren, 3; Baylies, 2; Estes, 1; Cunningham, 1.

Fouls.—Flint, 1; Cunningham, 1.

COLORADO SPRINGS, COLORADO

A tournament was held here July 5–18 as an informal tournament to open the polo season. Another is planned for August 26–September 6, to which it was hoped that teams from Fort Huachuca, Fort Bliss, and Fort Russell would be present. Unfortunately the two former are unable to attend.

At the last tournament, by special request of Fort Riley, four straight games for the open were played, so that they could get all the practice in they could before going east. In addition, a round robin was played under handicap among all teams present, which was won easily by Fort Riley.

Teams present were:

Fort Riley:			Cheyenne Mountain Country Club:	
Major W. Erwin	Hcp. 3	Back	A. Perkins	Hcp. 5
Major I. Swift	Hcp. 3	No. 3	F. Prince	Hcp. 5
Major H. Chamberlin	Hcp. 3	No. 2	C. Dammers	Hcp. 4
Major S. Doak	Hcp. 3	No. 1	L. Hughes	Hcp. 1
Major W. West	Hcp. 2	Spare	B. Hughes	Hcp. 0
Diamond Ranche:			**Denver Prairie Dogs:**	
Major Raborg	Hcp. 1	Back	F. Prince	Hcp. 5
C. Thornberg	Hcp. 1	No. 3	L. Hughes	Hcp. 4
R. Downs	Hcp. 1	No. 2	B. Hughes	Hcp. 0
C. Newbold	Hcp. 0	No. 1	D. Davis	Hcp. 0

C. M. C. C. Freebooters:

A. Perkins	Hcp. 5	Back.
J. A. Vickers	Hcp. 1	No. 3.
J. Minnick	Hcp. 2	No. 2.
R. L. Jones	Hcp. 1	No. 1.

In the open match on July 10 the spare members of the team played.

RESULTS OF POLO TOURNAMENT JULY 2 TO JULY 18

July 2. Practice game: Diamond Ranche, 6; Colorado Springs, 8.
4. Heavy rains stopped all polo.
5. C. M. C. C., 9; Fort Riley, 8. (Open.) Played on a very heavy ground.
6. A scratch game played on the practice ground.
7. C. M. C. C., 12; Fort Riley, 9. (Open.)
8. Colorado Springs, 9; Diamond Ranche, 4.
9. Horse show and gymkhana.
10. C. M. C. C., 8; Fort Riley, 7. (Open.)
11. Denver Prairie Dogs, 10; Diamond Ranche, 7. (3-goal handicap.)
12. Fort Riley, 10; C. M. C. C. Freebooters, 5. (3-goal handicap.)
13. Fort Riley, 16; Denver Prairie Dogs, 11. (6-goal handicap.)

14. Heavy rains stopped polo
16. C. M. C. C., 8; Fort Riley, 7. (Open.) After playing overtime.
    Diamond Ranche, 6; C. M. C. C. Freebooters, 5. (2-goal handicap.) Also after playing overtime.
17. Fort Riley, 27; Diamond Ranche, 10. (9-goal handicap.)
18. Denver Prairie Dogs, 11; C. M. C. C. Freebooters, 6. (1-goal handicap.)

Summary.—Open tournament: C. M. C. C., 37; Fort Riley, 31.
Handicap tournament: Fort Riley, 53 goals; Denver Prairie Dogs, 26 goals; C. M. C. C. Freebooters, 12 goals; Diamond Ranche, 7 goals.

Total goals actually scored during tournament, 166.

At the horse show held July 9 *Mary Pickford*, from the Cavalry School stables, ridden by Major Winfree, won first in the Park Saddle Horse Class. Major Raborg rode *Sally*, owned by Diamond Ranche, who won second prize in that class. Second prize in the Ladies' Saddle Horse Class was taken by *Belle*, owned by Diamond Ranche and ridden by Major Raborg. *Mary Pickford* took first prize in the Road Saddle Horse Class when ridden by Mrs. Arthur Perkins. *Oriole* and *Anaconda*, from the Cavalry School stables, ridden by Majors Swift and Winfree respectively, took second and third prizes in this class, while *Peanuts*, owned by Diamond Ranche and ridden by Major Raborg, took fourth place. *Casey Jones*, ridden by Major West, and *Jim Shelley*, ridden by Major Winfree, both from the Cavalry School stables, won places in the gymkhana.

THE ARMY POLO TEAM

Under the direction of Colonel Julian R. Lindsey, Cavalry, Chairman of the Central Polo Committee, practice started at Camp Vail, New Jersey, on August 15. The West Point detachment had arrived in good season and had already played in several tournaments. The detachment from Washington and Fort Myer arrived in good shape. The Riley detachment was seven days en route and arrived badly scratched and rather run down, but free from all accidents or sickness. Particular care was taken to keep the detachments separated so as to avoid contagion. The conditions at Camp Vail are most suitable for training a polo team. There are two excellent fields and ample stable accommodations. The improvement in the playing was steady and marked. Speed was developed early. The stick and team work came along more slowly. Colonel Lindsey reported on the last of August: "Principal faults of Army team play: missing, not riding off opponent, riding alongside own man, too much dribbling, too many fouls, poor goal shooting. There were many brilliant plays and team worked well together, making on the whole a splendid showing." On that day the Army Polo Team for 1921 was picked, as follows: 1, Wilson; 2, Chamberlin; 3, Brown, L. (Captain); 4, Erwin, W. W. The second Army Polo Team was selected as follows: 1, Erwin, V. P.; 2, Quekemeyer; 3, Swift (Captain); 4, Patton. The championship tournament opened September 10, at Philadelphia. Both army teams were defeated.

The string from West Point included *Black Pep*, *Countess*, *Peanut*, *Marvel*, *Traveler*, *Barbara Fritchie*, *Mercury*, *Chili*, *Prince Albert*, *Ludlow*, *Sweetmeat*, *O. X. O.*, *Pep*, *Buster*, *Vampire*, *Queen*, *Dolly*, and *Rollo*. From Washington, D. C., came *Blaze*, *Liggett*, *Star Light*, *High Ball*, *Louise*, *Jeff*, *Joffre*, and *Yazoo*; from Fort Myer, *Nezdgar*, *Monasis*, *Bull Run*, 69-*K*, *Bouvard*, 8-*M*, *Peggie*, and *Babe*. The biggest string came from Fort Riley, and included *Mary Pickford*, *Pop Joy*, *Jake Brown*, *Miss Saokaye*, *Casey Jones*, *Barry Houston*, *Jap*, *Jimmie*, *Chuck Newbold*, *Miss Maddox*, *Buck*, *Jim Shelley*, *Elsie Simmons*, *Phil Stewart*, *Gilford*, *Babe Coors*, *Orphan Girl*, *Belmont Park*, *Allen*, *Anaconda*, *Mitchie*, and *Lulu C.* Shortly after the start of the practice the 19th F. A. added four ponies to the string—*General March*, *Corrector*, *Lady Grey*, *Jackie*.

