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CONTENTS

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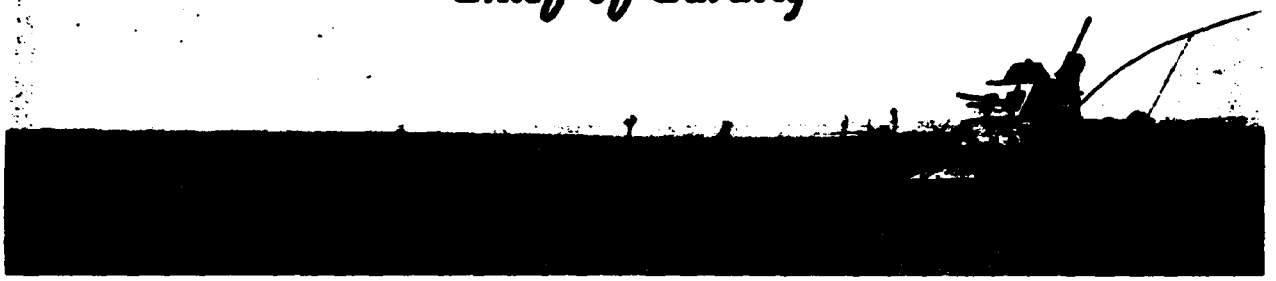
What of the Future?

By MAJOR GENERAL JOHN K. HERR

Chief of Cavalry



In view of the present world situation it appears that we are about to arm. Where will our Cavalry fit into the picture? Let us discuss some of the factors which bear upon that situation. There can be no doubt that in any war of magnitude the bone and sinew of armies will continue to be the mobile ground troops—the Infantry, Field Artillery and Cavalry. This is particularly true in our case because with the advent of mechanization each arm or service is charged with developing it as far as practicable and desirable in the execution of the rôle of the particular arm. Thus in our Army, mechanization is an integral part of each arm and is not separate. However powerful any other forces may be, in the last analysis, they must be considered as auxiliary to the mobile ground combat team. The future of our Cavalry will then depend to a great measure upon the wisdom of those who will plan our rearming. In such planning it must be remembered that our viewpoint should be radically different from that of many European nations. A great part of the military thought of Europe has been dominated by the problems of the western front during the last war, that is, secure flanks, defensive systems of great depth, limited terrain, and the fine network of roads. Our problem is a radically different one. Where may we fight? In case it should be on this continent or on this hemisphere or in any other wide reaches and open spaces, it appears to be a certainty that the war will be one of movement.

In this connection it must be recalled that even in the last war on the western front whenever there was movement there was a vital need for cavalry in large masses.

Witness the vital need for the British Cavalry Corps in the early retreat to the Marne where, by protecting the rear and left flank of the British II Corps, it saved that element from destruction. The enemy was thus prevented from pushing all of the allied forces off their line of retreat.

Study also the "Race to the Sea," when from September to November, 1914, two French Cavalry Corps augmented by the British Cavalry Corps established a mobile curtain from the Aisne to the Lys thereby covering successively the deployment of the French Second and Tenth Armies, the British Army, and the French Eighth Army, thereby balking the Germans in their attempt to seize the vital channel ports.

Observe again the use of the two German Cavalry Corps connecting the First and Second German Armies at the critical situation of the Marne.

Investigate, also, the use of the allied Cavalry in the spring of 1918 when it was rushed here, there, and everywhere to threatened points of rupture to hold back overwhelming enemy forces until reinforcements could be brought up.

It may be remarked also that the lack of Cavalry prevented the Germans from any adequate exploitation of their successes, whereas the allies were possessed of the very great advantage in the possession of considerable bodies of horsemen.

This point cannot be too strongly emphasized; that is, whenever there is movement, there is a great need for Cavalry in large masses. When there is *no* movement we have a war largely of futility.

The next point to be considered is that throughout history there have rarely been decisive victories except by the help of Cavalry. This agency has served to follow up or encircle and destroy the defeated enemy, or else, by swift movement in large masses, has been able to contribute to decisive results by surprise action at vital points. Notable examples of the use of Cavalry in this manner in the last war may be found. I will mention only two instances.

One—when the allied Cavalry crossed a difficult mountain range with pack transportation only, moved in September, 1918, into the Bulgarian theater and seized the key city of Uskub, thereby initially blocking the retreat of the German Eleventh Army through a defile which resulted in the capture of 90,000 men.

Again, the great victory of General Allenby in the battle of Megiddo. This was a notable use of Cavalry in a war of movement. Thrusting his Cavalry legions through the mountain passes near the coast, Allenby was able to cut off, capture and destroy practically the entire Turkish Army of more than 100,000 men.

It seems certain that we must be prepared for a war of movement. It is, therefore, logical that Cavalry may look forward with confidence to its rightful place as an important member of the ground combat team. The relative proportion of the different elements in the Army is something to be decided only after profound consideration of the entire problem which confronts America.

Fortunately this country is in a highly favorable position to produce the best Cavalry in the world. It will be recalled that at the outbreak of the European War there was no European Cavalry trained in the methods of the American Cavalry except the British which had taken to heart the lessons of the American Civil War and their own Boer War. Cavalry of most other nations had been trained for habitual mounted action. Some continued to carry the lance and were otherwise inadequately armed, equipped, and prepared to meet the conditions of the modern battlefield. This is not the case with American Cavalry. Since the time of our Civil War, it has been the best in the world. We are also in a very favorable position as regards our national resources. We have in this country more than twelve million horses, more than four and one-half million mules and the greatest motor industry on the globe. We have, therefore, the resources both in horses and in motor equipment to sustain our entire Cavalry, horse and mechanized, in its dominate effectiveness. Such Cavalry would be a fast moving force of great fire power. We must not look to Europe for any leadership of thought with respect to Cavalry; it would be a tragic error. I stress again the fact that, although many of the nations of Europe have gone more to mechanization in their Cavalry than to the horse, they are for the most part confronted with special situations. They face combat on fixed fronts in western Europe as well as economic conditions which preclude available supplies of forage, foodstuffs and animals. France, largely agricultural, maintains a very strong force of Cavalry, the bulk of which is horse. Poland and Russia have great masses of Cavalry to be used in major rôles. None of the Polish Cavalry is mechanized and only a fraction of the Russian. The average strength of the European Cavalry, even including those nations with a small amount, is much greater than that of the United States.

In our favorable position both geographically and economically, and looking forward to a war of movement, there appears to be no question that we should have a very great increase immediately in the strength of our Cavalry. It may be remembered in this connection that our best post-war military thought embodied in the National Defense Act provided for a balanced army. The cavalry quota envisaged under that program was in proportion to the importance and value of the arm under conditions peculiar to this country. In order to expand other elements for which no adequate means of personnel were provided, it was necessary to alter the balance established under the foregoing conception of our national defense needs. The same requirements have effected the infantry in a similar manner. It would now appear reasonable to restore to both their balanced proportions. There is, of course, no question but that the Infantry is the most important member of the ground combat team and that the ultimate strength of our Cavalry must be considered in proportion to that of our Infantry.

In any event there are certain minimum needs which should be satisfied. It must be remembered that Cavalry cannot be improvised. It should be immediately ready and highly trained. Let us consider then our Cavalry problem. We have both horse and mechanized Cavalry. It must be remembered that the entire Cavalry, both horse and mechanized, is dedicated to the execution of Cavalry rôles. How then will it be used in war? It will be used to accomplish all the historic rôles of Cavalry, that is, participation in combat, reconnaissance, counter-reconnaissance, as a connecting group between separated masses of infantry, delaying action, pursuit, seizing important positions or areas, in large masses against enemy's sensitive points such as flanks or rears. *It will be prepared to fight at all times* and will be used by the high command to meet any situation or crisis *where rapidity of movement or surprise is essential*. It will be used in smaller groups attached to commands such as independent divisions or corps. One of the most important duties for such smaller bodies will be that of reconnaissance. In this connection I wish to say that any independent body of troops that expects to rely solely upon vehicles of any kind for an adequate ground reconnaissance under all conditions is courting disaster. The use of horse and mechanized cavalry combines all of the features of complete ground reconnaissance and it is believed that the cavalry groups attached to independent armies or corps should include both in order to be most effective.

The bulk of Cavalry, however, should be used in large masses and perform major rôles, as may be determined by the high command. This means the welding of Cavalry Divisions into corps to be used as Army or GHQ Cavalry.

Thus, we should have an adequate amount of Cavalry both for attachments in smaller units such as regiments in addition to that required to constitute initially a minimum of one highly trained Cavalry corps. How should this corps be constituted and trained? What should be the proportion of horse Cavalry and of mechanized Cavalry? Let us consider for a moment, as bearing on this situation, the rôle and characteristics of the two, our horse and mechanized Cavalry. Our mechanized Cavalry under the wise policy of development for Cavalry action has accomplished a step by step progression wherein most of the mechanical difficulties have been eradicated and it is now capable of great marches and increased tactical capabilities.

Strategic mobility is perhaps its greatest asset. It has extraordinary fire volume and its shock action is considerable. Its tactical speed is very great on average terrain. It is difficult to control in large masses. It may find it difficult to protect itself in independent action when unsupported. It has not yet the capacity for sustained action that is inherent in horse Cavalry.

Horse Cavalry has great strategic mobility when transported by train or by motor. It can move under its own power by forced marches 150 miles in 48 hours or 100 miles in 24 hours. Through its individual riflemen it has great fluidity and flexibility of fire power. In the combat area in a war of movement our cavalry has greater tactical mobility considering all conditions of terrain and weather than has any other ground arm. When need be horse cavalry can cut loose from its wheeled elements and can be supplied by air or pack or live off the country. Our present horse cavalry is entirely motorized as to trains, and all regiments have their allotted quota of scout cars. The division has a squadron of armored cars and all special troops are motorized or mechanized.

It is evident that these cavalries supplement each other. It is apparent that while each might execute certain missions better alone, used in conjunction they will accomplish a majority of the major rôles with greater effectiveness than when used alone. Let us imagine for instance a Cavalry Corps of several horse divisions with one mechanized division. Such a force, if thrown out as Army or GHQ Cavalry to contact an opposing enemy, probably through use of the mechanized reconnaissance elements of both the horse and the mechanized divisions and in communication with our air forces will contact his leading ground elements. Following these reconnaissance vehicles there will probably be small groups of horse cavalry in support, perhaps portéed. These would be followed by one or more main bodies of horse Cavalry while the mechanized division would be held in hand ready to seize or to strike or, if need be, to make a special reconnaissance of some distant area.

Participation in Battle

In a war of movement when it becomes necessary to attack an enemy who has hastily taken a position, it can readily be seen that the mechanized Cavalry will enlarge the scope and effectiveness of the Cavalry attack. An attack of succeeding waves of these swift moving combat cars would fix the enemy in his position, riveting his attention upon the urgent threat. A mounted attack either immediately following or striking the enemy with successive waves of the horseman from a different angle would again rivet the attention of the enemy and further demoralize him. Meanwhile the dismounted force of Cavalry or Infantry approaching under cover of the previous attacks should be able to arrive at the position and seize it with minimum loss.

Delaying Action. In delaying action the mechanized division could be used for that part of the terrain where the roads were more favorable while the horse Cavalry operated in the remaining sector or sectors. They might even be interspersed according to the terrain features and road net. Withdrawing to successive positions, the mechanized Cavalry could cover the withdrawal of the horse Cavalry in certain contingencies. More advisable, perhaps, the great speed of the mechanized division would enable it to move to a flank and by surprise strike the pursuing enemy either alone or in conjunction with horse Cavalry.

Pursuit. It is in the pursuit that we visualize a really decisive blow against the enemy. Hit first by the air, then by the fast moving mechanized Cavalry, then by the horse Cavalry and, perhaps, followed up by Infantry in trucks, there appears to be little chance that the disorganized foe could be able to organize any effective rear guards. Such a pursuit should result in a victory of destruction—a battle with decisive results.

Thus it will be seen that the development of our mechanized Cavalry has infused strength into the Cavalry as a whole and that a Cavalry Corps comprising these elements should be a tremendously effective fighting force. Considering the motorized and mechanized elements of the horse Cavalry, a Cavalry Corps of three horse divisions, of three regiments each, and one mechanized division would be approximately half motor, half horse. It is believed that such a corps should be constituted and trained in the immediate future. There are no insuperable obstacles to the execution of this plan. Even if there were any great difficulties, they would be well worth overcoming. It is highly essential that troops should be trained in the way they are to be used. If we are to use large masses of Cavalry, it is not reasonable to suppose that they can be thrown together and function adequately at the outbreak of war. By concentrating such a corps on a wide and free area and in a suitable climate, we would be able to solve many important problems. We would be able to determine the most suitable organization for the division and corps by actually using this corps in all the exercises which might confront it in time of war such as participation in battle, reconnaissance, pursuit, delaying action. We would determine in each instance the best methods of combining the horse and mechanized divisions; we would ascertain what the relative proportion of each should be in the cavalry of the future; we would weld a fighting body of troops that would be worth its weght in gold to those who know how to use it. We would develop leaders who would know how to command. It is highly important that a leader of troops should have the opportunity to take his organization out constantly and practice it in all the exercises which may confront him in war. It is just the same as a captain of a polo team or a football team—he develops a powerful, smooth running outfit that is entirely responsive to his will. He has complete confidence in his ability to handle his command and they in turn have faith in his ability to lead them. The elements of such a command exist at the present and could be concentrated in the southwest which appears to be the most suitable section as to climate and which has the additional advantage of having the bulk of our cavalry located there now. In any reshuffling of troops due to rearmament, this should be taken into consideration.

Training Areas. It is also highly essential that there should be wide and free training area for the exercise of such a command. Our Navy may concentrate on the sea, our aviation in the air, but our land forces have no comparable areas available. However, such a training area exists in the southwest and the Chief of Cavalry has already had tentative studies made concerning it which have progressed to the point where it is apparent that such an area is suitable and possible of procurement at very reasonable figures. It would consist of a semicircular area with a radius of approximately 100 miles. This is considered a highly important feature because only in such an area without artificial restrictions can one find a real field laboratory in which to get the answers to our problems. It seems singular that in all the United States there is available no such extensive terrain. Within our vast country it is entirely possible to set up a number of such areas whereas in western Europe with its dense population such a scheme is not feasible.

Carrying out the above plan, it is believed to be necessary and desirable that the present mechanized brigade should be increased to a division. It has reached the stage of development where this is entirely in line with progress. It will then possess the proper headquarters and special troops which must be part of any integral fighting unit.

In any rearmament it will be necessary also to increase the number of Cavalry regiments and to augment the strength of each by at least an additional squadron. It is estimated that, in order to supply the proper quota of Cavalry for any effective Infantry-Field Artillery-Cavalry combat team of the Regular Army initially ready for instant action, the minimum strength should total somewhere between 20,000 and 30,000 cavalrymen.

Thus summarizing, we confront an American situation which is different from the problems of European countries and which looks forward in case of hostilities to war of movement; that in any such war the principal element is the Infantry-Field Artillery-Cavalry ground combat team; that such a force is the bone and sinew of any real fighting Army or armies; that at least a reasonable nucleus should be highly trained and ready to fight at once; and that all our thoughts and preparations, including our industrial preparation, should be geared toward a war of movement rather than one of static defense by means chiefly of matériel. Although matériel is highly important it must be remembered that personnel is equally important and that no war will be won solely by machines. In my opinion it is needful that all cavalrymen make some effort to demonstrate to the people of this country the truth concerning the efficiency and worth of American Cavalry. There appears to be a vast ignorance on this subject which is but natural in view of the isolated posts occupied by our Cavalry. Many of our people still envisage Cavalry charging boot to boot with drawn sabers. We should endeavor to disseminate the facts. It would be well, whenever possible, to ask those of our citizens who are interested actually to witness the maneuvers and demonstrations of our Cavalry. There are none so blind as those who will not see. As Chief of Cavalry I have an abiding faith in the future of modern Cavalry and I believe it is high time that our Cavalry should be increased, organized, and developed along the lines indicated by me in this article.

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Minesweeper Cars

HAIFA, PALESTINE.—(AP) Piloted by the minesweeper cars, I bumped over mile after mile of highways gashed every few feet by deep trenches which appeared to have been hacked out by hydraulic drills. The trenches were intended to impede the progress of British mechanized units.

Royal Air Force planes flew overhead and kept in constant touch with the mechanized units, giving the latter rebel positions.

—JAMES A. MILLS, Associated Press,
October 27, 1938.

What Does Palestine Prove?

BY CAPTAIN THE BARON GEORGE MAROCHETTI

*EDITOR'S NOTE: Captain, The Baron George Marochetti served during the war on the staff and with the 11th Prince Albert's Own Hussars and held several staff appointments after the war, since when he has always kept in touch with the Army. He is now closely associated with the antiaircraft defence of London and is still a keen horseman being in daily contact with cavalry officers belonging to mounted and mechanised regiments. His former regiment, the 11th Hussars, is now serving in Palestine.

Captain, The Baron George Marochetti is also widely travelled and has visited most parts of the British Empire.

On the 10th March, 1928, the 11th Prince Albert's Own Hussars were mechanised. That one of the most famous cavalry regiments, the Colonel of which was the then Duke of York, now King George VI, should be the first to sacrifice its horses on the altar of modern progress, came as a shock to the Army but the choice was probably deliberate. The authorities knew that mechanisation was certain to prove unpopular. A crack regiment was selected to set an example which other regiments would have to follow. The "Glorious Cherrypickers"[1] were on this account the first to exchange their horses for armoured cars.

In due course all other cavalry regiments in England met with the same sad fate, with the exception of the Royal Household Cavalry[2] and two regiments of Dragoons —the "Royals" and the "Scots Greys." The latter owe their salvation to the political outcry the rumour of the impending mechanisation of the "Greys"[3] raised in Scotland where the regiment is regarded as Household Cavalry to the King when His Majesty is over the Border.

Today the War Office are probably thankful that these two regiments, once destined for mechanisation were kept mounted. Time has already proved that occasions may arise when cavalry is indispensable and mechanised units comparatively ineffective. The "Scots Greys" and the "Royals" are both in Palestine at the present moment and the possibility of sending the Royal Horse Guards there has even been discussed, though the Royal Household Cavalry have never before been sent overseas in peace time. We realize now that though in civilized countries, with well laid-out roads and with petrol stations conveniently placed a few miles distant from each other, armoured cars and tanks are of supreme importance, they cannot altogether replace the mounted regiments in such countries as Palestine or India.

The records of the Great War immortalize many magnificent cavalry campaigns, one of which I myself remember well. It opened shortly after dawn on a misty August morning in 1918 when after the successful attack by the Australian and Canadian Corps, the British Cavalry received the long awaited order to advance. It is interesting to remember now how soon we overtook not only the Infantry but the Tanks and embarked on the triumphant pursuit of the German Army which was to lead us, though we did not realize it then, to the Rhine. The campaign began on the morning of the 8th of August, and on that day alone the First Cavalry Brigade, composed of the Queen's Bays, the Fifth Dragoon Guards, and the 11th Hussars, took over 1,100 prisoners, innumerable guns and machine guns, while a squadron of the 5th Dragoon Guards even captured a train full of soldiers who were returning from leave.

We bivouacked after much skirmishing and fighting, ten miles from our jumping-off base, having disorganized the German Army completely and played havoc with the order of their retreat. In the days that followed our work was real cavalry work—the advance guard of an attacking army—and we remained the advance guard until the Armistice. We reconquered numerous villages in France and Belgium and we kept on the move till the Rhine was reached.

The 8th of August was a red letter day for the British Cavalry. Ludendorf refers to it in his *Memoirs* as "the Black Day of the German Army in the history of the war," and its disasters led him to advise the Kaiser to instruct his Foreign Secretary to open the negotiations which eventually brought about the peace. This Black Day was a glorious justification of the British Cavalry.

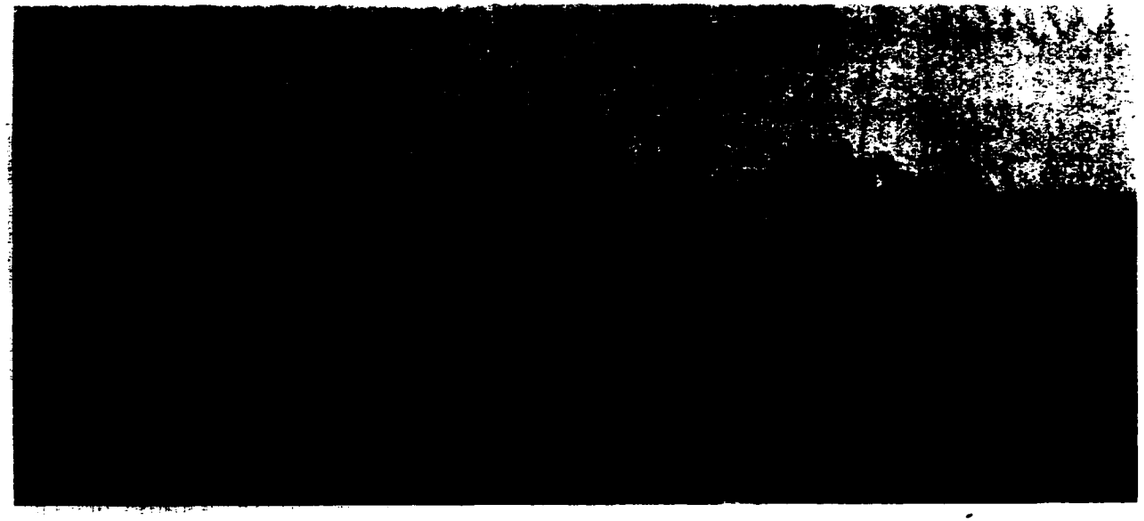
The Tanks were undoubtedly a great factor in that final march to victory which opened on August 8th, and I do not want to underestimate the greatness of their achievement. During the early hours of the battle they reduced the enemy ranks to chaos and supported the attacking Australians and Canadians as no other weapon could have done. By 10 AM, however, most of them had been put out of action. I remember distinctly the number of broken tanks, both heavy and light we saw lying about the country as we passed through the trenches that had been bridged over, and what splendid targets they presented for enemy fire.

On the other hand the cavalry casualties seemed incredibly small. If my recollection serves me rightly we did not lose more than three or four men and a few horses from my own Squadron. On the 8th of August and during the days that followed we not only reached our objectives but kept them against many counter attacks although the Brigade Mechanised Transport was unable to bring out the rations. Men can, when necessary, live on a few biscuits and though the country had been laid waste

[1]The 11th Hussars have been nicknamed "Cherrypickers" because they are the only regiment in the British Army entitled to wear crimson overalls and breeches. This dates back from Balaclava.