The Army has been fortunate in the invaluable assistance given by such civilian players as Borden, Johnson, Lee, and Dillingham.

IN AND ABOUT WASHINGTON, D. C.

During July polo practice was held at Fort Myer, Virginia, on two days a week, on which occasions a few green ponies were worked in slow periods and the newly arrived officers from the Cavalry School given experience. On Saturdays a team habitually played on the Potomac Park field against the War Department Polo Club. The Fort Myer line-up was: 1, Captain R. I. Sasse; 2, Lieutenant M. E. Jones; 3, Captain J. T. Cole; 4, Major Geo. S. Patton, Jr.; substitutes, Captains R. E. S. Williamson and J. W. Weeks. These games continued until the middle of August. The playing members of the War Department Club included Colonels Julian Lindsey and George Williams, Majors Bull, Quekemeyer, Collins, Groninger, Montgomery, Potter, Simpson, Burr, Newman, Howe, Blunt, Lee, and Hess, Captain Hettinger, Lieutenants Doeller and Jadwin. Practice was held twice a week, during which green ponies were worked during slow periods. On Saturdays two or three teams would be made up, so that eight to ten periods were played between the several teams among themselves and with Fort Myer. About August 15 Colonel Lindsey and Majors Quekemeyer and Patton left for Camp Alfred Vail, New Jersey, for practice in preparation for the competition for the Army Polo Team. August 24 and 26 War Department Club teams, on which Colonel Williams, Majors Montgomery, Newman, Simpson, Burr, and Lieutenant Jadwin played, were beaten in two games by the civilian club at Middleburg, Virginia. On August 27 the 3d Cavalry Polo Team from Fort Myer beat an Engineer team from Camp Humphreys.

AMERICAN FORCES IN GERMANY

The annual A. F. in G. Polo Handicap Cup presented by the Y. M. C. A. was won by the Freebooters on Sunday, the 31st of July. This is a novel win, in view of the fact that this is the first time that the Freebooter team has figured in any but the first round of this event in previous years. The first game played was won by the Cavalry Team from the Headquarters, with a score of 9 to 5. The next game was a win for the Infantry Team over the 2d Brigade, the score being 15 to 4. Then the Freebooters won from the Artillery by 9 goals to 8. The Cavalry then were defeated by Infantry in the semi-finals by a score of 8 to 7. And the final game was played on Sunday morning, when the Freebooters again won from the Infantry, this time scoring 6 goals to 3. With the exception of the 2d Brigade Team, the games were all evenly matched, and the brand of polo showed that the game is really going along well.

The teams were as follows, with the handicaps after each name:

Headquarters, Lieutenant Devine, 1; Major Andrews, 2; General Allen, 3; Captain Sumner, 1. Cavalry, Captain Donaldson, 2; Captain Rumbaugh, 3; Captain Tate, 3; Lieutenant Baker, 2. Infantry, W. O. Meskill, 1; Lieutenant Williamson, 0; Colonel Jeffries, 3; Captain McMillan, 0. Artillery, Captain Keating, 2; Captain Camp, 0; Captain Daugherty, 0; Major Higley, 5. 2d Brigade, Lieutenant Hudson, 0; Captain Mayberry, 0; Major Taylor, 0; Captain McDonald, 1. Freebooters, Mr. Henderson, 2; Major Talbott, 0; Captain Creed, 0; Lieutenant Holbrook, 0. The positions are as the names appear, namely, number one, first, etc.

The Cavalry had hard luck when they had to play the Infantry on the second field, which slowed them up a great deal; but for this it is believed that the Cavalry would have won. The Headquarters were outplayed on team work in their one and only trial. The Artillery-Freebooter game was a hard fight; it was any one's game up to the last period. July 23 the 14th Hussars of the British Army of the Rhine defeated the A. F. in G. five by the score of 11–4. Major Hendel, of the British Team, and Major Higley, of the American Team, played star games for their fours.

Regimental Notes

FIRST CAVALRY—Camp Harry J. Jones, Douglas, Arizona

Colonel A. V. P. Anderson, Commanding

Troop F, which has been stationed at Fort Apache, Arizona, rejoined the regiment on June 27 by marching 250 miles.

Consequent upon the reduction of the Army to 150,000 and the reorganization of the cavalry, the regiment has been reduced to 260 enlisted men. Provisional squads, platoons, and troops have been formed of junior officers and the senior non-commissioned officers of the regiment for the purpose of developing a corps of instructors for training of replacements. The training is intensive and includes field maneuvers and exercises.

The regiment has been assigned to the 1st Brigade, 1st Cavalry Division, and is in process of reorganization in conformity with the new cavalry organization.

In competition with the other organizations at this camp preparatory to the Corps Area Athletic Meet, the 1st Cavalry won 15 of the 31 events, a total of 144 points out of a possible 250.

The regimental horse show held on August 20 was a complete success and drew over two thousand spectators from the city of Douglas and surrounding country. The events included two ladies' classes, one in jumping and one in equitation; three classes for enlisted men, one in equitation and two in jumping, and four classes for officers, three jumping and one equitation and jumping. The trophies were handsome and the money prizes for the enlisted classes substantial.

There was a large number of officers, ladies, and enlisted men from the 10th Cavalry in attendance at the Horse Show and Polo Tournament.

SECOND CAVALRY—Fort Riley, Kansas

Colonel John S. Winn, Commanding

On July 2 the telegram from the Adjutant-General of the Army directing the discharge of all enlisted men who applied in writing for their discharges during the month of July, except those under charges or serving sentence, was received by this regiment.

At retreat the regiment was assembled, dismounted, on the artillery parade ground. The Regimental Commander informed the men of the receipt of this telegram and explained to them its meaning. He informed the men of the labor situation in this country, and made it clear to them that with approximately four million unemployed men in the United States it would be a very difficult matter for the average discharged soldier to secure work.

As a result of this opportunity to leave the service before the expiration of their terms of enlistment, and get home for a visit at the expense of the Government, a great many men applied for their discharges. Three hundred and fifty-five have been discharged since July 1 on account of the reduction of the Army and two hundred and thirty-seven on account of expiration of term of service. Some of the men discharged have been heard from since their return to their homes, and most of them are having the trouble in securing employment that was anticipated. One soldier asked to have his application for discharge withdrawn, as he had heard that seven men in his home town had died of starvation.

On August 31 the regiment was reorganized under the Tables of Organization. 1920-1921. The total enlisted strength is two hundred and one men.

The First Squadron is on duty at Camp Funston, guarding the cantonment and property. Seventy-five per cent of the cantonment has been sold and the purchasers are now wrecking the buildings. The western section of the camp has been retained by the Government for military purposes.

THIRD CAVALRY—Fort Myer, Virginia

Headquarters and Third Squadron, Colonel William C. Rivers, Commanding

During the last quarter officers and men of the Squadron have taken part in many of the meets of the Virginia Horse Show Association—Leesburg, Culpeper, Orange, Manassas, Marshall, and Warrenton. *Zeppelin*, owned by Lieutenant-Colonel Cootes, and *Geesemont* and *Applejack* from the Squadron were placed in many of the classes. Roman teams and a fire-jump squad were featured as main attractions by the various shows which fostered an *entente cordiale* between civilians and the Army. Many horsemen were complimentary upon the performance of the mounts of both officers and men in the jumping classes, and many of the Army horses entered in the open-for-all and handicap jumps returned with blue ribbons. The result has been gratifying in view of the competition with the best hunters in Virginia over courses practically new to our horses. Upon the completion of the Warrenton Show our best mounts will be sent to New York Horse Show Circuit at Syracuse and Rochester.

The polo team continues to play weekly games with the War Department on the excellent field at Potomac Park, Washington. Preparations are now under way to enter the team in the Washington Tournament, October 1-10, against practically the best teams of the Army in the east. Green ponies of last fall are rapidly reaching a tournament stage, through systematic training and careful stable management, though several of our mounts have been sent to the Army at Camp Vail, New Jersey.

In the Thousand Islands Polo Tournament at Alexandria Bay, New York, on August 20, between a team from the 3d Cavalry at Fort Ethan Allen, Vermont, and a civilian team from Toronto, the Cavalry defeated the civilians by the score of 9 to 6. The Army line-up was: 1, Major Havercamp; 2, Lieutenant McChesney; 3, Captain Herman; 4, Captain D. T. Nelson. On August 23 the final event was played, and resulted in a defeat for the Cavalry team by a civilian team from Montreal by a score of 4 to 2.

FOURTH CAVALRY—Brownsville, Texas

Colonel Howard R. Hickok, Commanding

July 4th proved quite a successful day at this station. The band, in accordance with Army customs, marched around the post at reveille, playing appropriate airs. At 8 a. m. the entire post turned out to witness the events of the post field day, in which competition was keen, and considerable skill in horsemanship was displayed. Later in the afternoon practically the entire personnel of the post attended the bull-fight at Matamoros.

The baseball tournament held in the post was completed in July, Troop B winning the cup.

The entire regiment (less Machine Gun and B Troops) participated in a practice march July 30-August 5, which involved concentration marches, field maneuvers, a night attack, and a combat problem for the entire regiment, using ball cartridges.

Contestants from the 4th Cavalry entered the Eighth Corps Area Rifle and Pistol Competition and Athletic meet held at San Antonio, Texas, in July; also three contestants from this regiment entered the tryout for the Engineer-Cavalry Rifle Team, held at Fort Bliss, Texas, in July and August, one of the contestants from the 4th Cavalry being selected to shoot on the Engineer-Cavalry Team.

The polo situation is improving and the outlook is very promising, regardless of the fact that the regiment is divided among three different stations.

During the last month many officers who have completed the prescribed courses at the Cavalry School, Fort Riley, Kansas, have joined the organizations to which assigned, and each of the new officers are attending each polo practice. At this station there are at present thirteen officers participating in polo.

FIFTH CAVALRY—Marfa, Texas

Colonel William D. Forsythe, Commanding

Memorial Day exercises by the troops of this command, with the co-operation of the citizens of Marfa, were a beautiful sight and were a huge success. The citizens of the near-by towns voted it the best affair that this community ever saw. They also extended a vote of thanks to the Commanding Officer, U. S. Troops, for the excellent handling of the exercises.

A beautiful program was rendered in the city of Marfa on Flag Day, in which some of the 5th Cavalry took a prominent part. Music was furnished by the 5th Cavalry Band. An address was made by Chaplain F. M. Thompson, 5th Cavalry, closing with exercises by the girl scouts.

Graduating exercises were held by the E. and R. Schools on June 24, at which the students were given a talk on "The Benefits of Education" by Colonel James J. Hornbrook, who presented certificates and orders of the graduates.

The Fourth of July was fittingly celebrated, commencing soon after sun-up and closing in the evening with a dance. Before 8 o'clock in the morning both sides of the field was fringed with automobiles. The troops of the 5th Cavalry lined up on the south side of the field, with their guidons, ready to cheer their entries in the events. The events followed one another in quick succession, and a great deal of credit is due to the officials for the splendid handling of the meet, which was run off without a hitch. Prominent merchants of the city of Marfa gave cups to the winners of the Field Day events. The Commanding Officer made the presentation of cups and prizes to the winners. An excellent "Monkey Drill" was staged by Troop "M," 5th Cavalry, which drew a thrill.

The orders to discharge, on application, 30 per cent of the actual strength of the enlisted men did not have much effect on the good old 5th Horse. We had more sabers in ranks on July 30 than any other Cavalry regiment in the Army.

A reception and dance was given at the Service Club on July 30 in honor of Colonel and Mrs. Hornbrook, who left for Washington, D. C., August 5, Colonel Hornbrook having been relieved from duty with the regiment to attend the General Staff College.

Colonel William D. Forsyth arrived August 5 and took over the command of the regiment and camp. Colonel Forsyth was for many years in the 5th Cavalry. A reception and dance for Colonel and Mrs. Forsyth was given Saturday, August 27.

All outposts in the Big Bend District have now been withdrawn to Marfa, so that now all troops of the regiment are together once more. Frequent patrols are sent out from Marfa, covering the river from Glenn Springs to Candaleria.

SIXTH CAVALRY—Fort Oglethorpe, Georgia

Colonel Robert R. Wallach, Commanding

In common with the other regiments of the service, the reorganization of the cavalry has revolutionized the 6th. The former Troop H, Captain Ben A. Mason, leaves by marching for Camp Knox, Kentucky, to become the active unit of the training center squadron of the 5th Corps Area. Troop L, Captain Wade C. Gatchell, now performs the same duty

in the 4th Corps. The personnel of the remaining troops of the 3d Squadron has already been absorbed by the active troops.