[2]The Royal Household Cavalry comprises two regiments, the Life Guards and the Royal Horse Guards. The Life Guards are known as the "Tins" and the Horse Guards as the "Blues." The Household Cavalry is responsible for the Royal escorts. One of the regiments is billeted at Hyde Park Barracks in London and the other at Windsor.

[3]The "Greys" are so named because the whole regiment is mounted on grey horses.



Present day British Cavalry operating in Palestine

by the Germans, the horses themselves found enough grass and foliage to keep them going with the help of iron rations which were very judiciously used.

Tanks and armoured cars cannot live on vegetation. Had we been mechanized in 1918 a miracle would have been required during the August Campaign to supply enough petrol and oil to keep us going. Not only does a tank or armoured car without fuel become useless but it is too heavy to be manhandled. It cannot even be hidden from view and must therefore be exposed to the risk of complete destruction by gunfire or enemy aircraft.

A cavalry unit advancing in open formation in suitable country can take advantage of the configuration of the ground to avoid the great danger of "enfilade" fire, as when aimed at from the front only, a horse at a gallop is difficult to bring down. Horses' legs offer such a small target—much smaller indeed than a man's leg—and they are therefore very hard to hit when advancing at 12 m.p.h., if a gunner has to alter his sights all the time. If not actually hit in the leg it is extraordinary how long a horse can carry a bullet without suffering from the wound. A horse's heart is protected by over a foot's thickness of flesh, as well as by the saddle and breast plate, and is never an easy target. Furthermore the man himself is well protected when riding a horse. The riding position is one which reduces his height and therefore his vulnerability and part of his body is further protected by the neck of his horse. Thus a mounted man is ten times less vulnerable than an infantryman, whose advance must in the nature of things be so much slower. It takes first-class and well-seasoned troops to resist a cavalry charge and a retreating army is generally a demoralized army. I know of very few cases where infantry or even machine gunners have successfully withstood a cavalry charge. Incidentally, as can be gathered from what I have just said, cavalry is far less vulnerable than is generally supposed and it has the great advantage of being able to live on the land.

In 1918, of course Tanks were in their infancy, but even in modern warfare I do not think they can replace the cavalry altogether. In twenty years Tanks have improved out of all recognition, and the Army has been reconstructed to embrace this new and all important branch of it. The Royal Army Service Corps* allots fifty per cent of its numbers to the business of serving Tanks and Armoured Cars with petrol and oil so that some of the disabilities from which the Armoured Car wing suffered in 1918 no longer exist. But even nowadays, I am told by brother officers, a direct hit can put a tank out of action and probably all its men as well. It is certainly an easier target for enemy fire than a mounted body extended in open formation.

In Spain at the battle of Guadalajara nearly two years ago, the biggest tank battle in history was fought. Hundreds of tanks were used and they should have swept into Madrid, but they were routed by ragged militiamen using a new type of anti-tank gun.

Even in Palestine where the rebels do not possess such modern weapons as anti-tank guns, they have invented land-mines which can put armoured cars out of action quite effectively. It is curious to notice that what serves as a defence against tanks—anti-tank guns or land-mines—is no defence against cavalry. On the other hand the greatest enemy of cavalry—"Barbed wire" and possibly machine guns fired from machine gun pits—are useless when used against tanks or armoured cars. This fact alone suggests that it is almost as impossible for tanks and armoured cars wholly to replace the cavalry as it is for the cavalry to do the work of tanks or armoured cars.

The terrain in the Middle East is particularly suited to

*The Royal Army Service Corps is the Corps of the British Army which deals with the Commissariat and is responsible for bringing food and supplies to the troops.

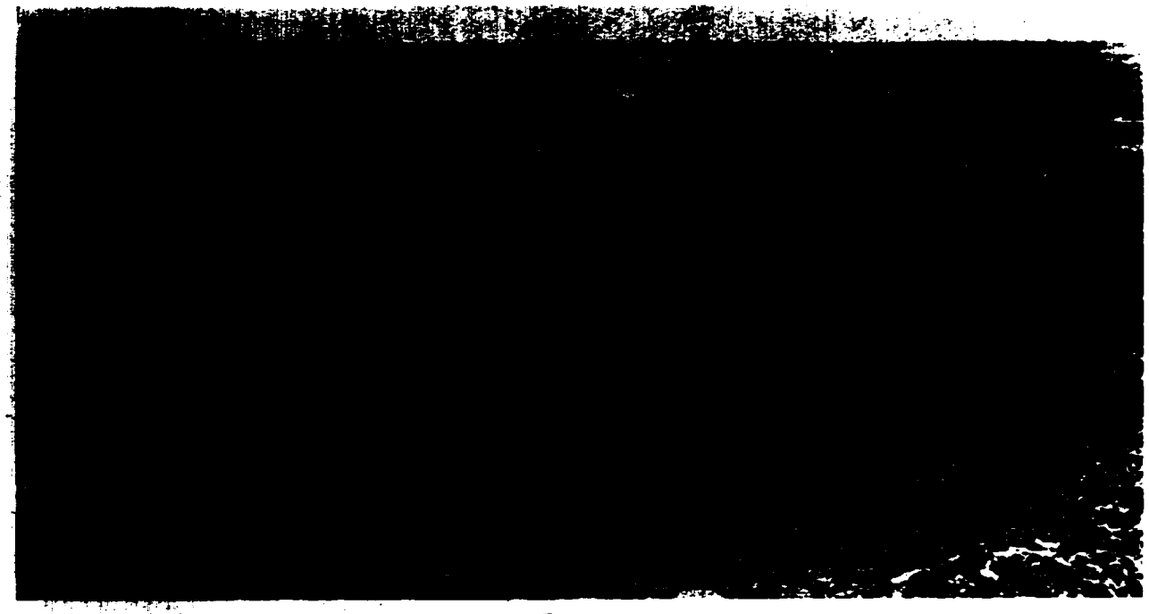
British Cavalry returning from the front, Amiens Area, 1918

cavalry work. It is rideable country and the orange groves and olive trees in Palestine offer easy screen for mounted troops. Ground so ideally suitable for cavalry is not best suited for mechanised warfare. A spinney or a copse, which means cover for cavalry, becomes an obstacle for a tank; walls and barricades which can easily be jumped by horsemen, may become deadly obstructions to a crew in an armoured car. Many men have been killed in Palestine, trying to remove the stones placed on the roads by rebels to bar the progress of armoured cars. The rebels wait in ambush and snipe while the crew of the car is in process of removing the obstruction. In the ravines or on the slopes broken by terraces which are outstanding features of the landscape in Palestine, armoured cars cannot be used, and tanks have to slow down to a walking pace. In swampy ground where a lane can be made for horses, tanks can be lost for ever.

When recent disturbances rendered it necessary to draft additional troops to Palestine to maintain order there, the High Command fully appreciating the advantages of mounted troops over machines, made a point of asking for cavalry regiments. Our "mighty Empire," so justly famous in the past for its horses and horsemen could produce no more than two mounted regiments. Both are now in Palestine and may yet be reinforced by the Royal Household Cavalry. That the unprecedented step of sending the Royal Household Cavalry abroad in peace time was even contemplated makes us wonder whether we weren't too drastic when we mechanised so much of our cavalry and left so few regiments their horses.

For in Palestine there is no nice line of demarcation separating friend from foe. In ordinary warfare there is as a rule an enemy line beyond which, with the exception of the civilian population, the enemy is ranged wearing uniforms recognisably those of opponents. This is not the case in Palestine where the enemy is everywhere—and nowhere. The main body of the Arabs is friendly but rebels have to be dealt with and they do not wear distinctive uniforms. It would be fatal in an attack to mistake friend for foe. In such a situation the cavalry can render service impossible to mechanised troops. If you sight a group of five or ten men while you are riding in an armoured car, you cannot open fire without investigation. Investigation necessitates leaving your armoured car. If the approaching party are friends all is well; if they are foes they fire and disappear, as if by magic, into the surrounding country. In an encounter of this kind a cavalry detachment has no such difficulty as their mechanised brothers. A mounted man has an advantage over an unmounted one. If necessary a body of horsemen can always surround an enemy which it is impossible for a single tank or armoured car to do.

It is not only in Palestine but also in India and Africa—in all countries indeed which are not highly developed—that cavalry can render service where armoured cars and tanks are ineffective. Wherever there is a question of pursuit of a man or a group of men across country the most powerful car in the world is useless compared to the cavalry. On this account it seems a pity to some of us that the army of today can put so few cavalry regiments in the field, for though we still have some fine Indian Cavalry regiments there are occasions when these cannot take the place of British cavalry. There was recently some discussion on the subject of sending Indian Cavalry troops to Palestine but the project presented difficulties. Many of the Indian regiments are composed of Mohammedans and it would be unfair to use them to oppose Arabs professing their own creed. Other regiments composed of Hindus might be unduly prejudiced against Mohammedans. Furthermore the Indian Army no longer, strictly speaking, comes under the head of Imperial troops. They belong to India proper; are paid by the Indian Budget and consist of Indian soldiers, commanded it is true by a few British officers who are, however, themselves under the jurisdiction



British Cavalry advancing through artillery fire, Amiens Area

of the Indian Government. Except in very special circumstances, and with the consent of the Indian Government, the Indian Army is not to be used outside India itself. The High Command there has never been unaware of the necessity for cavalry, and on this account very few Indian Cavalry regiments have been mechanised.

I have referred already to some of the work accomplished by the First Cavalry Brigade during the Great War in 1918. The German Army of today has not forgotten the lesson our cavalry taught them at such cost to their numbers. When over a year ago I spent a few weeks in Germany I was astonished to find that they had not gone in for wholesale mechanisation on the scale one might have expected from such a completely modern army. On the contrary they had bought many horses from Great Britain and Ireland. I have seen them making great use of these horses for their transport and for some of their light artillery. They may be aware that had they had a cavalry corps to push through the broken lines of the Fifth in March, 1918, they would undoubtedly have captured Amiens, and possibly Paris and the history of the world might have been written differently. But in 1918 they had no cavalry. Owing to our naval blockade they were so short of food that their horses had to be slaughtered to feed the hungry population and without their horses they were unable to take full advantage of their successes in the spring of 1918. I understand now that Germany has not mechanised its cavalry but, that except for two regiments which are entirely mounted on horses, all the other German cavalry regiments are combined mechanised and mounted units in equal proportions.

Most of the Continental Armies have in fact also retained a fair proportion of cavalry. France still has some 40[5] cavalry regiments. Hungary has been one of Ireland's largest customers for horses during recent years.

What will happen to our mechanised armies of the future? Germany could not have foreseen in 1914 that they would be forced to destroy their horses on account of the Blockade. Can we, even with the mastery of the seas to our credit, be absolutely certain that we will always have an adequate supply of petrol? From 1914 to 1918 we had with America for our ally, the undisputed control of the seas of the world—and of the world's supply of petrol. Will fortune favour us equally in the future when our requirements will be far, far greater than they were then? Our own Royal Air Force will be much larger in the next war than it was in the last and the present type of supercharged engine uses three or four times the amount of petrol used in the old war type of engine. Most of our ships are now oil-burners. The mechanised army will require twenty times the amount of petrol we needed in 1918 when we were very short of fuel. Such problems are not likely to have been overlooked by our General Staffs and our Government. One feels they can be relied upon to deal with them effectively. One can only hope that we may never have cause to regret the extensive mechanisation of our army.

In my opinion the ideal army would be one in which all arms were properly balanced. Tanks and armoured cars are very wonderful inventions but they should be used in conjunction with cavalry and infantry and should not be

[5]Of these 40 Cavalry regiments 20 are Metropolitan Regiments, while the other 20 are African Regiments raised in Algeria and Morocco, but many of these African regiments are actually serving in France. These numbers do not include the French Native regiments used in Indo-China, Syria, et cetera.

expected to replace cavalry altogether. There are, as recent events in Palestine have proved, forms of warfare in which nothing can satisfactorily replace the cavalry which is now out of all proportion to other branches of the Service. Its deficiency seems occasionally to be felt. One hopes that some at least of the regiments who were among the first to be dismounted may be given back their horses before it is too late. For horsemen cannot be improvised. To become horsemaster necessitates years of training and only highly trained troops can stand the hardships of campaigning. If in a future conflict the remounting of the dismounted regiments should be deemed advisable, few men would know how to ride the horses restored to them. Chargers would be difficult to procure, since few horses are bred now in England. But these are difficulties that could be surmounted successfully. The old cavalry regiments may have been mechanised but the old spirit still survives.

Change in Membership Dues Voted at Annual Meeting of United States Cavalry Association

The Executive Council of the Cavalry Association on June 10, 1936, in order to encourage membership, authorized the reduction in annual dues to $2.50 per year when five or more individuals forwarded applications for membership or reimbursement of dues as a group.

The above authorization, as originally intended, has found more widespread application in the personnel of the National Guard and the Cavalry Reserve. It served the purpose for which it was intended, and the membership in the Association has been increased by a material figure. After almost three years of trial it has been found that once a membership was enrolled at the reduced rate of $2.50 per year the member has been rebilled at that figure for subsequent years even though his dues were returned individually rather than in a lump sum covering five or more members. Thus, we find that approximately 3/5 of all cavalrymen in the Army of the United States are receiving the JOURNAL at $2.50 per year, while the remaining 2/5 are billed at $3.00 per year. Manifestly there is little equity to all concerned in such a condition.

As far back as 1931 the records of the Association indicate that efforts were made to place dues in the Cavalry Association on the comparable basis of all other service associations. The Cavalry Association for the past several years has been the only one which has carried dues at less than $3.00 per annum. In fact, there are two services whose annual dues are $4.50 per year, and the majority of all others receive $4.00 per year from all subscriptions other than individual. It is believed that The CAVALRY JOURNAL is commensurate in size, contents and makeup with most of the other service journals. It would appear that if other arms and services evaluate their periodicals at $3.00 per year the same should hold for the Cavalry Association.

In accordance with the above reasoning this subject was brought up for discussion at the annual meeting held in Washington on January 16, 1939. Representatives of all three components of the army were emphatic in their indorsement and recommendation of placing dues in the Cavalry Association on the same basis as all other associations. In view of this concensus of opinion, the subject was placed before the meeting of the Executive Council, held immediately after the adjournment of the Annual Meeting. By unanimous vote it was directed that, effective January 17, 1939, dues in the Association and all subscriptions to The CAVALRY JOURNAL shall be confined strictly to the basis of $3.00 per year.

For those members whose annual dues became effective prior to January 17, 1939, and who have received statements for the ensuing year, dues for that period will remain at the same figure at which they were initially billed. However, new subscriptions and membership dues which will become due from that date forward will be billed at $3.00.

CAVALRY OPERATIONS IN SPAIN

By Major E. M. Benitez, Coast Artillery Corps

The echoes of cannon on the battlefields of Europe had scarcely died away when military experts commenced a discussion concerning the aspects of future wars.

Some of the self-appointed commentators maintain that motorization and mechanization have transformed the art of war thus rendering the old principles inapplicable. Others believe that neither tanks, gases nor airplanes will make any material difference because these weapons will be counterbalanced by protective measures. The close students of recent conflicts are willing to accept the tank and the airplane as valuable auxiliaries; but to the man on the ground, the infantry which holds the terrain, they still bow to as the probable deciding factor. "The next war," they say, "may start in the air, but like the last one it will wind up in the mud."

The Spanish Civil War started on July 18, 1936, and since its very beginning has been used as the experimental laboratory wherein new weapons and their tactical employment are given the crucial test of combat. While many lessons have been learned, the special characteristics of this struggle have left unanswered many controversial questions. So the discussions continue.

"Quousque tandem?"[1] is the irritated question of Lieutenant General Marx, German Army, retired, "Are we going to continue this monotony of thought by going back to the World War and continue repeating the eternal song of the 1914-1918 campaign?"

It is well known that cavalry was effectively used by both Allies and Germans during the early days of the World War on the western front and by the Germans, Russians and Austrians on the eastern front; by the Germans during the Rumanian Campaign and by the British in Palestine. However, with two wars now going on, there are many military leaders who rightly believe that it is time to forget the past and discuss new problems under modern conditions.

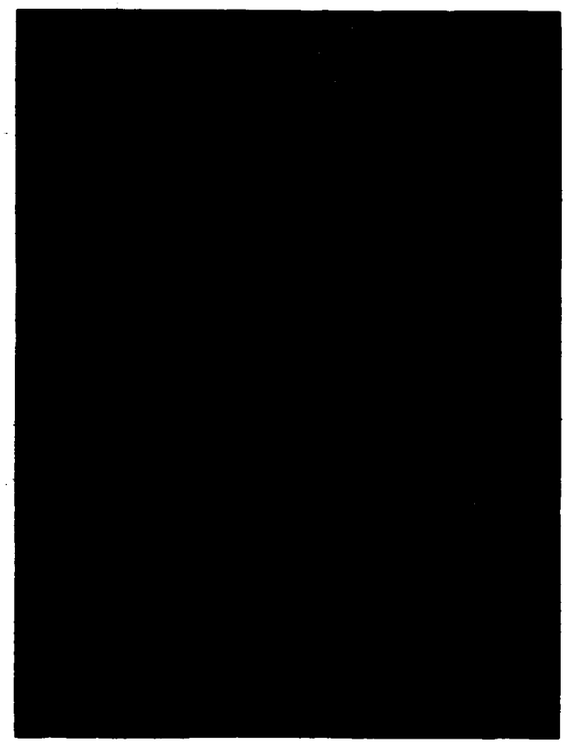
Much has been disclosed concerning airplanes and tanks, but the limited information concerning cavalry has led many officers to believe that this arm has been nonexistent in the Spanish War. In fact, Spain has furnished an excellent example of the important rôle of the cavalry arm in modern warfare.

The Spanish Army underwent some radical changes after the overthrow of the Monarchy in 1931. Before the outbreak of the revolution in 1936, the Spanish cavalry consisted of one cavalry division of three brigades of two regiments each—a total of about 3,800 sabres—two machine-gun squadrons (480 men), one regiment of horse artillery, one rifle cyclist company, one machine gun cyclist company, one company of engineers (sappers), a signal detachment, one service company, one aviation flight (reconnaissance) and various units of the medical and veterinary services. In addition, there was one cavalry squadron with one machine gun section attached to each of the eight organic infantry divisions. The headquarters of the cavalry division was in Madrid, but the division itself was scattered practically all over the eight territorial military areas of Spain. The cavalry in Morocco consisted of two cavalry sections (196 men) plus two cavalry "tabores" of native troops, making a total of approximately 2,000 sabres. These Moroccan troops were all veterans of many campaigns in Northern Africa, and possessed great experience and skill in mountain warfare.

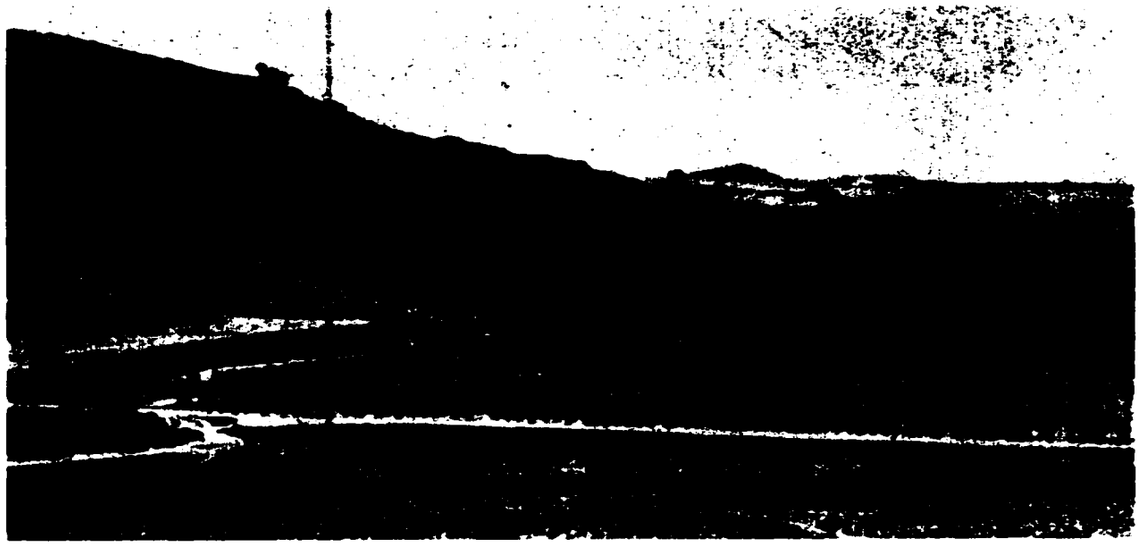
When the Revolution broke out in 1936, over ninety per cent of the regular army officers and a very large majority of the noncommissioned officers joined the Insurgent ranks. Many of these men were transferred to other branches of the service as circumstances required in order to form the skeleton of the Revolutionary Army. The Moroccan squadrons which had followed Franco's cause, were utilized as the nucleus of the Insurgent cavalry force

[1] Until when.

Cavalry in Modern War



General Jose Monasterio
Commanding Insurgent Cavalry Division



Insurgent Cavalry Advancing on the Aragon Front

and with the available cavalrymen that could be gathered together, were organized in October, 1936, into a cavalry brigade under the command of General José Monasterio. Initially it consisted of from five to six cavalry squadrons and one or two batteries of field artillery.

General Monasterio is an old soldier, a veteran who campaigned for years in Morocco, whose main ambition twenty-five years ago was to become an aviator. He gave up aviation after having been seriously injured in an accident near the Madrid airport at Cuatro Vientos, and when he had recovered, he joined the cavalry. He fought side by side with Franco in Morocco and later on became an instructor in the Military Academy at Zaragoza—the West Point of Spain—at the time that Franco was Commandant. He joined the revolution right from the beginning and received a leg wound in one of the first skirmishes of the war. Experienced, brave and resourceful is this leader who was selected to organize the first Insurgent cavalry force, which during the early days of the war had to fight afoot for lack of horses.

Cavalry, reinforced by motorized infantry, machine guns and a battalion of field artillery, participated in the siege of Madrid in 1936, covering effectively the right flank of the Insurgent Army; in the Jarama Valley in 1937, and in the Aragón campaign in Northern Spain, where it rendered valuable service in coöperation with friendly aviation. However, it was not until the Insurgent counteroffensive at Teruel on February 5, 1938, that cavalry proved itself to be invaluable to the Insurgent cause, and thereupon its operations will be followed in detail from that date.

The Battle of Alfambra

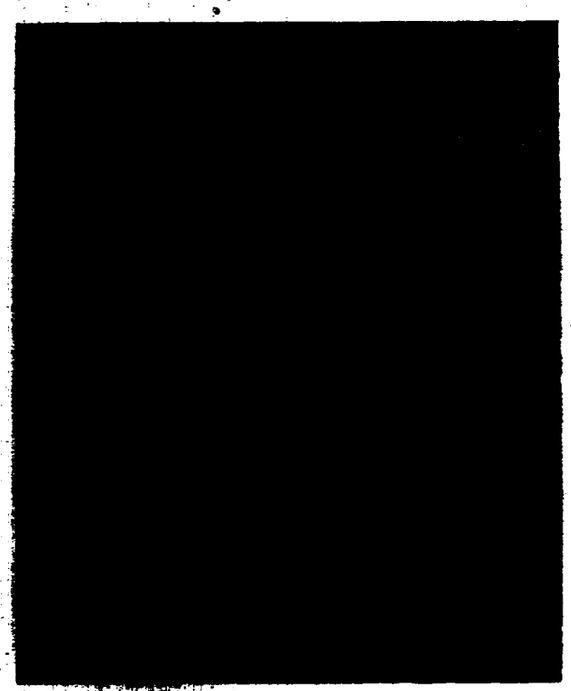
On December 21, 1937, the Government forces caught the Insurgents off guard and launched a surprise offensive capturing Teruel and practically annihilating the weak Insurgent garrison, just at the moment when General Franco was making intensive preparations for a drive to the sea. This operation was hailed by Government Spain as the greatest victory of Loyalist arms in eighteen months of war and was believed, at that time, to have marked the turning tide of the civil war.

The city of Teruel, capital of the province of the same name, with a population of 9,600 had been in Franco's possession since the beginning of the war. It is situated at the junction of two river valleys, formed by the confluence of the Guadalaviar and the Alfambra rivers and is about sixty miles northwest of Valencia. Teruel has been called the "City of Rock," because its location makes it a natural fortress built on a mountain shelf, protected on the south and southwest by a deep ravine which is traversed by an aqueduct, and on the southeast by the Guadalaviar River. This old and picturesque city was once destroyed by the Roman Legions in reprisal, to punish Hannibal for the wiping out of Sargento (Sargentum).

Teruel itself was of no great military importance or strategic value to General Franco; but, in view of the heavy Government concentration in that sector, the Insurgent command decided to recapture the city at all costs and thus accept the apparent challenge for a real test of strength.

The Insurgent High Command calls the scheme of maneuver employed at the Alfambra the "Bolsa" or pocket maneuver. It is simply a penetration, with a force engaging the enemy's attention with a vigorous frontal attack, while two other forces work around each end of the enemy's position to meet behind the hostile lines and close the mouth of the "pocket" or salient.

This battle is an almost exact replica of the St. Mihiel offensive with the difference that at St. Mihiel the heaviest



The government artillery scores a direct hit on the besieged seminary, Teruel, Spain

blow came from the south while at Alfambra the main drive was launched from the north.

The operations were carefully planned and well conducted, in fact, it was considered as "the most perfectly conceived and most brilliantly executed battle of the Civil War up to that time," by no less an authority than General Weygand, Foch's famous Chief of Staff during the World War. "For the first time," he says, "have I seen something that reminds me of the Great War. The concentration, disposition, advance, and maneuvering tactics were perfect. The Insurgent offensive in Northern Spain suffers by comparison, because the Government forces at that time lacked training and equipmet. On the other hand, the Government divisions at Montalbán and Teruel were well provided with modern equipment, had plenty of artillery, machine guns and munitions, while foreign advisers had whipped the Government militia into well disciplined units, reinforced by brave International Brigades."

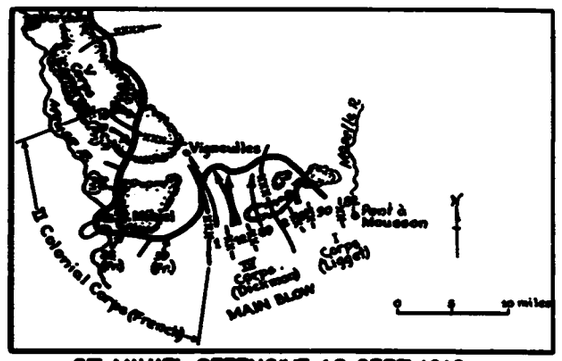
The Insurgent Headquarters' official account of the Teruel counteroffensive mentions that "a spectacular part was played by Monasterio's cavalry which contributed greatly to the victory by the speed and decision of its movements."

The first attempt to recover Teruel early in January took the Insurgents to the edge of the town, but arctic weather then brought operations to a standstill. In the middle of January, the Insurgents broadened their front near Teruel and captured El Muletón Hill, about four miles north of the town. Unfavorable weather continued throughout January, almost completely paralyzing military operations.

The battle of the Alfambra opened at dawn on February 5th. At that time the front lines, as indicated on the map, extended along the general line: Vivel del Rio—Singra—thence parallel to the Zaragoza—Teruel highway—Celadas heights—Muletón Hill—thence southwest. The key to this position was the strategically important Palomera mountain range, which dominates the mountainous country to the east and the main Teruel—Zaragoza highway to the west. The position had been greatly strengthened with pill boxes and machine gun nests making it practically a field fortress; it had however, the characteristic weakness of almost all salients in that it could be attacked from both flanks in converging operations.

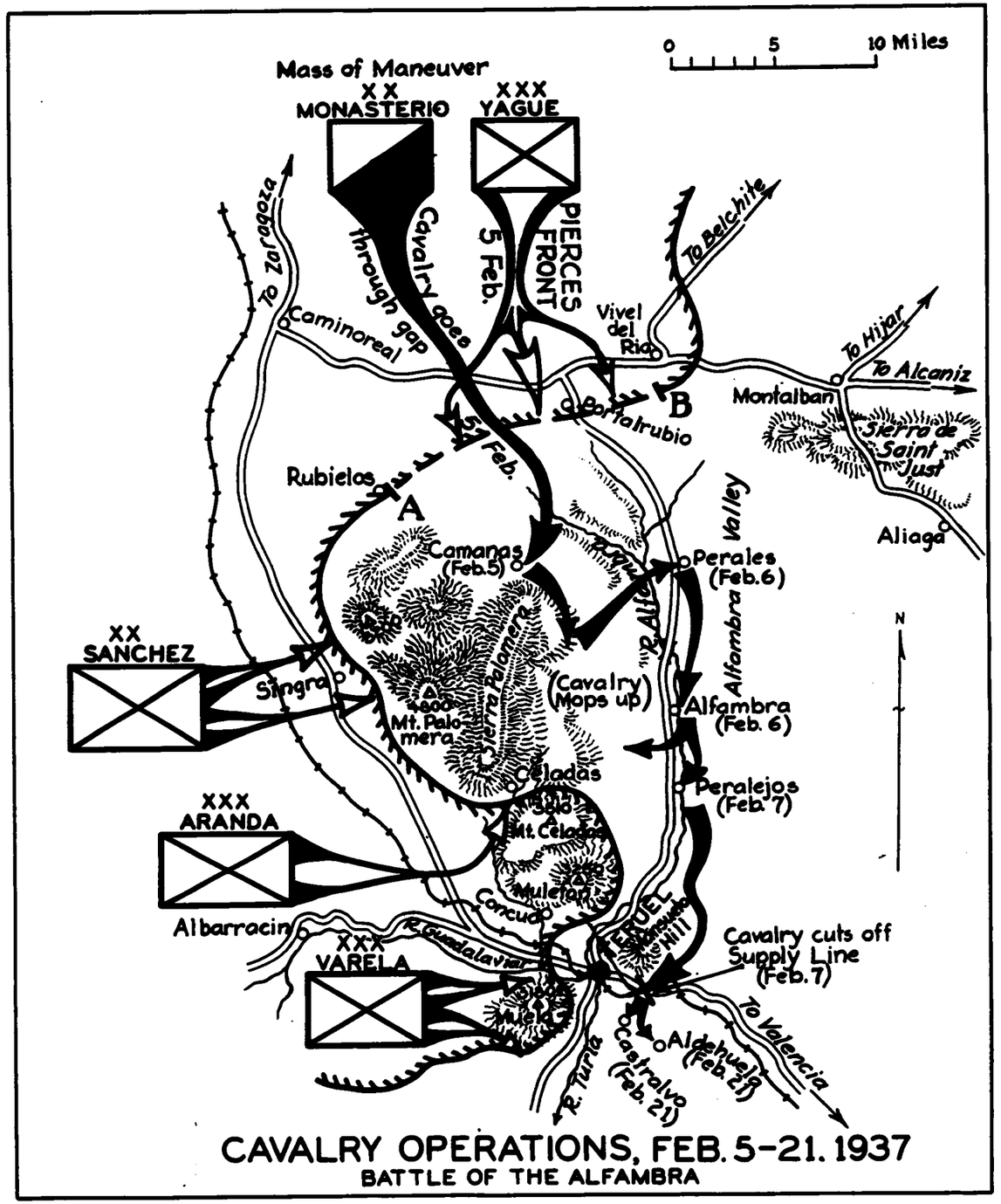
On February 5th, the Insurgents made a feint at Montalbán and then launched a vigorous attack on a front of some twenty-seven miles, extending from Portalrubio to Celadas, with Sánchez Division making the frontal attack from the vicinity of Cindra and the Corps of Yagüe and Aranda striking at the shoulders of the salient. Further south, Varela's Corps was pinning down the Government forces southwest of Teruel. All these Insurgent units were under the supreme command of General Fidel Dávila, newly appointed Insurgent Minister of Defense.

The attack was preceded by an artillery and an aerial preparation unparalleled in intensity in the Spanish War. Four hostile points were subjected to a devastating fire; Vivel del Rio, Portalrubio, Rubielos and Celadas, and by noon the main fortifications on the fronts of the main effort had been destroyed. Then the shock troops advance, tanks leading, in coördination with the infantry, artillery and aviation. Wave after wave of fresh troops advanced under cover of an artillery barrage, comparable to a World War effort. The Government lines gave way. On the north, Yagüe's Corps composed of crack Moroccan and Foreign Legion troops captured the villages of Rubielos, Cervera del Rincón, and Portalrubio, piercing the front at A—B as shown on the map. Through this gap came, with lightning-like speed, the *mass of maneuver*—Monasterio's Cavalry Division—which up to this time had



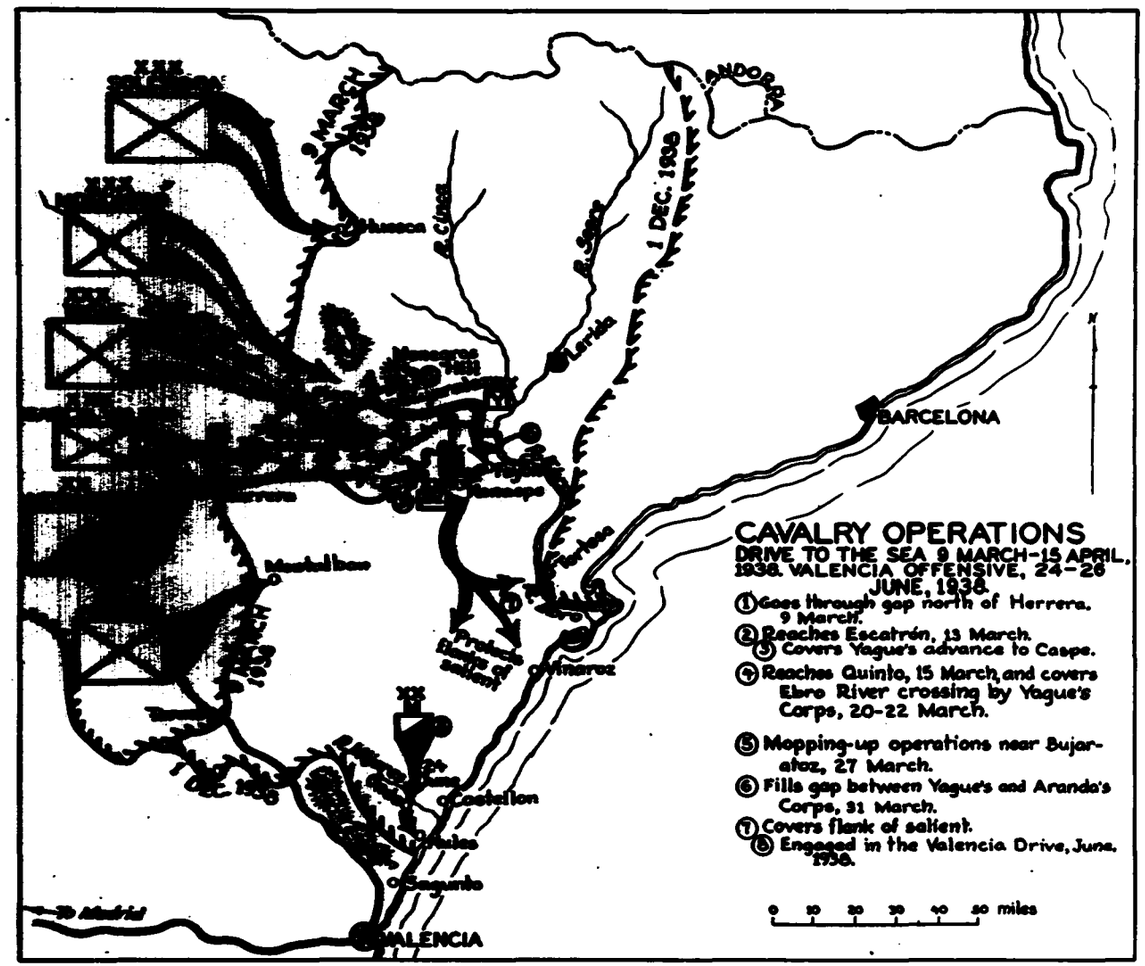
ST. MIHIEL OFFENSIVE 12 SEPT 1918
PLAN OF ATTACK OF FIRST ARMY

Map 1



Map 2

been carefully held in reserve. This cavalry command cut diagonally across the hostile position, reached the rear of the Government forces and captured the town of Camanas, routing the partially formed enemy reserves. The sudden appearance of the cavalry behind Sierra Palomera caused the evacuation of this key position, where two enemy brigades surrendered and two battalions which tried to escape were almost completely annihilated. Then, while Aranda's



Map 3

Corps driving northeast and Yagüe's Corps advancing south and southeast were executing the converging movement, the cavalry captured the towns of Perales and Alfambra to the east and then made a wide turning movement to the south driving enemy detachments from the Alfambra River Valley. Sweeping down on the east side of the Alfambra River, the Cavalry Division reached, on the third day of the battle (February 7th) the Teruel—Sagunto highway and railway about one mile west of the city, cutting off the main supply link of Teruel. In addition to inflicting heavy casualties, Monasterio's Cavalry Division captured several thousand prisoners, among them several units of the Campesino Brigades.* Throughout the three day engagement, the cavalry was particularly valuable in isolating detachments that were trying to join the retreating main bodies and in intercepting supplies intended for the Government forces.

By February 10th, the Insurgent forces had crossed the Alfambra River and three days later the three Insurgent corps joined forces on the Teruel—Sagunto highway, at the milestone, exactly two kilometers (1.2 miles) west of Teruel. Monasterio's Cavalry immediately advanced south, capturing the villages of Castralvo and Aldehuela, cutting off the retreat of the Government forces and assisted in forcing the surrender of Teruel, which occurred on the following day.

The rôle that cavalry played in this battle has been described by General Yagüe, Commander of the Moroccan Corps, in the following terms: "A large share of the credit for the success of this operation should go to Monasterio's Cavalry veterans, who demonstrated so well their efficiency in mountain fighting during our northern campaign and who have again repudiated the doubts some military authorities hold regarding cavalry's usefulness in modern warfare."

The Drive to the Sea

On March 9th, General Franco launched his overwhelming, spectacular offensive which with marked rapidity struck hard, swift blows on the 125-mile front extending roughly from Teruel to Huesca and on to the French frontier.

For this operation, France massed a total of 250,000 men organized into five army corps and Monasterio's Cavalry Division, with the operations of which we are largely concerned. This cavalry division had been completely reorganized after the battle of the Alfambra and now included motorized infantry and detachments of armored cars and tanks.

On March 9th, the 5th Navarrese Division broke through the enemy front near Herrera. Monasterio's Cavalry Division went through this gap, cutting off lines of communications and harassing the hostile forces in flank and rear. On March 11, it was officially commended for its "rapid and masterly advance" which had caused considerable disorder and confusion to the retreating enemy.

Continuing its advance to the east, the cavalry division reached Escatron on the 13th, advancing 60 miles in five days and capturing many prisoners and quantities of war materials, besides clearing the way for the advance of Yagüe's Corps which reached Caspe on the 15th. Its present mission was to protect the left (north) flank of Yagüe's Corps and to cover the preparations and crossings of the Ebro River by this corps at Quinto and Gelsa. The Moroccan Corps started its crossing on the morning of the 23d and by the 25th the entire corps had crossed the Ebro, a swift flowing river, which swollen by melting snows was at no place less than three hundred feet in width. Yagüe immediately advanced on Bujaraloz to cut off the Zaragoza—Lerida highway. This turning movement compelled the withdrawal of Government forces east of Zaragoza. The cavalry, forming the advance guard of Yagüe's Corps captured the town of Pina and seized many prisoners. A few days later, the cavalry was used to mop up the Monegros Hills in vicinity of Bujaraloz.

On March 27th, Yagüe's Corps made contact with the fortified line along the Cinca River, protecting the city of Lerida. This river flows in a gigantic ditch between parallel lines of steep hills. All bridges had been destroyed. Upon crossing the Cinca, a gap was created between Yagüe's Corps north of the Ebro and that of Garcia Valino on the south, in a wide bend of the Ebro River. General Yagüe immediately decided to plug this hole with cavalry. Monasterio's Division successfully accomplished this mission establishing contact with Garcia Valino's forces, and captured the villages of Fayon, Nonaspe and the surrounding heights.

On April 15th, the 4th Division of Navarre of Aranda's Corps, under General Camilo Alonso Voga, aided by flanking Moorish Cavalry, cracked the Government lines wide open sending the Government forces reeling north and south in full retreat, reaching the seacoast at Vinaroz. The Cavalry Division was then called upon to fill a salient of about 500 square miles, which it was able to accomplish because of its mobility.

On June 24, 1938, Garcia Valino's Corps shattered the Government lines in the vicinity of Onda. Monasterio's Cavalry went through this gap, then wheeled to the southeast in the direction of Nules, cutting off the enemy's retreat. Nules was captured on July 9th.

In general, Insurgent cavalry has proved extremely useful for the work of mopping up isolated enemy forces, particularly in the Alfambra Valley and the Ebro River drives, where isolated Government detachments were holding out in mountainous country in the wake of the advance.

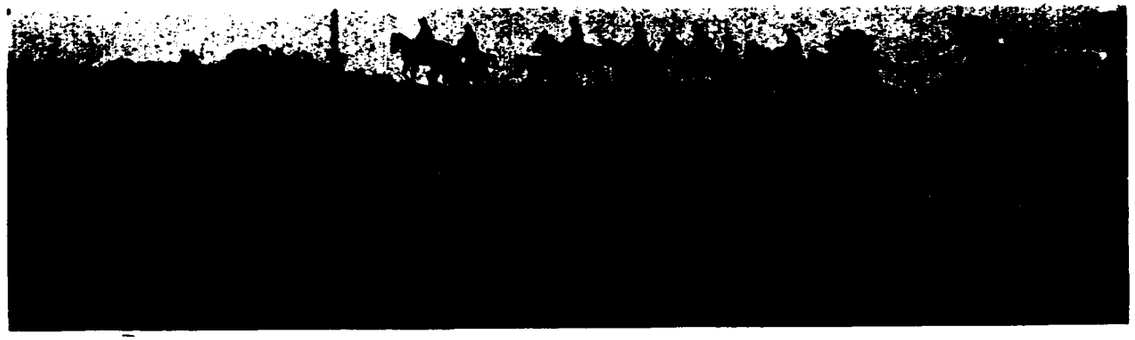
It is reported that the Government forces have some cavalry, but it seems to lack effective organization. This can be easily explained by the fact that practically all the trained personnel joined the revolution at the outbreak of the war.

Armies are created and organized to suit the special problems that confront each nation. Any discussion as to the effectiveness and merits of any one particular arm must be based upon the conditions in the theatre of operations. In a mountainous terrain, with very few good roads available as the present conditions in Spain, unquestionably horse cavalry can render services which no other arm can perform so effectively.

In Europe today, England, France and Germany have reduced their horse cavalry and replaced many units with independent motorized and mechanized units. On the

(Continued on page 30)

*Loyal Government troops organized by the Government leader, known as "El Campesino" (The Peasant).



Squadron of Insurgent Cavalry on a Reconnaissance Mission, Valencia front

Wounded Knee: A Look at the Record

By Brigadier General E. D. Scott, Retired

Editor's Note: The montage appearing on the opposite page, made up from items published in the press some months ago casts reflection upon the army—an army which, in reality, led and protected the nation's advance westward. To impugn motives to an organization, committed always to the preservation of American life and property, particularly forty years after the event, appears a thankless attitude towards those men in the service who bore, in great part, the brunt of American pioneering. In this article appears a list of eighteen individuals upon whom Congress saw fit to bestow the nation's highest award, a Congressional Medal of Honor for their conduct at Wounded Knee. It is believed that this article by General Scott covers adequately and impartially the facts pertaining to this subject. The CAVALRY JOURNAL is pleased to present concurrently with *The Field Artillery Journal* the results of General Scott's research.

Prior to the Civil War the territory of the great Sioux nation extended from the Platte to the Canadian border, and from the Mississippi on the east to the Rocky Mountains on the west. Settlers poured into the eastern part of this region; a bloody war broke out which ended in the Indians being driven to the west of the Missouri.

The Union Pacific built along the southern border of their lands; gold and silver was found in what is now southern Montana, and the nearest route thereto lay across the Sioux country from the railroad settlements in what is now Wyoming. The miners and settlers took that route; the Indians resented the encroachment, and the '50's and '60's were marked by more than fifty hostile demonstrations and armed clashes.

In 1868 a new treaty was entered into with the Sioux, replacing that of 1851 which had fixed their limits as above described, and this moved their western limit to the east of the Big Horn Mountains, thus clearing the routes to Montana. It also guaranteed to the Sioux the country east of the Big Horns as a hunting country in perpetuity. But gold was discovered in the Black Hills and 1874 and 1875 saw another rush of settlers into the heart of the Sioux country that the Government seemed unable to prevent. In 1876 a great part of the Sioux went on the warpath, the trouble culminating in the slaughter of most of the 7th Cavalry in the Battle of the Little Big Horn, in Montana. Another treaty limited the Sioux to what is now South Dakota west of the Mississippi, and ceded to the Government the major part of the Black Hills region, which was then formally opened to settlers.

In 1887 another treaty threw open to settlement the whole region between the Big Cheyenne and White Rivers, and north of the Black Hills to the North Dakota line, reducing the Indian country by half. This was more generally resented by the Indians than anything that had gone before. It not only took away their best lands, but split them in two groups separated by sixty miles of white man's land. Moreover, it was never admitted that the Indians who participated in making this treaty had authority to do so from the tribes. The Indians were slow to vacate their lands, the settlers cautious about moving in to occupy them.