Necessity for economy in feeding has been met conveniently through its coincidence with the reduction of the Army. Discharges throughout the regiment averaged about 40 per cent. Taking advantage of this reduced strength, half the number of horses of each organization have been turned in and sent to pasture at the target range at Catoosa Springs. The active line troops go in rotation on herding duty there for one week at a time.

For the animals retained for service a new feeding regimen has been instituted. The close-coupled horses, easy keepers, form Group I. They receive per day 8½ pounds of crushed oats and 10 pounds of hay, half long and half chopped, in three feeds. The moderate keepers, Group II, receive 10 pounds of crushed oats and 12 pounds of hay in the same number of feeds. The poor horses, of which there are but a few, forming Group III, are given the allowance of Group II, supplemented by a 9 p. m. feeding of 2 pounds of crushed oats mixed with 2 pounds of chopped hay per day. Bran mash is substituted for the evening meal of all groups on Saturdays and for Group III on Wednesdays as well. All horses are weighed every thirty days and careful observation is kept of them. As each animal shows improvement it is advanced to the next group.

While the schedule has been in operation too brief a time fully to demonstrate its benefits, the results thus far have fulfilled every expectation. The poorer horses are picking up noticeably, Group III is diminishing in numbers, and a marked economy in forage is being effected.

The regiment was paraded at the post on August 18 before several hundred of the "Knights of Khorassan," in convention in Chattanooga. The spectacle was a splendid one, and the visitors greeted the appearance of the squadrons on the field with much applause and evident pleasure.

Labor Day was observed with a field day. The events and their winners were: Costume contest, Private Stranberg, Troop H; best turned-out four-line team, Q. M. C. Detachment; enlisted men's jumping, Staff Sergeant Clark, 2d Squadron; cigar and umbrella race, Staff Sergeant Clark; officers' jumping, private mounts, Major R. O. Henry; ladies' jumping, Mrs. R. R. Wallach; open jumping, Sergeant Bryant, Troop F; rescue race, Service Troop; jumping by Government horses, Sergeant Green, Troop H; ball and mallet race, Captain O. I. Holman.

The regiment is represented on the Cavalry-Engineer Rifle Team at Camp Perry by Sergeant Jim Adams, of the former "I" Troop.

SEVENTH CAVALRY—Fort Bliss, El Paso, Texas

Colonel Walter C. Short, Commanding

The Cavalry-Engineer Rifle Match, held at the Mount Franklin Range, at Fort Bliss, was won by the 7th Cavalry Team, consisting of Captain Hobart R. Gay, Captain Anderson H. Norton, and First Sergeant Andrew B. Lafevers, Troop "B," 7th Cavalry. Staff Sergeant Jacob Bryant made the Regimental Team, and would have competed had he not sustained a broken shoulder in an accident. Captain Norton substituted for him. The members of the team won the following trophies:

Captain Gay—Gold medal and bronze medal.

Captain Norton—Gold medal and silver medal.

First Sergeant Lafevers—Gold medal and bronze medal.

The team as a whole won the Cavalry-Engineer Trophy Cup and the Team Match Cup. Both are beautiful trophies.

The Regimental Team left here August 21, 1921, with the other members of the Cavalry-Engineer Rifle Team, to compete in the national matches at Camp Perry, Ohio.

This is the only regimental team as a whole that was selected for the Cavalry-Engineer Team try-outs at Camp Perry.

In the Corps Area rifle and pistol competition held at Camp Bullis, San Antonio, Texas, the following medals were won by members of the 7th Cavalry Team:

1. Sergeant Lloyd P. Mayton, Troop "I"—Gold medal (rifle).
2. Sergeant Gustave H. Moeller, Troop "H"—Bronze medal (rifle).
3. Sergeant Lloyd P. Mayton, Troop "I"—Bronze medal (pistol).
4. Captain V. W. Wales (Adjutant)—Bronze medal (pistol).
5. Corporal James P. Harrington, Troop "F"—Bronze medal (pistol).

This competition was probably the first one held in this section where the competitors were allowed to fire as many shots as possible in the allotted time in rapid fire. As one colored competitor remarked at the 500-yard firing point, "This rabid fire sure do consist of one long mad minute and twenty dizzy seconds." Another colored competitor was heard to say, "I sure did trip a wicked trigger. I sent twenty-three down in that direction and Lord, man, I got a total of 93."

In the big Corps Area Athletic Meet the regiment stood ninth in the track and field events, out of about thirty-one competing teams. In the boxing the regiment was second. All the star athletes in the corps area competed, including a number that made the All-Army Team. The 25th Infantry starred in the track and field events. This latter regiment has a number of wonderful athletes and is to be congratulated on its showing.

EIGHTH CAVALRY—Fort Bliss, Texas

Colonel James H. Reeves, Commanding

Colonel James H. Reeves assumed command August the fifth, relieving Colonel George T. Langhorne. Colonel Langhorne had been with the regiment since the fall of 1915 and had been in command since August 29, 1917. It was with regret and much display of affection that his older officers and men who had served with him so long on arduous Border duty bade him "Good-bye."

Polo has been kept up to the standard and Colonel Reeves by his participation and encouragement has created an enlarged interest in the game.

Social activities of the enlisted men and their families are being centered in the Regimental Service Club. The men are much gratified with Colonel Reeves' efforts to cement the relations between the families and individual members of the regiment and to provide entertainments such as were characteristic of the Old Army. Much effort is being brought to bear to increase the interest in religious work as the sane basis of genuine morale and esprit in the regiment. It is believed that a unity of purpose and a wonderful regimental family spirit is developing.

NINTH CAVALRY—Camp Stotsenburg, Pampanga, P. I.

Colonel Edward Anderson, Commanding

Target practice was continued during the months of April and May. The number of men qualified on the "A" Range with rifle was approximately one-half of what must be qualified next year, when the regiment will fire as prescribed in Rifle Musketry. In the field practice every effort was made to make the problems as instructive and realistic as possible. The line troops fired approximately three hundred and fifty problems. The work as a whole was good. In the proficiency tests the ranges varied from eight hundred to one thousand three hundred yards. The problems were over very difficult ground; notwithstanding, all except two troops were proficient. Troop "D" made an exceptionally high number of hits, with excellent distribution. During this period practice was held with the automatic rifle. Thirty men of each troop fired the complete course and all other men on the one thousand yards range. It was the first time that the regiment had fired this weapon. The results obtained were only fair.