The wholesale reductions of the Indians' lands were no doubt an injustice to them and occasioned many hardships. But there is another side to the picture. The day of the buffalo was over; deer, elk, and antelope were few. In other words, meat, the principal diet of the Indians, could no longer be had by hunting. And with the game went the materials for clothing, bedding, tepees. These needs would have to be met by farming and stock raising, and the lands still left were vastly more than necessary for the purpose. The Government had not been slow to recognize that the Indian must be trained to be self-supporting under a new habit of life, and the later treaties had provided for the sustenance of the Indians while they were becoming adjusted. The policy of aid was very comprehensive; lands were allotted, brood cattle, horses, and sheep supplied, farming machinery, seed grain, and the like. Farmer instructors were scattered about freely. That the policy had in time a measurable success is shown by the fact that in 1910 half the Indians in South Dakota were taxpayers.

But the transition period was a hard one. The agencies were few and far between and the Indian bands were widely scattered. In a quite eloquent statement of grievances a chief said that ninety miles was too far to go for rations. One must agree with him! Issues of clothing and bedding were quite inadequate for the climate. The Sioux actually had a farmer tradition—vegetables and corn—but that was in their old home of Minnesota and eastern Dakota, not on the 3,000-foot tableland they now occupied.

But their principal grievance was in connection with rations. Beef was supplied on the hoof; the Indians were wasteful; the days after issue were days of feasting followed by famine before the next issue. Sometimes beeves were issued to carry over for the winter; a 1,000-pound beef in November became a 600-pound beef by February—if he lived that long. The entrails of animals were always a dainty to the Indian palate, but the thought of it was repugnant to some of the authorities in Washington—a formal order was issued forbidding their use as food, and directing that they be destroyed by fire. The agents and their Indian Police did what they could to enforce what must have seemed to their charges the most whimsical of requirements. There was plenty of opportunity for profiteering agents, contractors, and traders, and no doubt that it existed, the Indian being the loser. The Government sought to insure justice to the Indians by having an Army officer present to witness issues, in each case to make written report. Some of them are remarkable indictments of conditions; few are indictments. Some state (1890), that the issue witnessed amounted to about half that of the Army ration. The years 1889 and 1890 were very dry and crops failed in consequence. But late in the fall of the latter year, the Congress had failed to make the allotment of funds for feeding the Indians that should have been available on July 1st. That meant months of semi-starvation and the Indians could hardly be blamed for eating cattle and farm stock—or even for helping themselves to a few from the settlers herds. That second summer of drought and suffering must have built up in Indian psychology a condition fertile for trouble—just such a condition as found expression in the French Revolution.

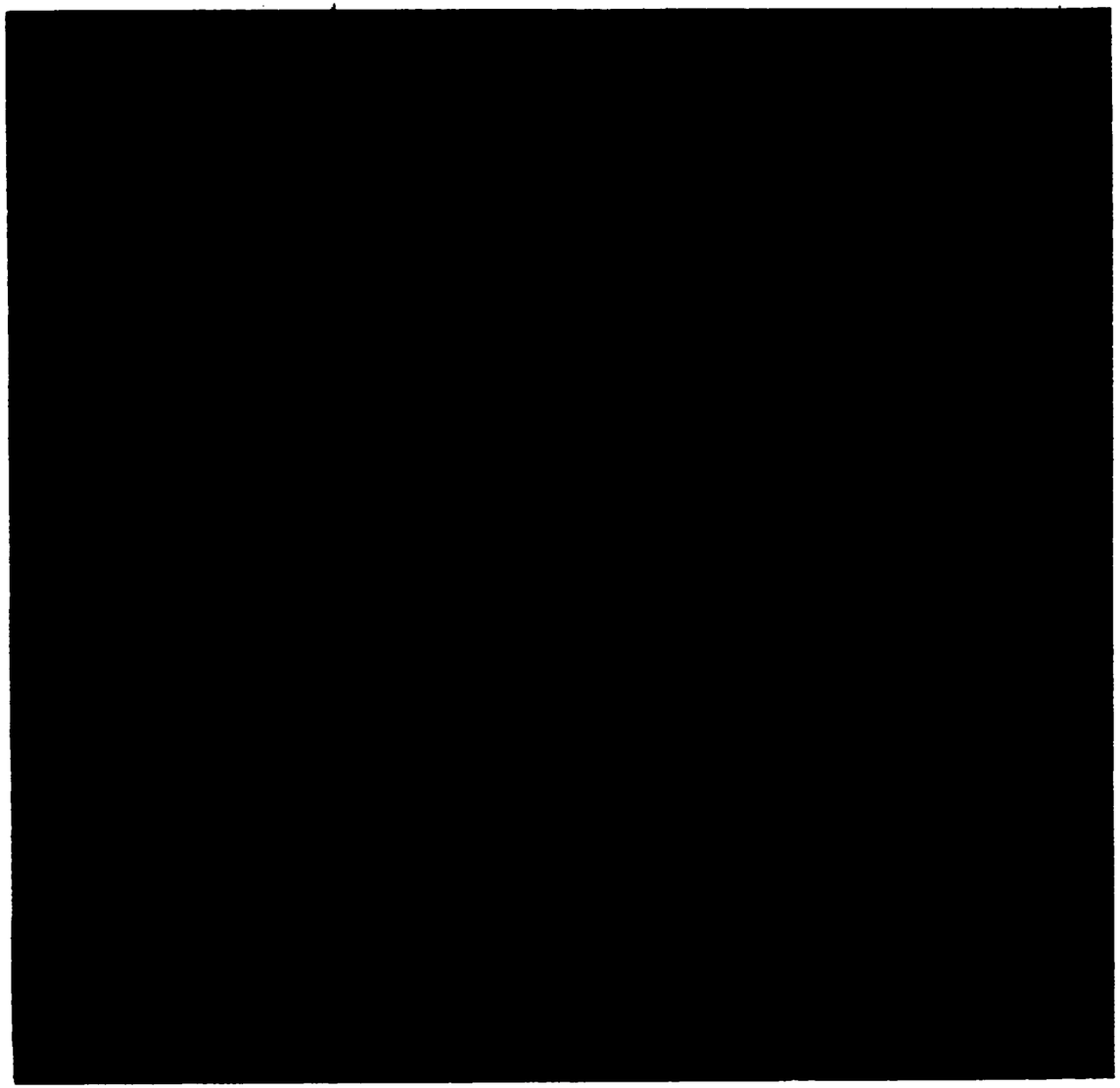
The missionaries had long been active among the Indians and doubtless the latter had discussed at length the Messiah who came to earth to bring peace and goodwill to all men—friend of the poor and downtrodden. And then, out in the Rockies, there arose a Medicine Man, one of their own race, who proclaimed the coming of an Indian Messiah who would send the white man back whence he came, and restore the buffalo to the range and the Indians to their ancestral homes and customs. The news spread to the east and the idea took hold on the Indian imagination. Dancing was a form of worship common to all Indians—as to primitive peoples the world over—and a new dance was devised to honor the new Messiah. It was called by the whites, "The Ghost Dance." Its practice spread all over the Sioux country and caused grave apprehension to the authorities. All Indian dances are religious and for a purpose—to bring rain, to cure an epidemic, to insure good crops, to insure successful war, and so on. And every Indian has his mind on the object of the dance—quite obsessed by it, he may dance till he drops. But before that he may develop a spiritual exaltation that renders him dangerous should anyone slip him the idea of a short cut to the objective by sudden and violent action against some person or persons. Herein lay the danger, and the authorities sought to thwart it by forbidding the dance. Of course the order could not be enforced, except in the vicinity of the Agencies, where the Indian Police had some authority. It was ignored by the bands scattered over an immense territory. Some Indian agents and Army officers thought and said that the craze would soon wear itself out, but they were a minority.

* * *

On October 29, 1890, Mr. P. P. Palmer, Indian Agent at the Cheyenne River Agency, reported to the Indian Bureau on the activities of two minor chiefs, Big Foot and Hump, and again on November 10. Both reports were to the effect that these Indians were selling their cattle and buying Winchesters and ammunition with the proceeds, were doing much Ghost dancing, and that his police were powerless. Later the agent at Pine Ridge Agency, Mr. Royer, made a similar report as to his Indians, saying they "are dancing in the snow," and asked military assistance. About November 2 a petition signed by 102 Sioux Indians, setting forth their grievances, was forwarded to the "Great White Father." And from then on the wires to Washington were hot with alarming reports.

General Nelson A. Miles was then in command of the Division of the Missouri, his headquarters at Chicago. The Division comprised the Department of the Dakotas (General Ruger) at St. Paul, and the Department of the Platte (General Brooke) at Omaha. The latter comprised the Sioux country.

The Pine Ridge Indian Agency was, and is, about 20

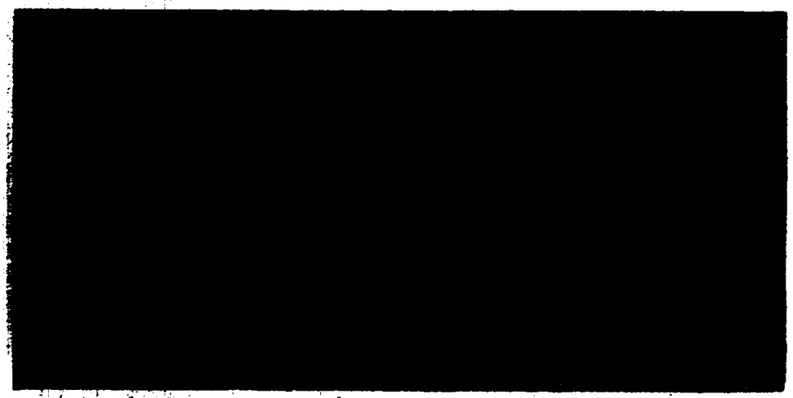


Correct Scale: One inch = 137.5 yards, approximately.

The line of tents closest to the "Council" was that of the Indian scouts. Between it and the Cavalry Camp proper was the initial position of Troops B and K, respectively from left to right, and in line abreast.

The line of dots indicating "⅔ A and I Troops Dismounted" actually did not extend as far to the west as shown, during the engagement, although it may have done so when posted the night before. Lt. Garlington's report shows his part of the line was close to the west edge of the camp, for his troopers made an effort to prevent the Indian women from preparing for the road by throwing off saddles and packs they had made up.

miles north of Rushville, Nebraska. It is a few miles north of the southern line of South Dakota. About 90 miles east by northeast is the Rosebud Indian Agency. Each is the administrative seat of a large reservation of the same name, which were the principal scenes of the Indian troubles of 1890. Pine Ridge Reservation has an average elevation of 3,000 feet above sea level. Its main topographical feature is an east-west ridge from 3,000 to 3,500 feet elevation along its center, from which several small streams flow north, northwest, and west into the White River. The latter rises in Nebraska, flows north about 40 miles west of Pine Ridge Agency, and northeast and east to the Missouri. It is a considerable stream with occasional practicable crossings. West of it are the Bad Lands, thirty miles from east to west, more than a hundred from south to north. At their western base is the south fork of the



The Wounded Knee Battlefield

Cheyenne, roughly paralleling the White. Beyond that, its rugged country rises gradually into the Black Hills.

The Bad Lands were the nearest and about the only refuge for disaffected or criminal Indians, and the policy of the Government was to keep all Indians east of the White River, where movements could be easily watched. Pursuit of Indians in the Bad Lands was unlikely to be successful. The country is exceedingly rugged.

The reservation terrain is in general rolling, with many sharp ridges running with scrub pine on the ridges and brush in the draws. The streams are generally small, with good fordings and soft banks, passable only in places. Roads were mostly dim trails, following the lines of least resistance.

When disaffection began in the fall of 1890 troops were disposed with a view to protecting the agencies and preventing the Indians leaving their reservations. Reinforcements were sent from other Departments; Nebraska and South Dakota placed their militia where they could best prevent their reservations. Among the reinforcements were the 7th Cavalry (less 4 troops), and Light Battery E, 1st Artillery. These arrived by rail at Rushville, and on the night of November 25-26 marched to Pine Ridge Agency, where part of the 9th Cavalry and 2nd Infantry had preceded them.

Early in December the battery received six 1.65-inch Hotchkiss guns (2-pounders) with packs, mules, etc., and under the direction of Lt. Harry L. Hawthorne, quickly prepared itself for service with the cavalry.

On December 14 an attempt to arrest Sitting Bull near Standing Rock Agency on the Missouri resulted in a fight in which he was killed with several of his followers and an equal number of Indian Police. One of his followers, the Big Foot referred to above, immediately moved away from there, with his band, dog and baggage. Hump's band joined him. He was located about December 22, and surrendered to General Summer. But that night he quietly slipped away again. It was believed that he was heading for the Bad Lands. The 9th Cavalry and one platoon of Battery E, 1st Artillery (Lt. John L. Hayden) was sent from Pine Ridge Agency to the mouth of the Wounded Knee Creek to watch the crossings of the White River, and Major Whitside, 7th Cavalry, was sent with Troops A, B, I, and K, one platoon of Battery E, 1st Artillery (Lt. Harry L. Hawthorne) and Troop A, Indian Scouts, to the crossing of Wounded Knee Creek about fourteen miles northeast of Pine Ridge Agency. He established camp with heavy tentage a few hundred yards south of the crossing, and sent Indian scouts to search the country to the north and east.

On December 28 this detachment was sitting about waiting for dinner when an Indian scout, Little Bat, came in with the information that Big Foot's band was on the march west, on the Porcupine Creek, off to the northeast. The command mounted and marched at once. A rapid march of about seven miles brought the band into view. Its wagon and pack train halted at once, the warriors formed line and moved towards the troops as though to attack. Their advance was at a walk, as half the Indians were on foot, alternating in the line with the mounted ones.

Major Whitside dismounted and formed line on a low crest. Lt. Hawthorne wished to place his guns on a knoll nearby whence he could command the cavalry position, the approaching Indians, and their trains, but he was overruled; Major Whitside required him to place them in front of the center of his line of cavalrymen.

When the Indians had come within hailing distance, Major Whitside went forward a little with another officer and an interpreter. The Indian line halted and several approached the Major, one of them stating he was Big Foot's representative. The Major refused to deal with a representative, and insisted on Big Foot appearing. It seems that warrior was sick and in a wagon. He was brought, and in answer to the Major's demand as to whether he meant war or surrender, he said the latter. Meantime a party of mounted Indians started around the flank of the cavalry, and the Major demanded that he recall them, which he did. More talk ensued as to the arrangements for the march back, and Big Foot sent for his trains. While they were coming up some of the Indians left their line and crowded around the guns—something new in their experience, and with which they seemed delighted. Perhaps those guns had something to do with the friendly and reasonable spirit displayed. But the Indians were probably quite willing to be captured—they were without food of any sort, and a fight with superior numbers of soldiers did not promise to secure any.

Indians on the reservations habitually wore ordinary civilian clothing; these Indians were stripped to breech clouts and leggins, were painted, and carried Winchester rifles with plenty of ammunition. Major Whitside would have liked to disarm them on the spot but this might have brought on a fight. He did well to induce the Indians to march back with him to his camp on Wounded Knee.

The march was uneventful. Indian scouts and part of the cavalry led, the Indians with their trains followed, the rest of the cavalry and guns brought up the rear. The Indians seemed in high good humor, talked and laughed, smoked cigarettes. They were assigned an area near the cavalry camp, counted—120 men, 230 women and children—rations were issued to them, and they proceeded to settle down in camp. They had few of the conventional tepees; most of their shelter was in the form of wickiups, a few light stakes covered with brush or pieces of old canvas. The area, as shown on the maps made at the time. was kidney-shaped, about 200 yards long and 100 wide. It must have been very crowded. They turned their ponies about 150 in number, loose to the west, but they were held in a herd by a military guard during the night. The Indians said they did not have enough shelter, and some Sibley tents were given them, but when the camp was searched the following morning there was no indication that they had been used. A wall tent was set up ot the end of the line of Scouts' tents for Big Foot, who was really sick with pneumonia. The surgeon, John van R. Hoff, gave him professional services in the night and the following morning.

Major Whitside had sent word from the scene of the surrender to Colonel Forsythe, commanding the 7th Cavalry, at Pine Ridge Agency, and that officer marched with the remainder of his command, Troops C, D, E, and G, and the remainder of Light Battery E, 1st Artillery, to the camp. The approach was made after dark and in such manner as not to advise or alarm the Indians. Between nine and midnight the operation was completed. Captain Capron had his battery together on a small knoll only 200 yards from the center of the camp area, and overlooking it.

Captain Myles Moylan, Troop A, was charged with the guard of the Indians, Troop I being added to his command. He established a line of sentinel posts, twenty in all, along the east, west, and south sides of the Indian camp area. The posts on the south side were across the ravine that limited the area in that direction. There was constant patrolling of the line during the night, and in the early morning the posts were reënforced by the men of the other reliefs. Security on the north side was provided by the camp and pocket-line guards.

There had been no snow that winter; the weather had been still and cold, but clear; the moon was at the full on December 25. The sky may have been overcast, but even then visibility would have been good for some distance, making the guard duty relatively easy.

Wounded Knee Creek, at the scene of the battle, is small, and at the time had ice an inch thick. Its direction is northwesterly. The principal trail or road from Pine Ridge Agency to Rosebud comes in from the southwest, crossing it, and then takes a more easterly direction. Near the crossing stood the trader's store, post office, and a few other buildings, and about 300 yards downstream, the church. A road passing the latter continues to the mouth of the stream. About 300 yards south of the crossing "Fast Horse Road" comes into the Agency road from the northwest. The Agency road divides a short distance south of this junction, descends by coulees into a ravine and out again, reuniting on the other side.

Between the Agency road and the stream the terrain is flat and not very high above the level of the latter. West of the road the terrain rises quickly into ridges and spurs from the ridge two to three miles west that is the divide between the Wounded Knee and the White Clay creeks. The ravine above referred to heads about two miles west of the road, runs almost due east, has numerous lateral branches, especially on the north side, and all contained much brush and scrub trees. A characteristic of the prairie coulee or ravines is their sudden beginning by a vertical drop of one or several feet, directly from the prairie. Such places were made-to-order rifle pits, and were so used by the Indians.

The creek itself had a border of fair-sized trees and brush; and hills in general carried a thinly scattered growth of scrub pine and cedar.

The ravine figured so prominently in the events of December 29, in all testimony relating thereto, and in all tales told, that it will be simply referred to in this narra-

Awards of the

CONGRESSIONAL MEDAL OF HONOR

for acts performed at

WOUNDED KNEE CREEK

December 29, 1890

William G. Austin, sergeant, Cavalry
John E. Clancy, musician, Artillery
Mosheim Feaster, private, Cavalry
Ernest A. Garlington, 1st Lt., Artillery
John C. Gresham, 1st Lt., Cavalry
Matther H. Hamilton, private, Cavalry
Joshua B. Hertzog, private, Artillery
Harry L. Hawthorne, 2nd Lt., Artillery
Marvin C. Hillock, private, Cavalry
George Hobday, private, Cavalry
George Loyd, sergeant, Cavalry
Albert W. McMillan, sergeant, Cavalry
Thomas Sullivan, private, Cavalry
Frederick E. Toy, 1st sergeant, Cavalry
Jacob Trautman, 1st sergeant, Cavalry
James Ward, sergeant, Cavalry
Paul H. Weinert, corporal, Artillery
Herman Ziegner, private, Cavalry

tive as "the ravine"—no chance of mistaken identity.

The plan for the disarmament was to assemble the bucks in the open space—scarcely a hundred yards square—between their camp and that of the cavalry, and there induce them to give up their arms peaceably. To convince them of the futility of any resistance, Troops B and K were formed up dismounted across the north side of the space; Troop G was formed up mounted, east of the space and little more than a hundred yards from it; on the south the sentinel line was in position across the ravine, with Troop A, Indian Scouts, in line, mounted, behind them, and Troops C and D still farther back, in line, mounted. West of the Indian camp the sentinel line was still in position, while about two hundred yards to the northwest, on a small knoll, the four guns of Capron's battery were in position, flanked by Troop E, mounted, on the right and one-third of Troops A and I on the left, also mounted.

All of these troops were in full view from the Indian camp, and within three hundred yards. What the Indians thought of it all will never be known; perhaps among them were some bright enough to see that if trouble started a breakthrough was not wholly impossible, fear of killing comrades across the circle might make the fire of the soldiers desultory and ineffective. Certainly the squaws worked hard and persistently up to the time the firing began, to saddle the ponies and load the pack ponies, travois and wagons—they expected to go somewhere, and soon.

The men of the guard were in a very precarious position should any fighting begin, and this was reflected in their losses: Troop A, five killed and five wounded; Troop I, four killed and six wounded.

Paralleling the south side of the cavalry camp was a line of Sibleys, the camp of Troop A, Indian Scouts. At the west end of this was the wall tent, erected by the troops for the use of Big Foot.

Just south of this tent Colonel Forsythe, Major Whitside and one or two others gathered, with two interpreters. The Indians, all in sheets or blankets, came from their camp and formed an irregular quarter-circle before them, facing east and north. The bucks so assembled numbered 106. The missing 14 were probably in camp, and would account for the firing there during and after the melee. They could hardly have escaped through the cordon of sentinels during the night. This was about eight o'clock on the morning of December 29, 1890.

Colonel Forsythe talked to the Indians at some length, through an interpreter, explaining to them that they must surrender their arms. They talked this over among themselves but appeared to arrive at no decision. At last twenty were called off to go into the camp and bring their arms. Some went part way but circled back and mingled with the crowd; most of them went to the camp, returning with two broken carbines, and said these were all the arms they had. They could not have been under the impression that only Government arms were meant, for more carbines were found in the camp when it was searched.

Colonel Forsythe and Major Whitside talked the situation over, decided nothing could be accomplished this way, and had Big Foot brought out of his tent to talk to his people. He was supported by an Indian and the hospital steward. Big Foot talked with his bucks and finally stated that they had no arms, that the latter had been destroyed on the Cheyenne, where they had been some days before. This was an astonishing statement in view of the fact that the whole band had marched into camp fully armed the evening before. The Chief was very sick; his mind may have been wandering; his bucks were obdurate and perhaps thinking of his leadership as being about at an end anyway—any answer was good enough.

Bucks were constantly passing between the council and the camp and seemed to be exciting the squaws, which may have had some connection with their efforts to get the pony herd ready for the road. It was decided to stop this circulation and to search the camp. Troop B deployed from its right on a line facing east and about half-way between the Indians and their camp; Troop K passed to the east of the gathering and deployed on the south in similar position, facing north. The men were at intervals of two yards, and there was a gap of about twenty yards between the troops. Curiously, Surgeon John van R. Hoff gave the only detailed description of this movement, and he noted that in Troop K there was an "involuntary" closing in to the left, but the men on the right maintained the frontage with wider intervals.

Captain Wallace (K) took six or eight men and began at the southeast end to search the camp; Captain Varnum (B) took a similar party and began to search from the north end. The squaws did all they could to hide weapons—in their clothing, under them as they sat on the ground; one was too sick to move, but a new Winchester was taken from under her. One of the parties took only firearms, the other took bows and arrows, knives, hatchets as well. Captain Wallace picked up a stone war-club and carried it during the search. It was found near his body after the fight and was the foundation for the story that he was killed by it. He was killed by a bullet through the stomach. Part of the arms were carried to the battery position by men sent by Captain Moylan from the "One-third A & I" shown on the map, part were carried to a wagon near the cavalry camp, placed there for the purpose by Lt. Guy Preston. He had received 29, mostly old—some of them carbines from the Custer fight—when the firing broke out.

All this must have taken up a lot of time; it is curious that no question of time was asked by the Board in its investigation, and no mention made by witnesses except as to the eight o'clock formation, and as to the attack on Troops C and D two miles west of the battlefield, at eleven o'clock. Colonel Forsythe in his formal report written December 31, states that the fighting began at 9:15, "twenty minutes hot fight," and forty minutes "skirmishing." This refers to the fighting about the camp only.

It was now decided to search the bucks, many of whom had by this time settled down on the ground. Major Whitside and Captain Varnum began passing them between them, one at a time. Search of the first three or four yielded one Winchester and many cartridges. The Major directed that the latter be collected; someone handed Captain Varnum an old hat; he and his first sergeant held it while it was filled; the Captain turned his head away and called to one of his men to bring a grain sack. Then, as he stated, " * * they all seemed to rise with a purpose of passing through to be searched, when I saw five or six bucks throw off their blankets and bring up their rifles. I turned to Major Whitside saying, 'By God, they have broken,' and the Indians faced my troop and began firing." Major Whitside states, "One shot was fired by an Indian, instantly followed by a volley from the others, who had jumped to their feet and thrown off their blankets." On the hillside across the ravine to the south, Lt. Charles W. Taylor, commanding the Indian Scouts, was watching the scene from a distance of about 200 yards. "A buck threw off his blanket and fired a rifle, apparently at the group where General Forsythe was standing. Other shots were fired and the Indians threw off their blankets. Then there was a lull for a second or two, and the soldiers began firing."

Surgeon John van R. Hoff was near Big Foot. "At this moment a shot was fired while I was walking toward General Forsythe, with my back toward the Indians. I turned instantly and saw these Indians breaking from their center apparently in the direction of the gap between B and K Troops, firing continuous volleys as they advanced."

Lt. James D. Mann, Troop K, assisted Captain Wallace in the search of the camp. The next day he was mortally wounded in a brush with Indians, and on his death bed dictated to his brother his story of the fight. Surely full credence should be given it. The following is an extract:

"In front of me were four bucks—three armed with rifles and one with bow and arrows. I drew my revolver and stepped through the line to my place with my detachment. The Indians raised their weapons over their heads as if in votive offering, then brought them down to bear on us, the one with the bow and arrow aiming directly at me. They seemed to wait an instant. The Medicine Man threw a handful of dust into the air, put on his war bonnet, and then I heard a gun fired near him. This seemed to be the signal they were waiting for, and the fire immediately began. I ordered my men to fire and the reports were almost simultaneous."

Lt. Mann was on the opposite side of the Indian mass from the group about Colonel Forsythe, and when the first shot was fired the Indians were already—in part at least—faced toward the troops between them and the camp.

The Medicine Man had been haranguing the Indians for some time and dancing. The interpreters said he was stirring them up, telling them they were proof against the bullets of the white men, that their own bullets would go true to the mark. One close-by witness describes the tenseness that grew up, * * "the dusky faces of the interpreters were ashy gray." There can be no doubt whatever that the firing was begun by the Indians, nor can there be any doubt that it was wholly unexpected by the troops.

One of the party with Colonel Forsythe was Father Francis M. J. Craft, a Catholic missionary priest, who had been ten years with the Indians of the Northwest. He happened to be at Pine Ridge Agency on a tour of visits to Catholic missions and schools, knew Big Foot and his band well, and went over to Wounded Knee in the hope of being helpful. "Malicious whites on and near all Agencies, during the present excitement, have by misrepresenting the intentions of the Army, caused such a state of alarm and suspicion among the Indians as to make it possible for the least excitement or misunderstanding to precipitate serious trouble."

His description of events is pretty much like that of others, and he reasoned with some of the Indians himself, noting among them some of the worst characters in the Sioux reservation. When some Indians raised their rifles he spoke to them, but "no one seemed to listen"; one, said to be a son of Big Foot, fired, and others followed his example.

Father Craft was severely wounded almost immediately—stabbed in the back by an Indian.

One of the interpreters, P. F. Wells, a half-breed, was also attacked by an Indian with a knife. He knocked the Indian over with his rifle and then shot him, but not before he had lost the end of his nose by the knife. The other interpreter, Ward, was also attacked by an Indian with a knife, and was unable to use his gun. They grappled and went down, the Indian on top. A soldier killed the Indian with his revolver.

Wounded Indians who continued firing were, of course, despatched; those who ceased firing were cared for. One such asked an interpreter just after the melee ended, the identity of a body lying near. Being told it was that of the Medicine Man he spoke as though to the corpse—"If I could be taken to you I would stab you." Then to the interpreter, "He is our murderer; only for him inciting our other young men we would all have been alive and happy." His statement was taken later in the hospital and embodied in the proceedings of the Board.

An old squaw said, "The treacherous ones are of Big Foot's band; we of Hump's band honestly wanted peace."

Apparently the Indians made the mistake of trying to shoot it out with the soldiers—they could have dashed through that thin line and reached their camp before the soldiers could have gotten in a second shot. It was less than fifty yards. Had there been no firing and the Indians simply made a dash for their camp and the shelter of the the ravine beyond, probably not a soldier would have fired a shot—there would have been no time for orders and they had none. In the space of a minute the Indians could have been in some sort of cover, ready to fight. Perhaps they were too sure of their repeating rifles; perhaps they were firmly imbued with what their medicine man had been telling them for an hour or more—that the white soldiers' bullets could not harm them. Whatever it was they paid dearly—their heaviest losses were right there.

This first phase of the fight was unique for modern times; soldiers and Indians stood on their feet and shot it out face to face. The soldiers had the advantage of position, being at intervals of two or more yards on a quarter-circle. The Indians were within that curve and closely crowded. The soldiers had the disadvantage of the single-shot carbine, the Indians the advantage of the seven-shot repeating rifle. But the latter advantage ends with the emptying of the magazine; it is difficult to use the rifle as a single loader and a soldier handy with the carbine could get in several shots in the time necessary to fill the magazine.

There is much uncertainty as to how long this first phase lasted, estimates varying from "a few minutes" to "eight or ten minutes." It would seem that the repeating rifle furnishes a fair yard-stick. The Indians were in a crowd and could not all fire at once; they expected their bullets to kill the soldiers, but most of them stayed on their feet and continued firing; they believed themselves immune to the soldiers' bullets, but found themselves being killed fast; attempts to reload their new Winchesters must have been fumbling at best; one may reasonably conclude that fighting was over for the Indians when they had emptied their magazines, perhaps in two or three minutes. Bewildered, disillusioned, the remaining Indians—more than half—rushed through the line of soldiers toward the only refuge in sight, the brushy ravine beyond their own camp. Some few wounded continued to fire from the ground until killed; one kept up a hot fire from a tepee; a soldier ran across to it with the remark that he would bring him out, slashed an opening in the tepee with a knife, and was promptly shot and killed. The battery then disposed of the Indian by two or three shells fired into the tepee. A number of Indians fired from concealment elsewhere in camp but were soon killed.

Things happened fast when this melee began. On the north, Lt. Nicholson, a staff officer, "made a break and went around in rear of E Troop, and watched the fight from the battery." Colonel Forsythe also made his way to the battery. On the east, Troop G broke in the center; the right platoon led by Lt. T. Q. Donaldson went to the rear and "around the wire fence," dismounted, and returned to the field to fight on foot. This troop was the only one in the line of fire of Troops B and K during the melee, and it did not have a single casualty. The rest of the troop went to the left rear into the ravine and also dismounted to fight on foot. On the south, flying bullets caused the sentinel line to run forward down the slopes of the ravine, the nearest shelter. The Indian Scouts scattered, part following the sentinel line into the ravine, part going farther to the right where Troop G was preparing to fight on foot, part going to the rear and left seeking shelter in the small ravines. When bullets reached the line of Troops C and D they began a rearward movement which was accelerated when a 1.65-inch shell fell close. Captain Godfrey said, "I ordered the troop to rally behind a hill to our left rear." Troop C conformed and the two formed a dismounted line on the crest of the hill. Squaws and children rushed out of camp to the west, southwest and south, seeking shelter in the ravines. Quite a number of squaws, and some bucks, managed to start the pony herd off to the northwest along the Fast Horse Road. They passed Troop E in a cloud of dust, into which that troop, now dismounted, fired in an effort to stop them. Some Indians fired back, one of them a squaw—and Lt. Sedgwick Rice prevented his men from shooting her. The battery fired a few shots ahead of the herd and it came to a halt less than a mile from where it started.

Some of the Indians who fled to the ravines hid at once, but many kept on up the big ravine and many crossed it and continued their flight up the slopes to the south through the sentinel line. Some of these groups were fired on by the battery and by Troops C and D—bucks being hardly distinguishable, and there were some of the latter.

Captain H. J. Nowlan, Troop I, had command of what was left of the sentinel line on the south side of the ravine, and his testimony gives a clear picture; "Indians rushed down in the ravine; up and down it; not a shot was fired at them but they were allowed to escape. But right behind them came the bucks and the cry went up from officers and men, 'Here come the bucks, let them have it,' and our fire was returned by the bucks." Which goes far to establish what is said above about the Indians trying to shoot it out and *then* making their dash for shelter; the women and children had got clear of the camp before they did. And certainly most of these found dead or wounded in camp must have been the victims of Indian bullets, since the Indian fire directed against the men of Troops B and K—which was practically all of it—necessarily passed through the Indian camp, directly behind the soldiers.

Major Whitside had gone to the south side of the ravine, to the second position of Troops C and D. There he directed Captain Jackson (C) to take his troop up the hills "and round up anything I found there," and bring in the Indians' pony herd, which he pointed out, then "a couple of miles to the northwest." Jackson started due west "up the bluffs" with his troop and had to go two miles to reach the head of the ravine. There he found some Indians well protected in the sharp breaks of the ravine's edge. He dismounted and attacked on foot. The fire fight lasted some time and one soldier was killed. Lt. Taylor came up with two of his Indian Scouts, and these crept near enough to open conversation with the Sioux. "It took a half hour's talk and I had to withdraw my men before they would come out." There were eight bucks, of whom five were wounded, and seventeen women and children, about half of them wounded. Jackson at once sent a request to Colonel Forsythe for an ambulance and a wagon for the wounded. Meantime first aid was given to all.

Before the arrival of Major Whitside on the position, Captain Godfrey had sent Lt. S. R. H. Tompkins with 12 men toward his left front to prevent Indians making their way up the ravine into the hills. Before he got in position the party Jackson found at the head of the ravine must have gotten by, and also a larger party that took up a position in one of the lateral ravines and had to be dislodged by artillery fire. But there were still armed Indians coming up and Lt. Tompkins' party had some skirmishing which resulted in three bucks being killed.

Major Whitside directed Captain Godfrey to pursue, with the remainder of his troop, some Indians seen going up the hills to their rear. He did so but saw only one Indian, far off. He continued on to the Divide—a couple of miles from his starting point—and down the opposite slopes for some distance. It was on this scout that an incident occurred that was the cause of a special investigation. Godfrey started on foot with two or three men to search a brushy ravine head, and suddenly glimpsed blankets quite close, and opened fire. No reply coming, they went in and found a squaw, a boy, and two small children, dead. Captain Godfrey and his men were exonerated of the charge of wanton killing.

Returning toward camp he saw Captain Jackson's troop off to the north and joined him. Jackson was waiting for the transportation for his wounded prisoners. Jackson was the senior, and he suggested that Godfrey return to camp, scouting the big ravine as he went. Godfrey detailed a few men to follow the bottom of the ravine, he, with the others, to follow them on the high ground. They were just starting off when four or five mounted Indians approached from the direction of the Agency (west), and waited to see what this might portend. These Indians were armed and one wore the badge of the Indian Police. They rode up with words of friendly greeting and shook hands with the two officers. One gave Captain Godfrey's hand such a pull as nearly unhorsed him. He asked the policeman what the man meant by it, and received the peculiar reply, "I don't know; he is my father." Then they rode off in the direction from which they came, turned at about a hundred yards and fired—except the policeman, who was waving his arms and appeared to be trying to stop them. These Indians then galloped off and disappeared but presently some fifty or sixty came in sight from that direction, deployed in line and at the gallop. Others appeared approaching on either flank. The Indians began firing; one of the soldiers was wounded; Captain Jackson mounted quickly, abandoned his prisoners, and retired to a better defensive position about a quarter of a mile to the rear and north of the ravine, where he again dismounted to fight on foot. He had thirty-four men, Godfrey fourteen—allowing for the minimum of horse-holders, about forty soldiers awaited the attack of mounted Indians whose numbers had now increased to about one hundred and fifty. But the attack was not made; Troops E and G were in sight, "coming up on the jump," and most of Troop A, Indian Scouts, and the hostile lines faced to the rear and galloped off.

It was learned later that these were Brule Sioux from Pine Ridge Agency. Of course all Indians thereabout must have known of Big Foot's surrender, and been greatly stirred up about it. The news of the fighting might have reached them, but that seems scarcely probable in the time available. It was thought, and with good reason, that no particular band was involved; that this was a gathering of hotheads who started off with some idea of a relief expedition. There is a possibility that some contact was made with Big Foot's band during the night and that the latter expected some such relief party, which might explain the long delay about the surrender of arms and the frantic efforts of the squaws to get the train packed and ready to move.

Immediately after the melee Edgerly (G) and Taylor (Indian Scouts) had assembled their commands and proceeded to the vicinity of the battery. There Colonel Forsythe directed Edgerly to proceed with these two troops and Troop E to the west, to round up the Indian herd and look for hostile Indians. He quickly did the former, left some soldiers and scouts in charge and went on, arriving in time to save Jackson and Godfrey from their precarious situation, as described above.

One batch of Indians had established themselves in the head of a small ravine, about half a mile up the big ravine, and a lively fight went on for some time. Finally Colonel Forsythe sent one gun under Lt. Harry L. Hawthorne to dislodge them. He went into action at 500 yards and the Indians were soon finished off. Hawthorne was severely wounded early in this action.

Besides the small engagements above described there were many smaller exchanges of shots on or in the vicinity of the battlefield. It must be remembered that smokeless powder had not been heard of at that time. When an Indian fired from concealment a large puff of smoke betrayed his position, and brought shots from all who saw it. Should the soldiers have waited and tried to learn if any women and children were in the vicinity of that smoke? The idea is absurd. There was an armed buck at that smoke, trying to kill one of them and he might succeed if there was any delay in despatching him.

During this mopping-up officers gave repeated warnings to their men against shooting women and children, and it is highly improbable that a single one was intentionally shot. There was one case of intentional shooting of a wounded buck by a very young soldier. His troop commander gave him a savage berating on the spot. The boy burst into tears and said he understood a wounded Indian was as dangerous as any.

From the testimony of several witnesses it is possible to give a fair picture of what happened at the camp after the melee. The mass of the Indians rushed through Troop K, through the Indian camp, to the ravine, but some hid in the camp and continued firing from concealment there. Troop K fell back on the cavalry camp, thus clearing the way for the artillery to end the activities of an Indian in a tepee, as related above. The men of Troop K were now, of course, facing south and southwest and their fire against these Indians was for the *first time* in the direction of other troops—the sentinel line from A and I, the Indian Scouts, and Troops C and D. Lt. Garlington was in charge of the sentinel line on the west and with the men near him, dropped into a sunken road. He was wounded by an Indian firing the ravine after the rush through, and the hospital steward was killed near him. The action by the

sentinel line on the south is described elsewhere. Just when or how the heavy losses by the sentinel line occurred cannot be determined, but when the Indians opened fire those men were standing in groups of three, along the arc of a circle over which the fire swept, and from 100 to 150 yards from the rifles. It is much more likely that their losses were greater then than during the subsequent intermittent firing.

Troop B suffered heavily in the melee, but the rush of the Indians through Troop K freed them of pressure, and Captain Varnum led them to their picket line, mounted up, and reported to Colonel Forsythe, who directed him to "cover the hospital," and some hours later, to clear up a portion of the ravine. He found many dead and wounded Indians and brought out nineteen unwounded women and children.

The losses suffered by these two troops (nearly one-half the total) and those inflicted by them on the Indians, were almost wholly during the progress of the melee. Two-thirds of Troop A and I, in groups of three or four, formed the sentinel line behind the Indian camp, wholly in the field of fire of the Indians. Their casualties nearly equalled those of B and K. *After* the melee, in the mopping-up of the camp, the fire of these lines into it endangered both, but it was not heavy and was soon ended. *None* of the other troops fired into the camp area.

Captain Capron "opened fire with all four guns as soon as the field was sufficiently cleared as to allow us to shoot without injury to our own men." His first target—"for my own two guns"—was at a "bunch of Indians firing on our troops," about 300 or 400 yards away. He fired at groups here and there over the field, but could not distinguish squaws from bucks. After the fight he saw a group of two bucks and one squaw, that had been killed by artillery fire, "2,000 or 2,500 yards from the battery."

The fire from scattered Indians finally ceased, with one notable exception; a lone buck in the head of a coulee kept up the fight until the troops had marched for Pine Ridge Agency! Colonel Forsythe stated this in his formal report of December 31; fire had failed to get or dislodge the buck and the Colonel considered him not worth the casualties that might follow an attempt to rush him.

Charges of inhumanity by the troops were refuted by every witness. Surgeon John van R. Hoff was emphatic. "I saw none. All the field which was the center of active operations came under my observation * * * a considerable number of wounded bucks and squaws brought in had had their wounds dressed by company bearers." As to whether any soldiers were victims of the fire of the troops, "I have not the slightest reason to know or think so; it was possible, but I have no reason to believe it." And in his capacity of surgeon of the command he must have known the nature of all the gunshot wounds.

The fighting at an end, the troops gathered up the wounded Indians and their own dead and wounded, and marched to Pine Ridge Agency. They had one officer and twenty-six men and an Indian Scout dead; four officers and thirty enlisted men wounded. Sixty-two women and children and eighty-three bucks were buried in a common grave a few days later. Some of the wounded died later.

Some writers have chosen to animadvert on this abandonment of the Indian dead. But the troops had suffered a heavy loss, collecting the wounded and getting them ready for the march required some time; the march would require four hours, it was necessary that the command return to the Agency as soon as possible, not only to get proper medical attention for the wounded but to escape possible attack by the thousands of Indians within a few hours' march. There was only a short winter afternoon available—they made the best possible use of it. And actually, several thousand Indians decamped that night and were only returned to the reservation after several skirmishes.

On the following day, December 30, six of these troops of the 7th Cavalry were ordered out and before evening had scored another victory in a skirmish at White Clay Creek. Each had one or more casualties the total being one killed and seven wounded, Lt. James D. Mann being among the latter.

There is nothing to conceal or apologize for in the Wounded Knee battle—beyond the killing of a wounded buck by an hysterical recruit. The firing was begun by the Indians and continued until they stopped it—with the one exception noted above. That women and children were casualties was unfortunate but unavoidable, and most must have been from Indian bullets.

Looking back from this distance in time, it seems curious that so little apprehension of danger was felt by the troops. Most of Whitside's officers spent the evening of December 28 in a Sibley tent, listening to Lt. Garlington's narrative of the Arctic relief expedition of which he had been a member. Had there been any thought of danger, each would have been with his men.

Assistant Surgeon Charles B. Ewing, from Pine Ridge Agency, was with the group near Colonel Forsythe, and had got in his wagon to return when the first shot was fired.

The hospital steward and the regimental sergeant major, certain to be men of intelligence and common sense, had wandered into the camp during the search and were both killed.

The troops were at a strength of about 50 men. For the formation the cooks and a few others would normally have been left in camp, but it would seem that some, at least, of the troop commanders did not consider it necessary to turn out all available men. Captain Jackson had 34 and Captain Godfrey 14 men in their fight with the Brule; each troop had had one casualty and Godfrey had detached Lt. Tompkins with 12 men. So the actual numbers of men present in ranks were 35 and 27. Definite figures cannot be had, but apparently A and I, the two guard troops, were the only ones in near full strength.

Father Craft, with ten years' experience among these Indians and well acquainted with this particular band, did not believe a break would come until it actually did.

The formation was one well designed to impress the

Indians, but not at all suited for fighting them—would an old and experienced soldier like Colonel Forsythe have ordered it, had he even dreamed of armed resistance?

Not since the Battle of the Little Big Horn in 1876 had anything comparable happened. Then, most of the 7th Cavalry was killed, including its colonel; at Wounded Knee most of a band of Indians was killed, including its chief—and by the 7th Cavalry.

No newspaper men witnessed the fight but they soon began arriving, and photographers as well. In their accounts the drama of the affair overshadowed the cold and simple facts that made up the true story. Hastily collected stories and "color" could not present a true picture. The writers could not be blamed; any reporter who sat down to analyze and weigh the "evidence" he collected, would have been hopelessly late in getting the "story" to his paper, and soon be seeking a job elsewhere.

It is highly improbable that any of these young men were motivated by a desire to do an injury to the Army in general or the troops in this fight in particular, but the idea did creep into the press that the 7th Cavalry had at last got its revenge for the "Custer Massacre" of fourteen years before.

Many writers toyed with this idea in the years following, and many military men made indignant denials and defended the honor of the Army in the public press. Sometimes official records were drawn upon but more often only personal recollections.

Four days after the fight at Wounded Knee, President Harrison, shocked by the reports, directed "* * * immediate inquiry into the killing of women and children." A Board of Investigation began its work on January 7, on the spot. Its records are on file in the War Department, and it is from them that this article is written. No tale compiled in the excitement of the days following the fight could possibly be as accurate as one compiled from the sworn evidence of eye-witnesses, obtained on the spot by a tribunal following the cool and impartial procedure prescribed by law and regulation.