On the morning of June 1 the regiment participated in a garrison review given for Major-General Wood. The regiment turned out approximately one thousand strong and passed in review with its usual steadiness.

On June 2 garrison training was begun. The program provided for two hours' mounted work daily, five days a week, one being devoted to field training. Dismounted drills, specialists, schools, and stables occupied the time until noon. Provisional staff and orderly and communication platoons were formed in anticipation of the new organization. Saturdays were devoted to parades, inspections, and reviews. The afternoons were devoted to educational and vocational classes.

The Camp Stotsenburg Polo Team, consisting mostly of 9th Cavalry officers, won the Round Robin Polo Tournament held on the Forbes field, in Manila, May 7–21. The tournament was held in honor of the arrival of the Wood-Forbes Commission in the Philippines. The competing teams were the Camp Stotsenburg Polo Club, Commission Team, Manila Polo Club, McKinley Polo Club, and the 31st Infantry Polo Club. The Camp Stotsenburg Club has held the championship of the Philippines for the last two years.

TENTH CAVALRY—Fort Huachuca, Arizona

Colonel Edwin B. Winans, Commanding

Since the last issue of the JOURNAL the 10th has finished its record firing both with pistol and rifle and with the usual high standing. All the troops made excellent showings, one troop qualifying 88 per cent plus. The Regimental Pistol Team then proceeded to win the Corps Area championship, and individual members of the regiment made high scores in the corps rifle competition. The automatic rifle has lately had our attention and very satisfactory shooting has been done; also we are well represented among those still present on the Cavalry-Engineer Rifle Team.

One of the high lights of the past three months was the celebration of our Regimental Organization Day, on July 28, our fifty-fifth birthday. The day was opened, in fact rent asunder, at reveille by the combined efforts of the band and the drum and bugle corps, who paraded the entire post and proved that it is not always true that "I can't get 'em up." At 10 o'clock the regiment was formed and presented with our new regimental standard, bearing in addition to the coat of arms our well-known insignia, the buffalo. Following this ceremony the entire garrison gathered at the base of the flagstaff, where, after an invocation by the chaplain, Our Colonel Winans briefly reviewed the history, the traditions, and the record of the "Old 10th" in a way that made us feel more than ever that for each of us there is only one regiment.

A gala field-day program had been arranged for the afternoon, but one of our well-known Arizona summer rain-storms descended upon our mountain fastness and kept us under cover all afternoon; however, it did not dampen our enjoyment of the evening's celebration. Honored and ably assisted by the presence of General and Mrs. Malin Craig, the Regimental Officers' Dinner and Dance at the Club was something to be long remembered. The Club was redecorated as of the days of 1866. The ladies were visions of beauty in costumes of the same period, and the officers wore the old-time "Blues." At the same time the enlisted personnel and their families were renewing old associations and cementing new comradeship with another regimental dinner and dance in the Amusement Hall and Gymnasium. This was also a huge success, and in fact the whole birthday celebration can best be summed up with the simple statement that "a pleasant time was had by all."

Our polo activities have consisted of the regular two games each week, in which practically every officer of the regiment takes part, one game with the 1st Cavalry here, which we won, and two games with the 1st at Douglas, both of which they won. We expect another game with the 1st here at an early date, the winner of which can claim the cham-

pionship of the 1st Brigade, 1st Cavalry Division. The fact that Colonel Winans is now commanding the 1st Cavalry Brigade will be an added incentive for us to win.

ELEVENTH CAVALRY—Presidio of Monterey, California

Colonel John M. Jenkins, Commanding

On August 11 the Machine-Gun Troop returned to the post from the artillery range at Gigling, California, where they have been in camp for three months for target practice and field firing.

On August 15 Troop F left Camp John H. Beacom, Calexico, California, now abandoned, for Camp Lawrence J. Hearn, Palm City, California.

During the past three months the remainder of the regiment, at the Presidio of Monterey, has been on the rifle range, going through a strenuous target season, with both service and automatic rifles.

The interest and active participation in polo continues. The polo string has been turned out for a much needed rest, and each officer is working on prospective ponies, endeavoring to augment our string.

TWELFTH CAVALRY—Del Rio, Texas

Colonel Sedgwick Rice, Commanding

The practice march on which this regiment expected to start July 1 was postponed by War Department order, occasioning much regret in the command. It is hoped, however, that conditions will so adjust themselves that it may be accomplished later.

The completion of the new dam across San Felipe Creek provides the post with another swimming pool. This gives us two fine pools, and swimming is a very popular sport just now.

A few more days will see the new tennis courts finished and ready for play. They are of hard clay, are very well constructed, and provided with ample back-stops. The mild winter climate which we enjoy here will, no doubt, make it possible to play all year.

The troop baseball league, which was organized early in the summer, finished its schedule of games some weeks ago. E Troop finished first, Machine-Gun Troop second, and L Troop won the money for the best-supported team. On a recent trip to Eagle Pass the 12th Cavalry team lost to the 46th Infantry and to the Eagle Pass civilian team by scores of 5 to 4 and 4 to 3 respectively. On August 27 and 28 the 12th won from the 46th by scores of 17 to 1 and 10 to 6 respectively. Chaplain Maher has been made official baseball coach and is bringing out some fine new material for the team. By next season we expect to have a team that may well be feared.

The ladies' equitation class has developed a fresh interest in riding, and among the most enjoyable events on the post recently were two paper chases given by Lieutenant-Colonel C. O. Thomas, Jr. The first one, given August 7, led over rolling ground to the northwest of camp and ended near the airdrome. The second chase, two weeks later, covered much rougher ground and included some hard riding. Every one agreed that the performance given by the ladies indicated application on their part and reflected credit on their instructor, Sergeant Rodgers. The class gave an enjoyable moonlight ride recently. Sandwiches and coffee were served at Sunset Point, overlooking the valley, at the White Ranch, about 10 miles from Del Rio.

We are looking forward with pleasure to the arrival of the 1st Squadron, which has been in Panama since 1916. It is expected that the squadron will reach Del Rio about September 10.

Practically the entire post has been composted and sodded with Bermuda grass, and the appearance of the lawns is most gratifying.

THIRTEENTH CAVALRY—Fort Clark, Texas

Colonel Roy B. Harper, Commanding

Fort Clark is having its share of Border weather, but fortunately the swimming pool, just below Las Moras Spring, always has a cool and fresh supply of water. As the spring is running somewhat low and the creek has been cleared of vegetation, a dam has been constructed to hold a good depth of water in the swimming pool.

Memorial and Independence Days were observed with fitting ceremonies. Following the Independence Day ceremonies boxing and a battle royal were staged in Las Moras Park, following which a swimming tournament was held, and the day was closed with dancing by the officers at the club and the enlisted men at the pavilion.

The open-air movies draw large audiences three evenings a week, and occasional boxing bouts and baseball games are the popular sports.

To appreciate Fort Clark as a cavalry station it is only necessary for one to observe our surplus horses running loose on the reservation, with fine grazing, and Las Moras winding along the shady pecan groves.

FOURTEENTH CAVALRY—Fort Des Moines, Iowa

Colonel Robert A. Brown, Commanding

The months of July and August have been of great interest to the members of this post. Many activities of both social and military interest have taken place.

On July 28 and 30 the polo team from this regiment played Camp Grant and were defeated in two hard-fought games. This was the first opportunity afforded the team from the 14th Cavalry to meet an outside team, and much valuable experience was gained.

On August 17–20 Troop "B" marched to Indianola to take part in the Warren County Fair. The exhibitions given were of a very high grade, and the fair committee and the citizens of Indianola were greatly impressed with the soldierly bearing, gentlemanly conduct, and horsemanship of the troop.

Troop "A" took part in the State Fair at Des Moines, August 24–September 2. All exhibitions were given in the Stock Pavilion at night and the jumping through fire hurdles formed a very spectacular exhibit. Troop "A" has perfected a very creditable exhibition and much praise is due the men and officers of that organization for their work.

A number of officers and enlisted men entered the various classes in the State Fair Horse Show and ribbons were taken in the light-weight hunter, middle-weight hunter, pair jumping, military charger, and four lined draft events. While the average conformation and appearance of the 14th Cavalry was not up to that of the high-priced stables of Miss Lulu Long, the Chesney Stables, the Canadian horses, etc., the performance over jumps of the Army horse was in most cases superior.

In the high jump the regiment was gratified to see four of its horses jump higher than six feet, one clearing the bars at six feet and six inches.

A polo game was arranged for August 28 and 30 with a team from Fort Riley, consisting of Major Holderness, Major West, Lieutenant-Colonel Lininger, and Major Baird. The score in both games was in favor of the visitors, 14 to 7 in the first game and 12 to 7 in the second. Both games were hard fought and sportsmanlike contests.

Orders for the reorganization of the regiment have been received, together with orders for a change of station for the 1st Squadron and Training Center Troop to Fort Sheridan, Illinois. It is with great regret that we see the 1st Squadron leave this post, as the regiment has only been completely assembled in one post for a short time.

On August 27 the 14th Cavalry gave a review at the State Fair Grounds in connec-

tion with a review of the 88th Division. Governor Kendall, General Weigle, and General Beach were in the reviewing stand with other officers of the 88th. The following letter was received from Governor Kendall:

"Colonel R. A. Brown,
Fort Des Moines, Iowa.

My Dear Colonel Brown: Permit me to congratulate you most sincerely upon the appearance of your troops at the State Fair last Saturday. It was magnificent. Everybody everywhere agreed that you have an organization of world-beaters.

Always with personal regard, I am,

Very truly yours,
(Signed) N. E. Kendall."

FIFTEENTH CAVALRY—Fort D. A. Russell, Wyoming

Colonel Thomas B. Dugan, Commanding

The regiment has been engaged in target practice, varied with two practise marches a week. The country surrounding the post is good hiking country, and the cool summer days have made the hikes practically a recreation for the command.

A regimental review was given in honor of 1st Sergeant William Fisher, of "C" Troop, who retired after thirty years' service.

The summer-resort weather at this post has made the social activities very enjoyable. The regular weekly hops have been well attended. An al fresco supper held in the parade at the Medical Circle was attended by all the officers and ladies of the garrison. The officers of the regiment gave an elaborate hop in farewell to Colonel Dugan, who is soon to leave this post. Many guests from Cheyenne were present.

The 3d Squadron officers gave a hunt breakfast in honor of the officers of the Utah Squadron and Hospital Company during their encampment here. When the Utah National Guard returned home, each troop and company of the Guard were presented with a pair of pups from the Hunt Club pack. The pack of the Regimental Hunt Club continues to grow at an alarming rate, now numbering thirty-five dogs of various ages. The older dogs are fleet and game and have made several kills of wolves and coyotes, which are numerous around the post. The weekly hunts have been supplemented by early morning chases by the more enthusiastic members of the club.

Good fishing can be had in the vicinity of the post, and a few hours by auto puts one into an angler's paradise. Good catches of trout have been made by week-end parties. Thousands of tourists in their autos have passed through the post this summer. They show considerable interest in the Army, and guard mounting and squadron parades usually have a good gallery.

The week of the Frontier Celebration was a red-letter period in the life of the garrison. The regiment participated in the big parade through the city and twice during the week passed in review before the packed amphitheaters. Each day one of the squadrons put on a special performance. The musical rides and combat drills were favorably received by the crowds. A quarter-mile and half-mile running race with officer riders was a feature of each day's events. The attendance each day exceeded twenty thousand people and gave the regiment an opportunity, which is not often afforded, to show the cavalry to the people.

The polo team came off victors at the Denver Tournament, and at this writing are in Colorado Springs.

The news that the regiment is to go on the inactive list has put every one on the anxious seat, and the question, "Where do we go from here?" is the main topic of the day. A great many officers have been ordered to other assignments and departures are of daily occurrence.

The Reserve Officers Department

THE CAVALRY OFFICERS RESERVE CORPS NUMBERS

3 Colonels.
11 Lieutenant-Colonels.
60 Majors.
233 Captains.
277 1st Lieutenants.
275 2d Lieutenants.
—
859

Of this number a score or so are due to be dropped from the rolls, as nothing has been heard from them in answer to many communications.

THE NEW REGULATIONS FOR THE OFFICERS' RESERVE CORPS

These regulations, which are about to be issued, cover practically all the points with regard to which inquiries have frequently been made by reserve officers. Note is made here of the more important sections.

APPOINTMENT

Section 12. The Officers' Reserve Corps is established for the purpose of providing a reserve of officers available for military service when needed. It is not a separate component of the Army, but is the corps which furnishes the necessary reserve officers for assignment to all components of the Army of the United States. Its members will therefore normally be assigned or attached to authorized organizations of the Army of the United States in time of peace. The numbers of reserve officers assigned or attached to organizations of the Organized Reserves in time of peace will not be limited to the strict requirements of tables of organization, but will include the officers required for replacement and for the formation of such new and additional units as may be required after the initial mobilization. Appointment as a reserve officer is not, in any case, to be the mere conferring of a rank, but is made to fill an office in which service may be rendered. Appointments are not honorary or rewards for past service, but are based primarily upon the qualifications of the appointee to satisfactorily perform the duties of a particular office.