Wounded Knee and controversies arising therefrom long ago lost all news value, but there was something of a flurry in 1931 when a book entitled, *Massacre*, by Robert Gessner, appeared. It is a general attack on the Government's policies toward the Indians throughout our history. The part relating to Wounded Knee is a sob story containing more misinformation, misrepresentation, ignorance, and falsehood, than probably any story ever written. In proof of this let us analyze it a bit:

To begin with, he "drove very hard" and arrived at the scene "very tired." One gets the idea he is talking of December, 1890, and the idea persists until far on in the narrative; "As I sat in the Wounded Knee store an old soldier came in who was present. * * * During the past forty years he had never returned to the scene, but he had come on that day." So the reader at last learns that his visit was forty years after the battle. He gives the man's name as D. E. Babb—but the rolls of the troops at Wounded Knee, on file in the War Department, bear no such name.

He "sat by the fire and recalled the events of that day." But he knew the average reader is not critical, so he did not trouble to look up a map, inform himself as to the military dispositions prior to the battle, or the organization and equipment of the troops.

Big Foot led his band down through the Bad Lands, with the *four* battalions of the 7th Cavalry "in full pursuit."

No cavalry regiment had four battalions; two of the 7th were at Pine Ridge Agency from November 27 until about Decmber 26, when one of them was sent to Wounded Knee; Big Foot was somewhere far to the east of the Bad Lands, and it was a mission of the military to prevent his reaching them.

But he gets a bit mixed and has the four battalions of the 7th in camp at Wounded Knee. And speaking of the Indians, "* * * they managed to worm themselves through a pass, leaving the desolate, barren Bad Lands, and came to camp at Wounded Knee."

Again he gets mixed up, as witness, "In the meantime General Forsythe and Major White (sic), with all of the battalions of the 7th Cavalry, surrounded Big Foot's camp, * * * the old chief willingly surrendered. He was not seeking a battle; he was only trying to find some forgotten corner of the earth where his band might worship unmolested."

Big Foot surrendered to Major Whitside nine miles northeast of Wounded Knee and was taken there by him.

"The troops got drunk at Christmas," and were still in that condition December 29.

That would have required a lot of whiskey, and it was many miles to any source of supply! And it hardly seems consistent with the "full pursuit" through the Bad Lands that terminated with the "surrounding" of Big Foot's camp on December 28.

"On the morning of the 29th a dozen drunken soldiers dragged Big Foot from his tent and killed him." This is perhaps the most atrocious of the many lies in the narrative. The proof is absolute as to the events preceding the fighting, and described herein.

He gives a thrilling picture of the fight, the troops firing indiscriminately at Indians of any age or sex, "Gatling guns poured in their fire," etc.

There were no Gatling guns with the troops. General Miles had declined the offer of some in a telegram to the War Department on November 23, in which he stated Gatlings were useless in fighting Indians.

"Two officers were wounded, twenty-five privates were killed and thirty-three wounded."

Actually, one officer and twenty-six enlisted men and one Indian Scout were killed, four officers and thirty enlisted men wounded.

But inaccuracy is nothing to Mr. Gessner. After giving the officer casualties as two wounded, he later describes Captain Wallace as being dead "with a tomahawk sprouting from his forehead." He also assigns him to the 9th Cavalry—no mistake in the figure; he spells it out, "Ninth."

Actually, Wallace was shot twice and had a bruise on the head which might have been inflicted by a stone war-club that lay near.

"Only one soldier was killed at the hands of an Indian."

But why continue? Not a statement of Gessner's that cannot be refuted by sworn testimony given forty years before *Massacre* was written. The pity is that such a foul libel on the Army of our country should be permitted in circulation.

Seven years after the appearance of *Massacre*, Wounded Knee again made the front pages. Two Indians, alleged survivors of that battle, appeared before a Committee of the Congress and under the guidance of a Washington lawyer, told their stories. This was in support of a bill to reimburse the survivors and the descendants of Indians in that fight, in the sum of $1,000.00 each, the estimated total being $080,000.00.

The Indians at Wounded Knee brought on their own destruction as surely as any people ever did. Their attack on the troops was as treacherous as any in the history of Indian warfare, and that they were under a strange religious hallucination is only an explanation, not an excuse. They do not come into court with clean hands, though they may believe their recollections of what happened forty-seven years ago are accurate.

One officer and twenty-six enlisted men and one Indian Scout died on the field doing their duty. Three more enlisted men died next day. Four officers and thirty enlisted men were wounded on the field. Has anyone thought of compensation for twenty-nine bereaved white families and an Ogallala one? Or for the families of the wounded soldiers? Or for those killed and wounded next day on White Clay Creek, the direct aftermath of Wounded Knee? Or for the descendants of all these and the four hundred-odd soldiers and the hundred loyal Indians who risked their lives on that field?

Not that anyone has heard!

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23. P. F. Wells, Indian Interpreter. Testimony before Board.
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26. U. S. Weather Bureau for Moon Phase at time of battle.
27. Lt. H. L. Hawthorne. Report and correspondence.

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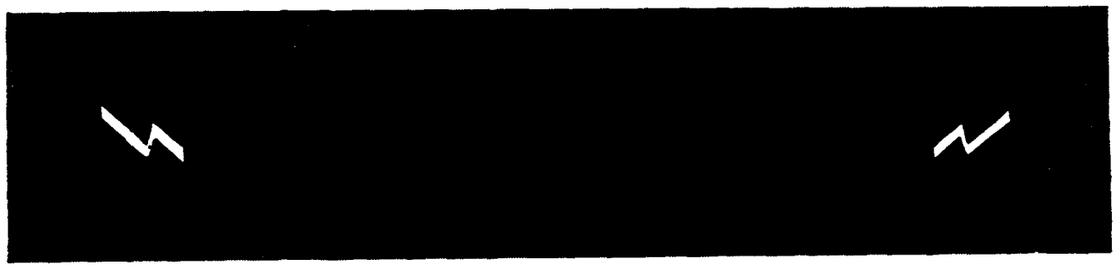
Cavalry Operations in Spain

(Continued from page 17)

other hand, Poland and Russia have kept their horse cavalry, developing its operational formations on a large scale. Terrain and other conditions justify both schools of thought. In the United States, the value of horse cavalry can be estimated best by studying the possibilities of warfare against a specific enemy and the character of the probable future fields of battle. A careful and impartial analysis of the conditions affecting this nation would avoid thoughtless statements and needless controversies and would help to determine the requirements of a force suitably organized and equipped to carry out certain specific missions. An army so created and organized in peacetime, based upon actual conditions, would undoubtedly give the best solution to the problem of national defense.



PART IX

When we entrained for Clermont-Ferand we were issued some bread and canned rations for two days. I inspected these rations, for in the Spanish War I had made the acquaintance of cans with swelled heads and had had ptomaine poisoning three times, so naturally I have never trusted canned goods since. I discovered now that some patriot had slipped the Army for cash something he could not have given to the starving Armenians, for fully seventy per cent of the canned goods had swelled heads, infallible sign of sudden death or acute intestinal riot. So I hove them all out into the ditch beside the right-of-way, explained to the men that it was better to starve three days than to have a super bellyache and advised them to take up their belts a notch. They all grinned happily, as the American soldier always will if you give him a sound excuse for making him suffer and he knows you are on the job looking after his comfort and health. I promised the lads I'd have a good luncheon for them next day or bust a hamestrap trying.

After inspecting my battery's rations I thought it the part of wisdom to confide my discovery to the lieutenant colonel who was in command. The colonel was following via automobile. The former didn't seem to realize the importance of my report so I suggested that, in all probability, the canned rations of the other batteries were as bad as mine and ought to be destroyed or serious illness or even death might result. I added that I knew I was the only battery commander who had inspected his men's rations.

The lieutenant colonel thereupon begged me to mind my own business and refrain from attempting to tell him or the other battery commanders their business. To which I replied: "I'll just make my report on those rations to you in writing and then, if nothing is done about it and any of the men die or a serious illness strikes this regiment so hard it can't be moved, a general court-martial will be telling you and the other battery commanders their business. I'll certainly make an issue of it."

He pondered this about ten minutes and then ordered the other battery commanders to inspect their canned rations for swelled heads, and this was fortunate for most of their canned goods went into the ditch. But I was in Dutch. It doesn't do for one to be efficient when, by so doing, he exposes the inefficiency of an untrained, inexperienced, or negligent superior.

The lieutenant colonel got off the train at Perigeaux and got left behind, so I took command and stopped the train until he could catch up with us in a French taxicab. Long before he appeared, however, I had ready for his reception a song descriptive of his inefficiency in missing the train—and all hands sang it to him with great gusto.

I noticed he was wiring ahead to Toul to a Frog to have coffee for twenty-two hundred men ready when we got there. What an optimist he was! I think he wanted five hundred litres and I collapsed when a Frog appeared with five litres!

Now, there were strict orders against riding in the cab of the locomotive with the French engineer and equally strict orders against the troops disembarking until the colonel gave the word. He was to meet us at Toul. I instructed my first sergeant to have a dozen of the Big Fours empty their barrack bags and stand by; when they saw me at the railroad station giving them the signal to rally on me, they were to jump off, run like the devil with their barrack bags and join me. I then climbed up in the cab of the locomotive to ride there into Toul. The French engineer tried to put me off but I waved a ten franc note at him and he bade me remain and even gave me his cushioned seat. Later I discovered I could have had the same service for five francs.

As we slowed up to stop for a couple of hours at Toul I slipped off the still moving locomotive, ran into the railway eating house, made a quick survey of his shelves, and asked the proprietor how much he would take for the entire contents of his little store. He gazed at me pop-eyed and started to bargain, but I cried him down and he said "eighteen hundred francs." I laid the money on the barrelhead and while he was making out a receipt for my battery fund voucher I ran out. The top had his cold nose poked around the corner of the last car on the train and I gave him the signal. In no time at all the brave lads were loading into their barrack bags 115 cans of *pate de foie gras*, 150 cans of sardines, some forty cans of peaches and apricots, forty or fifty cans of Libby's corned beef, a couple of boiled hams, a cheese as big as a gun wheel and twice as thick, and about thirty loaves of French war bread of the general dimensions of a railway tie. I had to borrow the Frog's hand truck to move the cheese and bread. Of course I had paid too much for this food but why trade when my lads had empty stomachs? And I had lots of money in the battery fund and knew I would never spend it all. (As a matter of fact, upon demobilization, I turned $1,800.00 in to the government.)

As we emerged with our plunder, down the side of the train came the colonel and the lieutenant colonel and the battery commanders, with old man Krantz far in the lead, hurrying on his long legs to grab off for Headquarters Company the grub I had just purchased. "Too late,

"The French engineer tried to put me off but I waved a ten franc note at him."

August," I taunted him. "I rode the engine cab and got there first before the train had stopped. I've bought out the house."

Krantz grinned. He could take a licking, but he always had a wallop left. "You, Peder," he said, "vill let me have some of dot food for my noncoms und a sick man or two." Good old Krantz. Always out to salvage something from defeat. Of course he got it.

The colonel caught sight of my enlisted pack-train and yelled: "Captain Kyne, what do you mean by disobeying my orders and taking these enlisted men off the train before I have given the word?"

"I have disobeyed you, sir," I confessed, "and I did it deliberately. My men are hungry and I'll risk a general court any time for their sake. But I have the food I promised them. If the captain fails to stay with his men in a day of stress they are not so apt to stay with him in a day of stress." He replied without animus: "You'll be court-martialed." I grinned and said: "I bet I will not be court-martialed by you." The colonel didn't quite know what to make of this weird brand of military behavior, but I think he approved of it, so he said: "Well, get the remainder of your battery off and let them stretch their legs. And we'll divide this food you have with the regiment."

"We will, like hell," I replied. "This grub is mine. I bought it for my men and I don't care a hoot whether the remainder of the regiment starves or not. In the army, Colonel, it's a case of the devil take the hindmost, and I have been in the forefront so I guess the devil will not take me."

The lieutenant colonel said he thought my action extremely selfish but I paid no attention to him. Then the colonel demanded an explanation as to why I was de-

"I had to borrow the Frog's hand-truck to move the bread and cheese."

training my men in full pack, so I begged him to stand by and see. I formed the outfit up company front, opened ranks, and ordered my outfit to unsling packs and then sit down on the packs and be comfortable! So much better than sprawling in the dirt! The mess sergeant and his cooks then spread the kitchen carpaulin and a detail started to open the canned goods. The station master loaned us an axe to break up that gigantic cheese and I went over into the town and returned with two hundred and twenty pints of very good red wine to wash down the cheese and war bread and sardines and *pate de fois gras*. A pint for every man, and how the rascals taunted the other batteries because they didn't have an old soldier skipper to look after them!

At sight of the wine the colonel blew up and reminded me very forcibly of the A.E.F. edict against bringing liquor aboard troop trains. "I am well aware of that order, sir," I replied, "but it refers to bringing liquor aboard in containers, whereas, my men will bring it aboard in their stomachs." Unable to beat that sophistry the colonel walked away and my gang snickered. Some of the old hands even winked slyly at me. I didn't give any officer except Krantz and my dear old pal who commanded Battery B even a crust of bread. These two rated it, however, for they had their dues always paid in advance in the League Of Outlaw Battery Commanders . . . ah, oui! On active service let me have men about me who are fit for treasons, stratagems and spoils.

We had enough food left over for supper and at daylight, in a freezing rain we piled off in the railroad yards at Clermont-Ferand. My mess sergeant promptly swiped some old railroad ties and made a fire between the tracks, dug out the rations we had salvaged from our practice march two months before and which I had refused to turn in to the regimental supply office. Upon entraining for France I had had these rations boxed and labeled accompanying baggage. My men had had their condiment tins filled with coffee, sugar, etc., for two months, so we pooled it all now and breakfasted heavy on beans, corned willie, hardtack, coffee and canned peaches. So, for the second time on that trip, the remainder of the regiment had to stand around and slaver at the mouth. I knew I was making myself more unpopular than ever, if this was possible, but I did not care. Why should I? I had a happy family, as snooty as they come and I wanted to keep it that way. The colonel wanted to know by what authority I had made a fire in the railroad yards and I told him I was acting under the right of eminent domain. Whereat he laughed. He couldn't hold a grouch worth a cent. Quite usually he expected me to hand him a laugh and I think he credited my overdraft on his patience with the chuckles I gave him.

In this respect I recall an answer I once made him. Whenever we transferred a man to an A.E.F. casualty draft our old man always would have us up and question us as to our reasons for sending this particular man, his idea being that maybe an inferior man could be sent. I had a huge, pot-bellied private of Hebraic persuasion; he owed me twenty-five dollars and wouldn't pay it so I decided to send him away where he might get killed. "Why are you sending this fellow?" the colonel demanded. "Because he's a Jew?" The colonel was not remotely anti-Semitic; it was instinct with him to demand a square deal, except when he was crowding an enemy and even then, if the enemy laid off him forty-eight hours, he would forgive him.

I replied: "No, sir. Like the colonel, I am not a Jew baiter. In fact, one of my grandest sergeants is a Jew, but I want to get rid of this fellow because he spoils my formation in two places. Whenever I right dress my outfit this bird's belly and his nose are sticking out and neither can be drawn in far enough. He violates my sense of military aesthetics."

"Off with his head," said the colonel. He was a long time getting over that one.

Well, my battalion settled down in a village called Plauzat. Nothing had happened in Plauzat and environs since Julius Caesar fought Vercingetorix about two miles from Plauzat. Indeed, I had some arrowheads picked up on that sanguinary field. My outlaw pal and I, following our insistence on giving ourselves all the best of it, secured a lovely room each in the chateau of a Bourbon gentleman, the Comte de Seray and a swell fellow he was. I ran his clan down about twenty generations by their oil portraits on his ancestral walls and they all looked as alike as a litter of pups. The long, acquisitive Bourbon nose showed up in every man Jack of them. The count gave me a nickname, due to my habit of saying to my interpreter when talking with the count: "What does he say?" So the count called me Capitaine Qu'est ca se. That was as close as he got to translating my English query.

While we were there the count had an elder brother, Comte Henri de Chassaigne de Seray come up from Paris to visit him. This old lad was a speaking likeness of the late John L. Sullivan, a hell-raising old Royalist with a roving eye and a great judge of liquor and ladies. I called him John L. and my pal explained in French to our host that this was a title of respect. The count thought I was trying to say general as the French pronounce it, so his brother became General de Plauzat and this was considered extraordinarily funny.

That rascal, John L., came nearly putting an inglorious finish to my riotous military career. He invited the two of us to dine with him one night in Clermont-Ferand. He was to pick us up at a cafe with his brother's car. I got in first and in the darkness fell over a lady with a little dog. She smelled strongly of lady powder and her cheerful: "Ha, my little cabbage" (in English) told me all I wanted to know. I sat between her and another lady, boy friend sat in the jump seat and John L's lady sat up front with him. I said to my pal, "Tommy, we're up to our necks in a social bog. There's a G.H.Q. order against this sort of skylarking and while I'll take all sorts of liberties with our colonel, John J. Pershing has me stopped in my

tracks. Explain to this Parisian rake that we can't do this sort of thing."

My pal had one inevitable answer to any protest against fun. "Snort and carry six." So we carried on. John L. drove us to a cafe and in the light the ladies showed up very beautiful and well-dressed and charming, but they all spoke English so well I knew they must have been associating with our troops. I couldn't eat. I was frightened. Suppose a general came in and decided that this wasn't a war to make the world safe for democracy, after all! Even Tommy's repeated "snort and carry six" failed to cure my agitation.

We danced to the tune of a hewgag into which M. le Host dropped coins. The front door was the sort of swinging three-quarters door they used to have in old-fashioned saloons—the sort a dog could come to and look in under to see if his master was there whooping it up. The light from a wet pavement bounced in under that door and in that subdued radiance I saw a pair of military legs, standing immovable, while over the top of the door a soldier with a mean eye took stock of our innocent little party.

And I had the answer. I waltzed mademoiselle over to Tommy and said: "Tom, that infernal John L. has taken us to a cafe that is out of bounds for American troops and an M.P. has discovered us."

"Snort and carry six," said Tommy. "You're seeing things. I have never known a more nervous man."

Just then the proprietor shot across the dance floor and slammed a big thick inside door in the M.P's face. Then waiters appeared with civilian clothes and, although I protested pitifully that I'd rather be caught redhanded in uniform than in a long black French civilian overcoat and a billy-cockhat, I was overruled. I took a look at Tommy and he took a look at me and the girls said we were *trey joile* and we howled with laughter. Then we each took a girl by the arm, the landlord threw open the door and out we marched in the face of a squad of M.P's and to the sound of whistles blowing frantically.

We got through them and down the street about forty feet when the officer in command of the raiding party noticed pigskin puttees sticking out below the hem of my overcoat. "Halt," he yelled. "You're in arrest."

"We do not speak English," said John L. in his excellent French.

"To hell with you. You're a Frog, but those birds with you are American officers. Halt, you officers. Halt or we'll shoot."

I knew they wouldn't. I knew they wouldn't have the courage to shoot until they'd stripped us. So we marched on.

"Take 'em," said the provost-marshal, and they rushed us, just as a door opened. So John L. went in and we followed and slammed the door in the noses of the enemy. With an elderly female guiding us we ran down into the basement, out a door into a vacant lot and the pouring rain, across that lot and through a door in a brick wall—and lo, we were in a garage and there was our late host warming up the count's car for the getaway. We paid him, handed him back his accursed raiment, got in the car and put up all the curtains. A frightful riot raged outside; dimly the clamor could be heard through the walls. When all was ready the Frog threw the garage door open and I had a glimpse of a dozen soldiers in the alley through which we had to proceed. The place was surrounded. But John L. put his car in second gear and shot out with a whoop, and the M.P. all flattened up against the walls to escape being run over, the while they flourished pistols and bayonets and howled to us to halt or they'd shoot.

So my pal put his lips to the hand-hole in the curtain on his side and gave them the Bronx cheer. On my side I did likewise for I knew they'd never dare fire into a French car with the curtains drawn. And they didn't. They chased us out into the street, where John L. put his car in high and away we went slithering and careening and skidding around corners, with a Ford car chasing us. John L., like all the French, had no sense when it came to driving an automobile. He stopped for nothing and I noticed he had a trick of locking his brakes and sort of throwing the car around a corner. Later I learned he was an old automobile race driver.

We shook them off, pulled in to a cafe, dumped the ladies out without ceremony and fled back to Plauzat, still hungry and thirsty. The dear lasses screamed for money which they didn't get, because the lights of the Ford were showing and we had no time to count out money for those gold diggers!

When finally we succeeded in explaining to John L. the nature of the awful fate from which we had escaped; when we quoted to him G.H.Q. orders about being found in out-of-bounds cafes with ladies to whom we had never been formally introduced and how we could have been in very serious trouble with the grand jury if we had been caught, he proclaimed that of all fools extant Americans are the greatest. And I think so, too. However, I suppose that whenever we go to war G.H.Q., will always, in deference to the edicts of the Holier-than-thou fraternity, smugly assume that single men, or even married men, in barracks can, by the mere issuance of an order, be made to develop gracefully into little plaster saints.

I never went out with John L. again. I was afraid of him.

One Saturday I went down to Clermont-Ferand and engaged a room in the Hotel De La Poste, to enjoy a bath in a real tub. About midnight Snooper rolled in on me, a little tight and badly frightened because he had just killed two men and three women. How? With his mighty fist, of course. No two weedy men and three women could live after having been on the receiving end of an arm like a hawser. It seemed he had met these Frogs in a cafe and had had a few drinks with them. They had then suggested a change of pasture and Snooper had gone with them and in an alley they had made the fatal mistake of jumping on him all together. Oh, la! Oh, loo la-la!

"Hop into that twin bed, Snoop," I told him. "Nobody, it appears, saw you commit this wholesale murder, so forget it. If they find the bodies and try to pin it on you I'll be your alibi. We were together all day and all night."

No bodies were ever found, so we forgot it until one night about a month later I found myself in Clermont-Ferand in a cafe eating alone. A little *nymph du pave* came to my table and tried to interest me, but I told her I was going back to my village in a taxicab presently. So then the news came out that the taxicabs were out of gas that night and not operating, but she said she had a friend who was chauffeur to a gendeman who had an American car; that his master would be in bed by ten o'clock and, for a consideration, his chauffeur would take me home. Fine. I bade her go forth and fix it, which she did and for her services I gave her ten francs. I was to meet her and her friend at the railroad station at ten-fifteen.

I found her there talking to a bird in a little Overland car. Beside this driver, who had one eye and looked like a crook, sat two big hearty young women about twenty-eight or thirty. In the tonneau sat a yellowish, slight weedy young man with another buxom lass. I thought the weedy man was a drug addict. And I was to sit in the tonneau between these two and be driven home!

My back hackles came up. *Two men and three women!* Undoubtedly here was the same gang that had jumped Snooper! I excused myself and went to the rear in an adjacent cafe, for I remembered that, in paying for my dinner in the presence of the little streetwalker I had pulled a roll of about eighteen thousand francs out of my blouse pocket. It was my battery fund. The French would not take checks and I had to have it in cash; I couldn't leave it in my locker and I had to carry it on my person. SO SHE KNEW I HAD A ROLL ON ME. She had framed it for the gang, on a percentage basis!