Section 13 deals with the division of reserve officers into two classes, those for service with troops and those for special service.

Sections 17 and 18 describe the manner in which reserve officers will be appointed. The record of the officer is examined, the result of his attendance at any course of instruction is taken into account, and personal examination is made when practicable. World War officers will be appointed to reserve commissions on the basis of their records, where such records indicate qualifications.

Section 19 explains how it is necessary to disregard World War records in this connection after a certain period of time and sets November 11, 1923, as the date after which appointment to the Officers' Reserve Corps must be made on some other basis.

Section 21 provides for commissioning of warrant officers and enlisted men of the Regular Army and National Guard in the Officers' Reserve Corps, certain special instructions being required as a condition.

SECTION 23. Reserve officers are needed primarily, but not exclusively, for units of the Organized Reserves. They should be assigned, so far as practicable, to units near their places of residence. The location and development of units of the Organized Reserves is delegated to department and corps area commanders. Available reserve officers are also allotted to them for assignment. As the organization of units progresses, and it is found that additional officers are needed, it is contemplated that suitable and available officer material will be located and obtained by the department or corps area commanders under some of the means provided for appointment. The procurement of reserve officers for the Organized Reserves is thus largely in the hands of the department or corps area commanders. As soon as practicable a full quota of officers for the Organized Reserves should be procured and maintained, as well as the officers that will be required in an emergency for the other components of the Army of the United States.

PROMOTIONS

SECTION 25. All steps taken in time of peace in the development of the Officers' Reserve Corps, including promotions therein, must be with a view to readiness for the prompt mobilization of an efficient army in time of war. In time of war, after the components of the army have been called to active service, all officers will be equally eligible for promotion, regardless of whether they have served, in time of peace, in the Regular Army, the National Guard, or the Organized Reserves. Promotion in time of war must, in general, be based upon a method of selection, with due consideration of the needs of the military service and the relative qualifications of persons available for promotion. The promotion system embodied in these regulations is applicable in time of peace only. The system is formulated with a view to giving such promotion as appears reasonable and proper in time of peace, with the understanding that, in time of war, conditions will afford exceptional officers an opportunity, which is lacking in time of peace, to demonstrate clearly their military capacity and fitness for advancement.

SECTION 26. Promotion, in time of peace, must be based upon considerations of their general and professional qualifications, the interest manifested by them, their length of service, and age, with a view to providing reasonable advancement to the grades for which it is believed they will be fitted in time of war and from which they will have a fair and equal opportunity for further advancement under conditions of active service.

SECTION 27. With a view to developing the interest, ability, and qualities of military leadership, the system of promotion is designed to afford any competent reserve officer an opportunity to rise by successive steps to any office in the Army which is to be filled, and for which he has the ability to qualify. With this object in view, no fixed numbers are prescribed for the various grades and branches of the Officers' Reserve Corps. So far as numbers in each grade are concerned, the only restriction placed upon promotions is that there must be a suitable office and duty to which any promoted officer can be assigned.

SECTION 28. In addition to theoretical training and instruction, an officer, to be qualified for promotion, must have the knowledge and judgment that develop with age and experience. A minimum length of service in a grade is, therefore, required as a condition of eligibility for advancement to the next higher grade. The minimum of one year required by law being of limited application, a minimum of three years' service in a grade is required by these regulations. Of the three years, one must be in the Officers' Reserve Corps, as required by law, liberal credit being given toward the other two years for service rendered as an officer during or since the World War. This minimum period, and the service credited thereto, allow an opportunity for promotion commensurate with the time available, interest, and inclination of the officer to apply himself to the acquirement of knowledge of his profession, and also takes cognizance of experience gained in active service during the World War. It is not expected that all reserve officers will be able to qualify for promotion at the expiration of such period. Length of service is but one factor in determining qualification for advancement. The actual period of service in any grade prior to promotion will depend upon the capacity and industry of each individual officer as affected by the time that he can spare for military study.

Minimum time to be served in each grade.—To be eligible for promotion to any grade, an officer must be credited with three years' service in the next lower grade, one year of which must in every case have been in the Officers' Reserve Corps since November 11, 1918. In computing the required three years' service in any grade, there will be credited service in the grade in the Officers' Reserve Corps since November 11, 1918, active service in the same or higher grade in any component of the United States Army between April 6, 1917, and December 31, 1920; double credit being given for such of the above service as was rendered during the period of hostilities, *i. e.*, between April 6, 1917, and November 11,

1918. Except for the one year which must have been in the Officers' Reserve Corps, there will also be credited service as a federally recognized officer of the National Guard since November 11, 1918. No service of any kind prior to April 6, 1917, is to be credited nor is any but active service between April 6, 1917, and November 11, 1918, to be credited.

SECTION 29. An officer eligible for promotion is not considered therefor until he signifies his readiness to undergo the examination prescribed. An officer cannot be considered qualified to fill an office in the next higher grade until, by a suitable test, he can demonstrate his professional fitness therefor. These officers who are eligible for promotion are encouraged to signify their readiness for examination when, but not before, they feel themselves reasonably qualified. Requests or recommendations to be examined for promotion must pass through military channels and will be approved, unless the recommendations made thereon indicate that the officer is not deemed sufficiently qualified to justify examination, or that there is no suitable assignment. In submitting requests or recommendations, it is to the interest of all concerned to avoid the examination of officers who are not reasonably prepared and qualified for examination. As examining boards are required, in case any officer examined is found not qualified for promotion, to inquire into and report upon his qualifications to continue in his grade, it is to the interest of each reserve officer to refrain from signifying his readiness for examination, until he feels himself reasonably qualified therefor.

SECTION 30. Briefly, the conditions for promotion are:

(*a*) A minimum of three years' actual or constructive service in the grade from which promoted.

(*b*) A suitable assignment for the officer if promoted.

(*c*) A demonstration of qualifications by examination.

ASSIGNMENT

SECTION 31. The Army is to be organized on the basis of organizations rather than individuals. So, excepting a few, reserve officers will be assigned by their respective corps area commanders to organizations of their branch.

SECTION 33. The specific assignment of each reserve officer is to be determined by the authority authorized to assign him as soon as practicable after receipt of the initial data covering his qualifications for assignment. Reserve officers may be assigned or attached to all components of the Army of the United States. Assignments to the Regular Army will be made only as specifically directed by the War Department from time to time. All reserve officers who are also officers, warrant officers, or enlisted men of the National Guard will be considered as on duty with that component of the Army and will be given no other assignment as reserve officers. The assignment of other reserve officers to the National Guard will be made only when authorized by the War Department.