I removed my puttees, wrapped my roll against the calves of my legs and rolled the puttees again. I left a few francs in my pocket for seed and then purchased from a waiter a pocket knife with a six-inch blade. I slipped this knife, opened, into my right hand blouse pocket with the point against my wadded handkerchief and came back to the car. They wanted me to sit between them in the tonneau but I was too polite for that. Ah, no. What? Intrude myself between monsieur and mademoiselle and their love! Impossible. I walked around and got into the tonneau and seated myself on the right, so, in the event the big lass next me should reach around to garrote me I could come around with the knife in my right hand and slit her weasand. I felt perfectly able to clean up the bunch and was rather anxious to try, for the years had been long since I'd tangled in physical combat with anybody, and in my youth I liked it!

Well, they drove me past the turn-off on the road to my village and far out into a lonely valley, through the center of which a creek ran. The creek was lined with a thick growth of willows, so I knew they planned to kill me and hide my body here. I was not surprised, therefore, when the car stopped suddenly and my companions in the tonneau bailed out the left hand side saying we had a flat tire. They came around to the right side very quickly to receive me as I emerged on that side—but I fooled them. I got out the left hand door, pretended to stumble and fell prone long enough to look under the car and note THAT ALL FOUR TIRES WERE STANDING UP! Then I came around the rear of the car to the right—and they rushed me. But alas, I was also rushing them! It was what you might call a meeting engagement. The weedy bird clawed at me and I straight-lefted him and right-crossed him and he was out. I did the same to two gals. This gave me a view of the one-eyed man bending over the tool box on the running board trying to get out a hammer. So I kicked him from the rear but well forward and up—and he collapsed screaming, while I socked the remaining damsel a kick in the posterior as she was trying to escape out into the field. I returned, got possession of the hammer and sat down on the running board to await the resurrection, first, however, having taken the precaution to frisk the fallen for guns and finding none. Their knives I threw into the creek.

When the one-eyed man was able to sit up I made him get in and drive me home, while his friends stood off in the field and were very cold, for it was a frosty night. Arrived home I slapped him around a little for good measure and neglected to pay him. This was the only danger I was ever in in France and I enjoyed it tremendously. But for good old Snooper, however, I would have been a gone fawn.

Suddenly for no reason at all that I was aware of, the colonel removed me from command of the first battalion and gave it to my pal, commanding B Battery. After two weeks the colonel busted him and put me back in command. I served a week and then old Krantz was relieved temporarily of command of headquarters company and sent over to relieve me. He was much embarrassed, because he was several months junior to me, but we welcomed him as one welcomes a gentle rain over an arid district and gave him a special dinner at our mess.

I was the mess officer and had decided that, with so little of life remaining before us, we should do ourselves well in the matter of eating and drinking. We did. We had two cooks for twelve officers, a butler and assistant butler and an Italian soldier whose sole duty was to dig up the best in drinkables, mushrooms, old cheese, fat ducks, geese, turkeys, chickens, and truffles. Our mess cost us sixty dollars each in American money, but with the exception of three second lieutenants we could all afford it. They suspected nothing but good mess management on my part, when I charged them twenty-eight dollars.

Presently I achieved command again and somebody sent us a Y.M.C.A. man. I ordered him to establish a battalion post exchange but he pleaded he couldn't buy anything. So I fired him. Somebody then sent us out another, but he was a total abstainer, too, and when we put brandy in his coffee and got him tight he wanted to sing hymns instead of ribald songs of an up-and-coming soldiery. So I fired him and started a store of my own and forgot to pay the commissary for the goods I stocked it with until some sharp fellow up at Tours deducted it from my paycheck. When I paid it to the quartermaster in Bordeaux I insisted on four receipts—one for me, one for my battery fund

voucher, one to send to the bird at Tours, and one to show somebody in Washington years after the war was over that I'd really paid the bill.

They fooled me. Six months after demobilization I received a demand from Washington for payment of the account, so I sent on my fourth receipt and that was that! There must have been a crook in the A.E.F.!

Presently our colonel settled the problem as to who should command the first battalion. One of our captains was promoted to major and sent over with many a warning to be firm and make me and my pal walk in the way we should go. The new major was quite filled with misgivings. He felt that an immediate showdown and a frank statement of his ideals and desires was necessary, particularly with me, because I was the worst outlaw. At least everybody had assured him I would be his problem child and yet he wasn't quite ready to believe this because he liked me. Without in the least wishing to let him down easy, I hailed his advent with pleasure, assured him that if we'd had the selecting of a major we would have picked him, promised him affectionate, cheerful obedience and loyalty, and gave him a dinner, all of which had the effect of making him happy in his new job. He was gravely concerned, however, and almost a little scandalized to discover that I only had four sentries scattered through the village, in case of fire or riot, and that I had no provost and a guard to visit the estaminets and see that the soldiers behaved and obeyed the order from G.H.Q. limiting the troops to light wines and beers and outlawing champagne and cognac.

I assured him my soldiers never got drunk and never created a riot, because, after I had read the G.H.Q. order to them three times in succession at retreat formation I had gathered them around me and announced that having expounded the law to them, I would now interpret it. And I interpreted that order to mean that they could swim in cognac and champagne provided they could carry the load home with dignity; that I regarded them as men not morons or minor children, that I would not snoop upon them, that all the estaminets in the village were theirs with one exception, and that was for the officers, and that if any man got drunk and disgraced the uniform and I found it out I'd bust his corporal and sergeant.

They were on their honor and they played the game with me, but when the new major organized an hourly patrol to watch them, he snooped on empty estaminets, for I had ordered a boycott on him. So, after three nights of that, and a lot of cheerful jeering from me, he gave up and the men came out of their billets and trade resumed its normal flow. I was in a fair way of making of him a very fine major when we were demobilized. Albeit he resisted stubbornly, I was slowly but steadily indoctrinating him with brand new theories of troop management and exorcising his preconceived ideas of army life. He tried to make me get up for reveille, but I told him I didn't expect to live very long and while I lived and the opportunity offered I purposed having my breakfast in bed. And lieutenants should be worked else they would get out of hand.

We were the first American troops ever to set foot in Plauzat and wild excitement, incident to the contemplation of unusual profit from us, broke out at once. I had the mayor in and pinned him down to a price on all liquor, eggs, cheeses, truffles, poultry and vegetables. I had to do a lot of figuring, based on five francs, sixty-five centimes to the American dollar to discover that the prices he named were not only reasonable but even cheap. So I made up a schedule of prices one hundred per cent higher. Thus, a bottle of vin ordinaire costing a Frog fifty centimes sold to a soldier for a franc. These lists I had posted up all over town and then hired the town crier, an ancient female who looked like a witch and had a voice as shrill as a fife, to go around tapping her drum and spreading the gospel. If profiteering above my listed price was indulged in the shop doing the profiteering would be posted as out of bounds. I wanted to give the French a break.

The largest estaminet in town was presided over by a young woman we all considered a little bit addicted to bats in her belfry. She was known as Split-tooth Annie and the soldiers felt so sorry for her low mental state that she got most of their trade. In fact, one of my bucks felt so sorry for her that when he went home he left Split-tooth Annie a little souvenir, but whether it was a boy or a girl I never knew, although I passed through Plauzat in my automobile in the fall of 1924 and asked, but nobody seemed to remember her. Ah, well, c'est la guerre.

That was a strange village. One night, in a back street, I pulled seven young or middle-aged women off a very old peasant woman. They had her down and were beating her to death. I clouted them left and right and carried their victim in to the count's park and washed her off at the fountain and begged the count's butler to bring me a shot of good old brandy for her. But he wasn't interested. He wasn't even sympathetic. Then the count came out, and he smiled at my concern over the old lady and my anger at the brutality of the younger women. He said: "They will yet kill her. They think she has the Evil Eye, that she is a witch."

About a week after we arrived an instructor was assigned to each battalion. He was a real instructor—gentle, patient, never smiling when one asked a boob question, explaining everything in simple, non-tautological, uninvolved English. He had been up to the front a year and he knew his business and we knew he knew it, wherefore, for the first time since I had held up my hand I had confidence in my instructor. To prove to you how good he was he taught me how to shoot at a balloon and hit it—theoretically. I almost got a swelled head to think I was smart enough to learn to shoot down a sausage balloon.

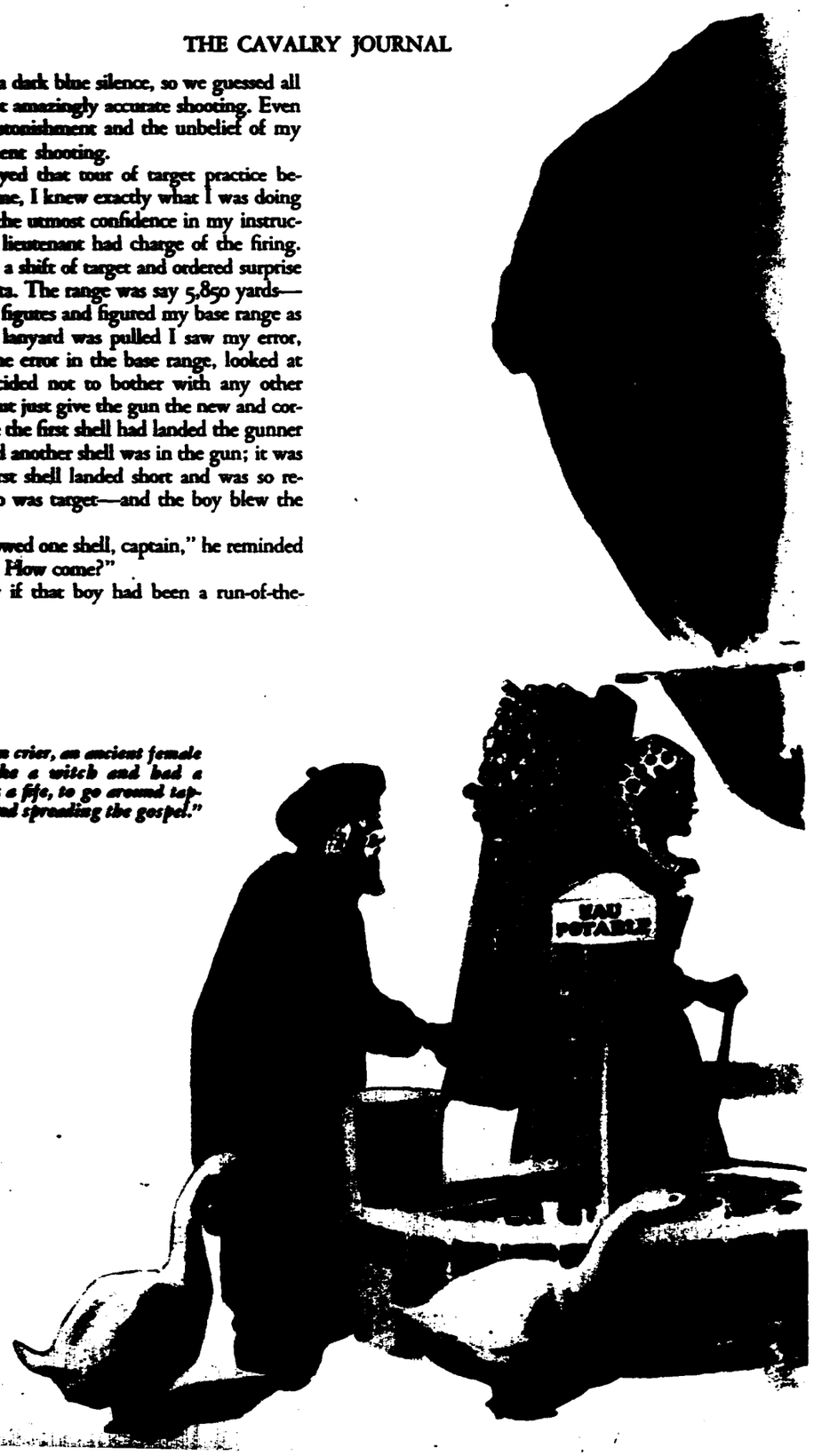
After our instructor had completed his lesson in theory we went up to the target range at Randanne to see if the theory would work. It did. It was zero weather, with a foot of snow on the ground and before we commenced shooting we were supposed to receive by wireless from a French meteorological station on top of Puy-De-Dome a report of the direction and velocity of the wind, the temperature and the barometric pressure. We never re-

ceived anything but a dark blue silence, so we guessed all that and did the most amazingly accurate shooting. Even I, to my own vast astonishment and the unbelief of my comrades, did excellent shooting.

I thoroughly enjoyed that tour of target practice because, for the first time, I knew exactly what I was doing and why and I had the utmost confidence in my instructors. A boy second lieutenant had charge of the firing. One day he gave me a shift of target and ordered surprise fire. I figured my data. The range was say 5,850 yards—and I transposed my figures and figured my base range as 5,580 yards. As the lanyard was pulled I saw my error, quickly computed the error in the base range, looked at my range table, decided not to bother with any other minor adjustments but just give the gun the new and correct elevation. Before the first shell had landed the gunner had the new data and another shell was in the gun; it was on its way as the first shell landed short and was so reported. Number two was target—and the boy blew the whistle on me.

"You are only allowed one shell, captain," he reminded me. "You used two. How come?"

I explained. Now if that boy had been a run-of-the-



"I hired the town crier, an ancient female who looked like a witch and had a voice as shrill as a fife, to go around tapping her drum and spreading the gospel."

mine instructor he would have given me a sour puss and muttered: "No solution." Being a perfectly whaling gorgeous instructor he smiled and said: "I ordered surprise fire, and by George, you discovered your error and corrected it so fast you actually did achieve surprise fire. Solution! Why? Because just now you learned something important and all by your own little self. Hereafter you'll be more careful of your figures. We learn more from our mistakes than we do from our successes and as long as you live and fire a field piece you will never again transpose your figures."

I told him I really ought to blow his brains out then and there in order that his young soul might be wafted to its reward before military sin could lay its devastating hand upon him. I still think of that boy with the utmost affection.

On our first tour on the target range we used British eighteen pounders simulating G.P.F. methods. Only the officer personnel and the gun crews went up to the range at Randanne, the remainder of the regiments remaining in their respective billets and this situation developed a perplexing problem for our colonel. He wanted all of his officers to have target practice and, indeed, they HAD to have it, but on the other hand he feared to leave the troops alone in their villages without an officer in command. He sent for me to ask me what officer I thought I could readily spare for this job and I told him that we had one in the first battalion who would never learn to shoot or be a soldier if he remained on the target range until he grew a long gray beard, because the colonel had recommended him for a second lieutenancy after he had failed miserably as a corporal, although he was socially o. k. in civil life. I added that I viewed with terror the prospect of leaving this cheerful idiot and first class souse in command of the battalion because it would embarrass him, and suggested that the young man be taken to the target range and that my first sergeant be given command of the battalion.

"But," the colonel protested, "first sergeants never command battalions." I reminded him that I had soldiered under first sergeants perfectly competent to do it and that sometimes first sergeants did command when all the officers were killed or wounded. And that my first sergeant would have discipline or else. So, much against his desire the colonel gave me my way. When I returned from two weeks up on the target range and asked my top how he had gotten along he said a few of the new selective service men had tentatively tried him out but that he had discovered an old dry well, stone-lined, and after he had lowered a couple of them into this well and kept them there three days on bread and water there had been a vast improvement in discipline. When I was demobilized I stole the delinquency book, just for a jolly souvenir and one day I looked through it and had the horrors at what I read there: That top was a strong man and fit to command.

After mounting from the target range we laid around the village two or three weeks doing nothing, while waiting for the issuance of G.P.F. rifles, trucks and tractors. During this period one of my first lieutenants was detailed to attend a school to learn orientation. He duly graduated from this school and the day after his return to our midst he was, on the colonel's recommendation, commissioned a captain. Evidently the colonel deemed a captaincy infra dig for an orientation officer, so he made our orientation officer battalion adjutant.

Now, there wasn't a bit of battalion adjutanting to do, so our major decided to make orientation officers out of all of us, with our recent graduate to instruct us. And lo, it then developed that he was a battalion adjutant, for seemingly he had forgotten his orientation as readily as he had learned it. At any rate he was of no use to us so the major began trying to puzzle orientation out by himself. Then somebody sent us over a theodolite and one day we got out in a field with the theodolite (vintage of 1870) and tried laying down some orientation lines in an effort to discover the coördinates of a colossal statue of the Virgin on a distant hill.

Suddenly a dispatch rider scorched up the road on his motorcycle. A few minutes later we saw the village cure scamper out of his parsonage to the church across the street, losing his slippers en route. And then the church bell began to ring and I said to the major: "To hell with the coördinates of the Statuede la Virge. We are no longer interested, because the war is over."

My first sergeant came running over and confirmed my suspicions. The motor cycle rider had brought the news formally from regimental headquarters.

"You remain here," the major ordered, "and finish this problem."

"It was finished before it started. We're all wrong and we even suspect it, major. Never, never will our battalion adjutant-orientation officer function in his dual rôle." And I folded the legs of the theodolite, handed the instrument to a soldier and bade him carry it up to battalion headquarters.

"Come back with that theodolite," the major yelled.

"No, soldier," I said firmly, "carry on. Major, on such an auspicious occasion only a very dull man could possibly monkey with a theodolite and ponder coördinates. You are far from being a dull man, so follow me, amigo, to Split-Tooth Annie's or some other refreshment bureau, for I am about to knock over a quart of warm champagne."

He sighed and followed me, cursing me for an outlaw and then, as was his custom, breaking into laughter and putting his arm through mine. He knew I would never seriously be disobedient.

I have often wondered what would have happened to us if the Armistice hadn't saved us. There come occasions in the life of a battery commander on active service when he can use an orientation officer. I often wonder, too, what the colonel was up to when he promoted a brand new orientation officer to a different job and never filled the vacancy!

Well—c'est la guerre!

(To be continued)

COMBINED CAVALRY MANEUVERS

By Major Vennard Wilson, Cavalry

EDITOR'S NOTE: The comments carried herewith on the maneuvers at Fort Riley last Autumn represent the observations and impressions of an individual and in no wise reflect official endorsement nor concurrence.

The October, 1938, maneuvers and demonstrations at the Cavalry School were conducted in accordance with directives from the War Department and from the Chief of Cavalry involving the 7th Cavalry Brigade and the Cavalry School maps.

They were of such character that all who witnessed them profited by the experience. No type of training compares in value with actual participation in operations in the field where capabilities and limitations of coöperation, organization, mobility, and technique are established as matters of fact.

Nature of Exercises

The exercises held at Fort Riley during the month of October were divided into three phases as follows:

(1) Instruction of officers at the Cavalry School.

(2) Demonstrations for the Command and General Staff School, the Cavalry school, and visiting officers.

(3) Maneuvers designed to verify or revise the methods of coöperation between horse cavalry and mechanized cavalry, and to work out the technique of operations involving the tactical employment of large horse and mechanized cavalry units in the field. Five separate maneuvers were held, each distinct in itself.

The scope of this article is limited to an account of the maneuver phase mentioned above.

Restricted Terrain Limits Value of Practical Military Training

General and special situations in each maneuver were drawn so that contact and final deployment took place on the Fort Riley Reservation.* This procedure was necessary because of the impossibility of leasing lands and to avoid damage to private property. *The artificial conditions imposed by lack of adequate terrain for maneuvers of modern mobile troops is one of the greatest handicaps to efficient military training in this country.*

General and Special Situations

Since the general and special situations in these maneuvers were, of necessity, drawn to assure contact on the Fort Riley Reservation, they are not described in detail, but the resulting tactical situations in each case are presented in a very brief manner to give a picture of the operations.

Enemy Representation

Officers and noncommissioned officers of the resident classes and small detachments of school troops were used to represent enemy forces in the first three maneuvers. Enemy units and guns were indicated by flags carried and maneuvered by the students under the direction of the officer in charge of the exercise.

The enemy was more fully represented during the fourth maneuver than during the preceding ones, but not to the extent that it could be designated as two-sided.

The fifth maneuver was two-sided.

*EDITOR'S NOTE: This fact should be kept in mind during any consideration of these maneuvers. Lack of available maneuver area with consequent artificial restrictions necessitated arbitrarily narrow limits. In a large measure, also, the problems discussed represent the detached operations of relatively small units.

MANEUVER NO. 1: October 15, 1938

Horse Cavalry Regiment, Reinforced by a Combat-Car Squadron, in an Attack

The purpose of this exercise was to study the employment of a combat-car squadron supporting a horse cavalry regiment in an offensive action, and the defensive measures of the combat-car squadron against attack aviation.

A blue horse cavalry regiment (2d Cavalry) reinforced by a battery of horse artillery, was engaged in attacking a Red horse cavalry regiment on the Fort Riley Reservation. The Blue mission was to secure a bridgehead position, the key terrain of which is now occupied by the enemy. (See sketch of Maneuver No. 1.)

The initial attack of the 2d Cavalry was not successful. As the maneuver opened, the 2d Cavalry was disposed with two squadrons in line along the line Four Way Divide—Morris Hill—Caisson Hill; one squadron was in reserve. The enemy held the high ground on the north side of the reservation, Custer Hill—Randolph Hill—Carpenter Hill.

Red reinforcements, consisting of one horse cavalry regiment and a battery of artillery, were approaching from the north, were 15 miles away, and could affect the action in two hours unless delayed.

Blue reinforcements of one combat-car squadron (1st Squadron, 13th Cavalry, Mecz.) reinforced by one mortar platoon, from a higher echelon, were expected by the 2d Cavalry.