SECTION 34. In making assignments, due consideration will be given to general and special qualifications, limitations as to the kind of duty for which appointed or suited, place of residence and local affiliations, and the preferences of the officers. So far as practicable, all reserve officers are to be assigned to units in the vicinity of their places of residence. However, World War veterans who so desire may be assigned to their reconstituted former war organizations in the discretion of corps area and department commanders. Upon a permanent change of residence a new assignment will be made if necessary, but officers will be retained in their original units or in higher organizations of which such units form parts if consistent with the general principles stated above.

SECTION 35. In making assignments, the normal legal obligation of reserve officers will be kept in mind—that is, the obligation to serve only in a national emergency expressly declared by Congress. In general, therefore, reserve officers will be assigned to units of the Organized Reserves. Assignments involving an obligation to serve in lesser emergencies with other components of the Army of the United States can be made only with the consent of the officers concerned.

TRAINING

Section 41 provides for 15-day training periods in each year, subject, however, to appropriations for this purpose by Congress and, to some extent, to individual circumstances.

Section 42 authorizes attendance of reserve officers at the various service schools.

SECTION 44. In general, some training and instruction while on an inactive status will be necessary to replace, or to supplement, training received while on active duty. This

will, in general, take the form of instruction by Regular Army officers detailed for duty with units of the Organized Reserves, of correspondence courses, or of study engaged in by the officer himself. Organization commanders, corps area and department commanders, and chiefs of branches have a mutual responsibility in accomplishing the training and instruction of reserve officers and will from time to time afford these officers such facilities for training and instruction when on an inactive status as circumstances permit. Within the limits of funds that may be utilized for this purpose, the War Department will make available for the use of reserve officers such official publications as are necessary or desirable for their instruction.

ACTIVE DUTY

SECTION 45. Active duty for reserve officers is of two general classes: First, active duty in a national emergency expressly declared by Congress, and, second, active duty in time of peace for training or instruction, or for some duty of a temporary nature.

SECTION 47. The maximum obligation for active duty in time of peace is fifteen days in a calendar year. It will, in general, be impracticable to require this maximum. When officers are to be called for a fifteen-day training period, they will be given as much advance notice as practicable, and any officer upon whom such a call to duty would work a hardship may be excused from attendance for that call. Specially selected officers will be called to active duty from time to time for the following temporary duties:

(*a*) As additional members of the War Department General Staff.
(*b*) To attend the various service schools.
(*c*) For duty with organizations of the Regular Army or Organized Reserves.
(*d*) As instructors at training camps or schools.
(*e*) For consultation, duty on courts-martial or boards, or other duties for which specially qualified.

SECTION 50. When on active duty reserve officers are subject to the Articles of War and to assignment to any duty, and receive the pay and allowances provided by law for officers of like grade of the Regular Army. Reserve officers are not entitled to retirement or retired pay, their compensation in the event of disability being provided for by law.

The National Guard

Cavalry Team Rifle Match—200 and 600 yards—held at Seagirt, New Jersey, August 19 was won by Troop B, New Jersey Cavalry, with an aggregate of 321 points. The Headquarters Troop was second, with 261, and Troop C, of Newark, third, with 255.

The following officers of the National Guard Cavalry have been authorized to attend the Cavalry School, Fort Riley, for the special course for National Guard officers, beginning September 15 and ending December 15:

Alabama.—Captain John C. Carter.
Georgia.—1st Lieutenant Charles J. Martin.
Connecticut.—Captain William J. Thornton.
Idaho.—2d Lieutenant Walter L. Roche.
Massachusetts.—2d Lieutenant Elliot Zwicker.
North Carolina.—Captain F. W. S. Swann.
Ohio.—1st Lieutenant Harold F. Bower and 2d Lieutenant Vance I. Shield.
Pennsylvania.—Captain John B. Brittell and Captain John B. Goheen.
Rhode Island.—1st Lieutenant Mark P. Rancourt.
Tennessee.—Captain Herbert R. Dyer.
Texas.—2d Lieutenant Robert H. Johnson.
Wisconsin.—Captain Everett C. Hart and 1st Lieutenant Bertham E. Morrison.

Due to limited appropriations, the number detailed was restricted to the above, although the capacity of the school would have accommodated thirty officers.

Federal recognition was extended the following organizations since July 1:

Colorado.—Headquarters and Headquarters Detachment, 1st Separate Squadron.
Louisiana.—Troop B.
Kentucky.—Headquarters and Headquarters Detachment and Troop A, 53d Machine-Gun Squadron.
Pennsylvania.—Headquarters and Headquarters Detachment of the 52d Machine-Gun Squadron, of the 1st Squadron, 104th Cavalry, and of the 1st and 2d Squadrons, 103d Cavalry.

Reports received in the Militia Bureau indicate that the cavalry field training camps have been most successful and instructive, all organizations showing satisfactory progress, the members of the organizations showing great interest and enthusiasm in their work. Camps were held in June by Texas at Camp Mabry, Idaho at Boise Barracks, Utah at Fort D. A. Russell, Connecticut at Niatic; in July and August by Pennsylvania at Mt. Gretna, New York at Fort Ethan Allen, Massachusetts at Camp Devens, New Jersey at Seagirt, and Ohio at Camp Perry.

TEXAS NATIONAL GUARD CAVALRY CAMP

The annual field training encampment of the Texas National Guard was held at Camp Mabry, near Austin, June 12 to the 26, inclusive. The encampment was commanded by Brigadier General J. F. Wolters, who commands the 1st Cavalry Brigade. The units in attendance were 1st Cavalry Brigade Headquarters Troop, 1st Cavalry Regiment, 1st Cavalry Machine-Gun Squadron, Four Provisional Infantry companies, and the State Staff Corps.

Colonel Sterling P. Adams, U. S. Army, was senior instructor; Lieutenant-Colonel John T. Sayles, senior machine-gun instructor; Colonel W. S. Faukner, senior infantry instructor; Major-General Joseph T. Dickman, Commanding General, 8th Corps Area, visited the encampment and reviewed the troops.

The cavalry units of the Texas National Guard are organized under the new Cavalry Table of Organization, and this was the first opportunity afforded to test the utility of the new table. The new table was complied with strictly. Both the Regular Army officers, who attended the camp as instructors, and the National Guard officers expressed themselves as entirely satisfied with the work.

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