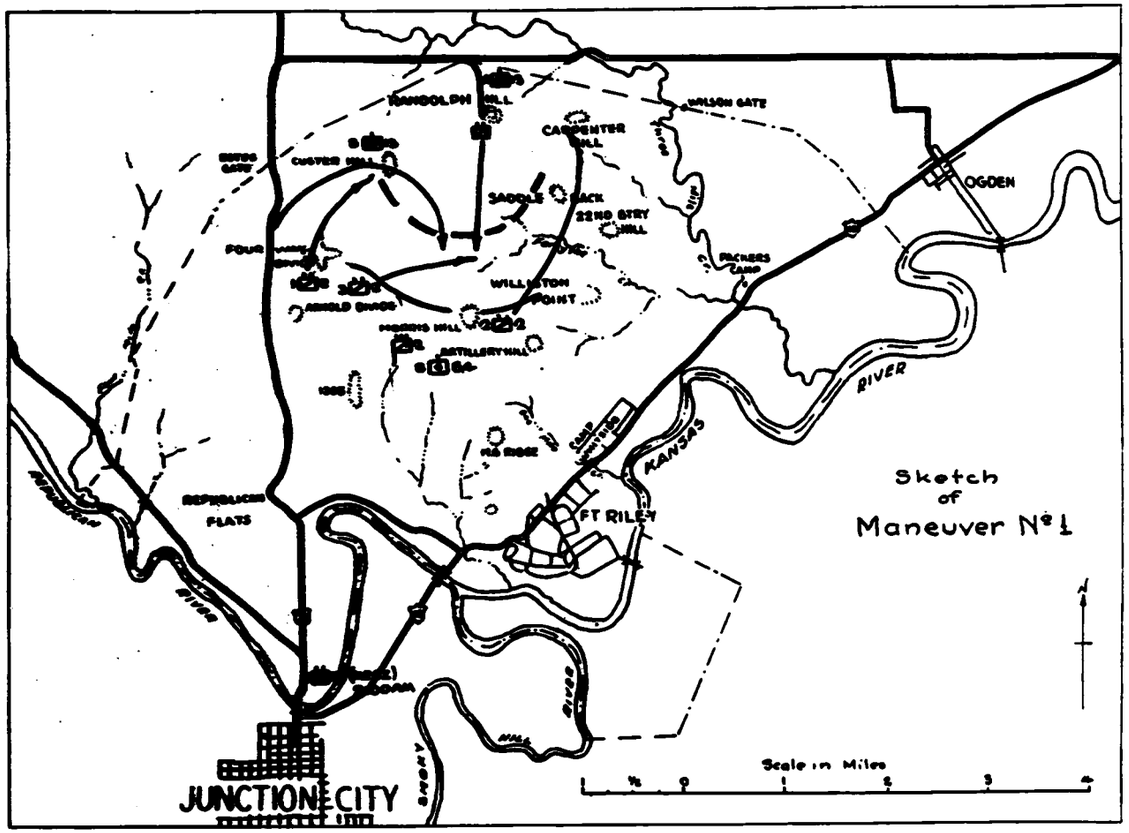
Red forces were known to be using attack aviation.

The Operations

At 8:45 AM the Commanding Officer, 2d Cavalry, was at his OP at Morris Hill, where he was informed that the combat-car squadron would arrive at the Washington Street Bridge at 9:00 AM. He returned to his command post and from time to time issued necessary orders for the operations that followed.

The Commanding Officer, Combat-Car Squadron was directed by radio to proceed with his squadron to Republican Point, where he would be met by a staff officer from the 2d Cavalry. Regimental S-3, 2d Cavalry, with marked map and written order, contacted the combat-car squadron at 9:20 AM. The squadron commander issued his attack order and advanced to the north.

At 9:40 AM the reserve squadron (1st Squadron, 2d



Cavalry) was moved forward to near Arnold Divide to be prepared to support the attack of the combat-car squadron.

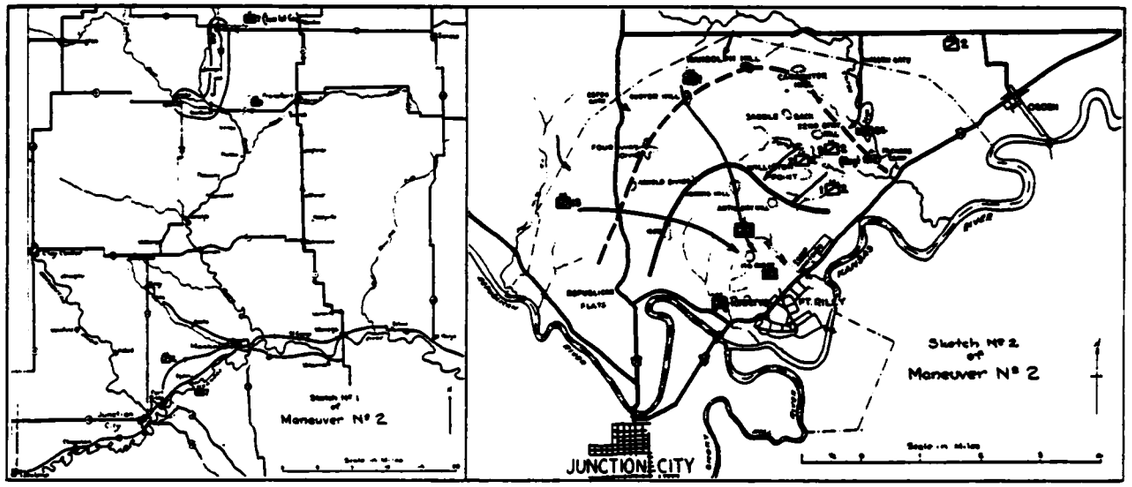
At 9:53 AM, the Commanding Officer, 2d Cavalry learned through a radio report from his scout cars that the combat-car squadron was preparing to attack. He ordered artillery fire on Custer Hill, and, at 10:00 AM, directed his 2d Squadron (right squadron in line on Morris and Caisson Hills), by mounted messenger, to watch for hostile movements about Wolf Canyon and Forsythe Canyon, and to advance the squadron to drive the enemy from Carpenter Hill.

Troop B, Combat-Car squadron attacked Custer Hill at 10:03 AM. Troop C, Combat-Car Squadron attacked Randolph Hill at 10:10 AM. The attack was made in column of platoons at 200 yards, platoons echeloned. It was well delivered initially and would no doubt have been successful.

At 10:15 AM, when the attack of the combat cars on Custer Hill was observed from the Regimental OP on Morris Hill, the reserve squadron 2d Cavalry was directed to advance and support the combat cars. The squadron moved out at 10:20 AM. With little over a mile to go, it should have arrived on Custer Hill at 10:25 AM, or 10:30 AM at the latest. The fast movement of the mechanized attack had caused the combat cars to clear and pass beyond Custer Hill, part of them already having reached their assembly area at Cameron Springs by 10:20 AM. The outlined enemy movements then indicated that they had retaken Custer Hill, and this caused a second combat-car attack to be launched. The horse squadron halted on the way to Custer Hill for a dismounted attack, and did not arrive until about 10:40 AM.

The 2d Squadron, 2d Cavalry moved north at 10:20 AM on Carpenter Hill, which was occupied at 10:35 AM. The 3d Squadron was moved to Cameron Springs in regimental reserve. At 10:30 AM, the combat-car squadron was directed to advance north against the approaching enemy regiment, which had been delayed by the scout-car platoon of the 2d Cavalry after the combat-car attack was launched.

The operations of the attack aviation had been planned for an attack against the combat-car squadron in its initial approach on the reservation. Due to the fact that the attack planes were due to arrive on the day of the exercise, it was necessary to arrange for the mission prior to that day. The Commanding General, Barksdale Field, arranged to have this attack made as a continuous mission from that post, the planes to leave Barksdale Field in time to reach Chapman, Kansas, at 8:30 AM, where they were to be contacted by an observation plane and have the target designated. This was accomplished on schedule. The attack was delivered a few minutes before the exercise actually started, the 1st Squadron, 13th Cavalry (Mecz) then being in an



administrative halt awaiting the opening of the exercise. A second attack was made on this unit about 10:15 AM as it was entering its assembly area, but the vehicles were well dispersed at that time. Antiaircraft machine guns were in readiness to fire on the attack planes.

Comments

The tactical situation required that an objective be secured quickly. The force primarily allotted proved to be insufficient, and the only other force available to the higher command to send in as reinforcements was a squadron of combat cars. This was a suitable mission for mechanization and shows the usefulness of a combat-car squadron for employment with horse cavalry.

The attack of the combat-car squadron was launched one hour and three minutes after it arrived. Of this time, 20 minutes was required to issue the regimental order, 20 minutes in marching, and 23 minutes for issue of squadron and troop orders and for deployment. *If the full effect of surprise is to be obtained, these times must be cut to the minimum.* It is very doubtful that the total time could be reduced to less than 40 minutes under the most favorable circumstances.

The plan contemplated the use of one of the squadrons of the 2d Cavalry, which was deployed in line, in a pursuit or exploitation mission. This squadron was ordered forward at the time the combat-car attack started, and actually began its advance twenty minutes later. This was a very small squadron, due to the reduced strength of the 2d Cavalry, and a full squadron would no doubt have required longer to assemble from a wide front. Prior to the attack, this squadron could have withdrawn most of its rifle units and part of its light machine guns, and could have moved forward as part of the combined attack.

Lack of experience in operations of this type hindered coordination in the attack, not only in the squadron which followed the attack of the combat-car squadron, but also in the attack of the right squadron of the 2d Cavalry against Carpenter Hill. The results of the operation would have been more decisive had all elements started at the same time. Some form of coördination is essential, preferably a "time of attack."

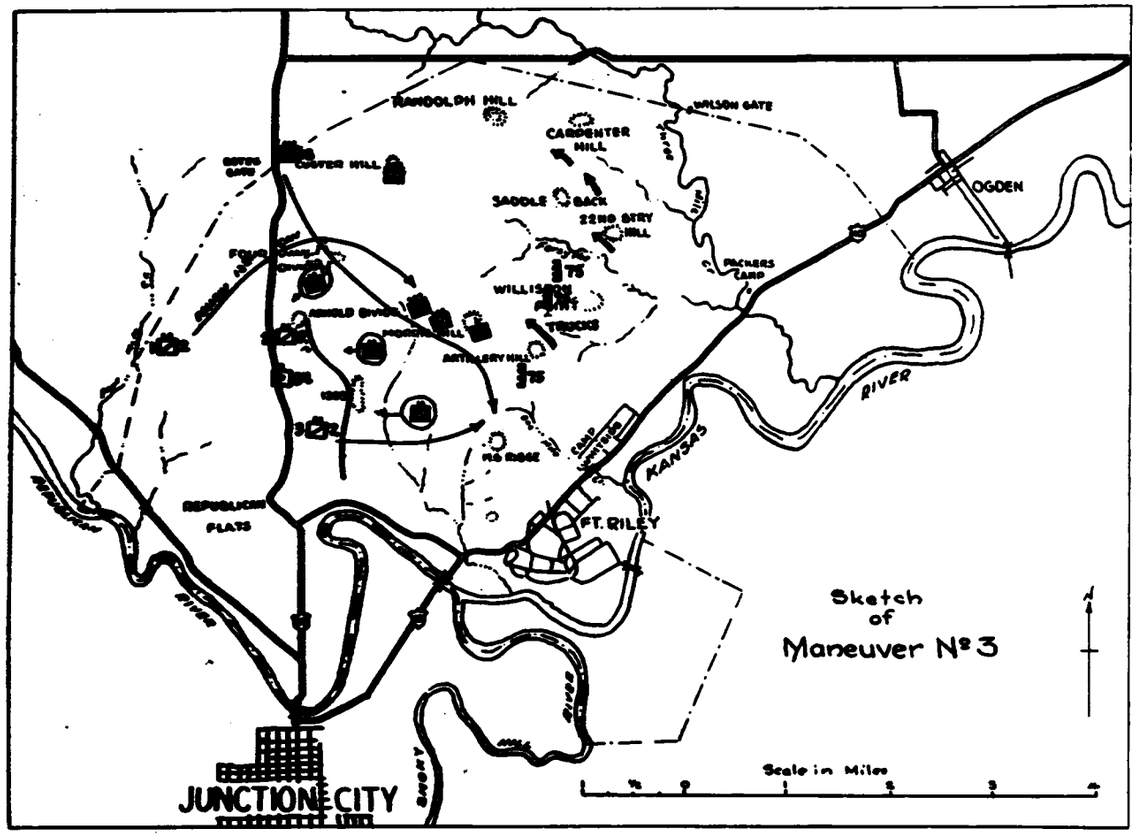
The successful operations of attack aviation in executing an attack mission during a continuous flight from Barksdale Field, Louisiana, was an interesting feature of this maneuver.

While certain imperfections were noted in the execution of this maneuver it nevertheless shows the feasibility of cooperation of horse cavalry and mechanized cavalry and the potential power of such a combination. The powers and limitations of each are such that one supplements the other to a marked degree. The crushing effect of combat-car units greatly assists horse cavalry in advancing its attack. The holding power of horse cavalry secures the objectives gained by mechanized cavalry. Horse cavalry, with its mobility, appears to be the best available means to furnish the prompt coöperation required by this situation.

MANEUVER NO. 2: October 18/19, 1938

Concentration of Mechanized Cavalry Brigade and Horse Cavalry Regiment on the Battlefield, After Night March, for Combined Offensive Operations After Daylight.

This exercise consisted of a daylight administrative phase and an overnight tactical phase. The administrative phase consisted of the march of the 2d Cavalry to Manhattan (about 15 miles) and the march of the 7th Cavalry Brigade to the vicinity of Blue Rapids, Kansas (about 75 miles from Fort Riley via Wamego). The tactical phase started at 4:00 PM, at which time all units were to be in concealed bivouacs, with outposts established, prepared for defense against attack aviation. The tactical march was to start at midnight, with the 2d Cavalry attached to the 7th Cavalry Brigade (Mecz), the two units arriving at Fort Riley prepared for a combined offensive action at daylight.



At 4:00 PM, the 2d Cavalry was in its bivouac at Manhattan and the 7th Cavalry Brigade (Mecz) was entering its bivouac in the Blue Rapids area. The only information available to the brigade commander was that the 2d Cavalry had been attached to his brigade, and that the entire force was to be prepared for a night march on orders from army headquarters. (See Sketch No. 1, Maneuver No. 2.)

At 10:00 PM, the 7th Cavalry Brigade Commander was informed that Fort Riley was occupied by a brigade of enemy infantry; that a flight of attack aviation was available to him on call; that he would move on Fort Riley at midnight with his entire force, drive out the enemy forces, and secure the bridges at Fort Riley.

The enemy infantry brigade, reinforced by one battery of artillery, with outposts established, was occupying a defensive position on the Fort Riley Reservation. (See Sketch No. 2, Maneuver No. 2.) Its position was generally fan-shaped, with Fort Riley as a center, extending from 3,000 to 4,000 yards therefrom, with east and west flanks on the river. The total length of its line was about 8,000 yards. The northeast sector (about one-half of the total) was protected on the north by canyons. The northwest sector, although on open ground, was favorably placed on high ground. This information was not available to the 7th Cavalry Brigade.

The Operations

The 2d Cavalry, at Manhattan, received orders through a staff officer of the 7th Cavalry Brigade at 11:50 PM to march at once to Ogden and there await orders; to reconnoiter thoroughly the hostile position on the high ground on the Fort Riley Reservation, and to report the result of reconnaissance to the 7th Cavalry Brigade at Magic School (about 10 miles north of Fort Riley) not later than 4:00 AM. (Note: The 2d Cavalry had no radio set to work direct with the 7th Cavalry Brigade, and the range of its scout-car sets was not sufficient in the early stages. The brigade staff officer had a 193 radio set to work in the brigade net, but this set went out of order.)

The 2d Cavalry sent five officer patrols in scout cars to accomplish the reconnaissance. The horse elements marched in one column at 12:55 AM on Ogden, halting one mile north thereof at 3:25 AM, where they remained until 5:05 AM.

The five officer patrols in scout cars reconnoitered the enemy position and reported the result of the reconnaissance to the brigade commander at Magic School prior to 4:00 AM. The information obtained was in greater detail than could possibly have been obtained had an actual enemy been present.

At 5:05 AM, the 2d Cavalry received orders to be prepared to attack at 6:15 AM along a designated axis (Williston Point—Artillery Hill), which would bring it against the enemy right—that part of the front covered by canyons. It was also directed to make its main effort on its right. The distance to the attack area was about five miles; the regiment moved out at the trot at 5:05 AM, after preliminary orders had been issued, and was assembled in attack position by 6:20 AM.

The 7th Cavalry Brigade (Mecz) marched from its bivouac area at midnight in two columns, 1st Cavalry (Mecz) on Highway 77 and the 13th Cavalry (Mecz) on roads west thereof. It was halted at 4:00 AM about 10 miles north of the Fort Riley Reservation. In this area, orders for the attack were issued by the brigade and regimental commanders, based upon information received from the 2d Cavalry. It was expected that the attack could be launched by 6:30 AM.

The plan of operations, as developed at this time, was as follows:

A coördinated attack by the entire force, including attack aviation, on order, about 6:30 AM.

2d Cavalry to attack enemy right.

1st Cavalry (Mecz) to attack enemy center, axis Randolph Hill—Morris Hill—Machine Gun Ridge.

13th Cavalry (Mecz), entering through J. Dixon, to attack enemy left, axis Arnold Divide—hill west of Machine Gun Ridge.

Upon completion of attack, to assemble approximately in center of enemy position as a result of the converging directions of attack.

The 2d Cavalry was in attack position on time as indicated above. The mechanized elements required longer time to develop than had been anticipated, and were ready to attack at 7:10 AM. The attack was launched about 7:15 AM. The attack proceeded satisfactorily at that time, and coördination of movement into the final assembly areas was well executed.

Comments

The administrative march was well conducted. Its rate was 20 miles per hour. The mechanized elements, using several bivouac areas, and placing vehicles under trees and camouflage, obtained excellent cover from air observation and were not located by observation planes.

The primary tactical purpose of this maneuver, that of concentrating horse and mechanized elements on the battlefield from distant areas under adverse conditions, was accomplished, although certain imperfections were noted as indicated below.*

The march of the 7th Cavalry Brigade (Mecz) to the south during darkness was under very severe conditions of dust and a cold north wind. Lights were used. The rate was about 15 miles per hour as far as Magic School, slower thereafter.

The 2d Cavalry in this operation, especially in the reconnaissance phase, could have been employed differently. Initially it was 12 miles from the reservation boundary, and about 16 miles from the farthest part of the enemy position. Its initial reconnaissance orders directed it to secure information of enemy dispositions and to report them by 4:00 AM, a time allowance of 4 hours. It would have been impossible to accomplish this mission by horse patrols alone. However, a minimum of one troop could have proceeded at once to reinforce the scout-car reconnaissance and the horse patrol reconnaissance could have been continuous after the report of 4:00 AM had been made.

In the attack phase, the 2d Cavalry was given a zone of attack which converged upon the final objectives of the mechanized elements. This is one possible solution, apparently adopted because of the relatively wide front and comparatively strong enemy to be attacked. Another solution would have been to place elements of the 2d Cavalry in contact along the entire line, with its mass in rear of the mechanized attack on the west, and to have the horse elements exploit the success of the mechanized elements and cover their assembly.

The development of the 7th Cavalry Brigade (Mecz) consumed more time than had been originally estimated. However, when the attack started, it was well coördinated and controlled, proceeding from one terrain objective to the next in an orderly manner. The degree of success which could have been obtained against infantry on favorable ground, with over twelve hours to organize the position, is, of course, extremely questionable. Undoubtedly the 2d Cavalry would have had a difficult task in its sector also.

The outstanding difficulty in this operation was communication between the 7th Cavalry Brigade and the 2d Cavalry. In the initial phase there was a lack of sets in the 2d Cavalry with sufficient range to reach brigade headquarters.

The attack aviation was employed against antitank guns on the enemy front line west of Morris Hill at 6:17 AM as planned. The objective was suitable, but the attack was delivered too early because of the unexpected time required for the development of the ground forces. This illustrated the difficulty of coördinating ground and air attacks and the necessity for close liaison between ground and air until the final attack is actually launched. The enemy artillery would also have been a suitable target.

*EDITOR'S NOTE: Imperfections noted here will undoubtedly continue to exist so long as there is lack of opportunity for continuous combat training between all types of our cavalry.

MANEUVER NO. 3: October 24, 1938

Mechanized Cavalry Brigade and Horse Cavalry Regiment in a Delaying Action Against an Infantry Division.

This exercise, in its larger tactical aspects, represented the coöperative employment of a regiment of horse cavalry and a brigade of mechanized cavalry in delaying the advance of a Red infantry division. Due to terrain limitations, the lack of sufficient troops to outline a complete infantry division, and to the desire to study the detailed operations of a mechanized unit the size of a regiment, that part of the exercise which was held on the Fort Riley Reservation, and which was developed in complete detail, was essentially the launching of a counter-attack by a

horse regiment, reinforced by a mechanized regiment, against the leading exposed infantry regiment of the Red division.

A regiment of horse cavalry had been engaged during the previous day in delaying the advance of a Red infantry division, which was advancing westward from Manhattan (15 miles northeast of Fort Riley). This Red division, with the 2d Cavalry in contact along Three Mile Creek, had bivouacked in the area of Ogden (5 miles northeast of Fort Riley) during the night preceding the maneuver.

During the same night, the Blue 7th Cavalry Brigade (Mecz), reinforced by a flight of attack aviation, under army control, had been moved from a distant area to take over the delaying mission previously assigned the 2d Cavalry, and the 2d Cavalry had been attached to it.

The maneuver began at 8:30 AM, 24 October. At this time, the 2d Cavalry was just completing the occupation of its second delaying position, having been driven from its initial delaying position by a daylight attack of one regiment of Red infantry, supported by one battalion of Red light artillery, the only enemy troops actually in contact. The remainder of the Red infantry division was beginning to advance, with one infantry regiment so placed that it could reach the 2d Cavalry in about two hours, and the remaining brigade just beginning to break into columns from its bivouac area. (See Sketch of Maneuver No. 3.)

The Blue 7th Cavalry Brigade was disposed with the 13th Cavalry (Mecz) about four miles in rear of the 2d Cavalry (with a liaison officer at the Command Post, 2d Cavalry), and the remainder of the brigade just completing its crossing at Milford. Colonel 2d Cavalry, as senior regimental commander, had been designated to command the joint operations of the 2d Cavalry and 13th Cavalry (Mecz).

The Operations

The operations of the 7th Cavalry Brigade (less 13th Cavalry) will not be discussed in detail. Terrain limitations prevented development for offensive action, although the reconnaissance phase was actually carried out successfully. Account was taken of the tactical significance of this operation in the development of the actions of the enemy forces. The threat against its rear would have forced the Red infantry division to dispose itself for an all-around defense and to employ a large proportion of its force for rear and north (exposed) flank protection. It would also have had the effect of delaying the movement of supporting forces to assist the exposed leading infantry regiment. Without this threat, the enemy in contact with the 2d Cavalry could have been strongly supported, especially by artillery, within one hour.

Orders for the combined attack of the 2d Cavalry and 13th Cavalry (Mecz) were issued by the Commanding Officer, 2d Cavalry, at 8:30 AM. Plans had been prepared prior to this hour. The method used was to radio the Commanding Officer, 13th Cavalry (Mecz) to continue his advance to a designated point where he would be met by a staff officer of the 2d Cavalry with detailed orders.

The 13th Cavalry (Mecz) launched its attack at 9:30 AM, and fired a rocket signal at that time. The initial objective was Four Way Divide.

The reserve squadron of the 2d Cavalry moved out promptly in rear of the 13th Cavalry and was in position to follow up very closely the attack of the combat cars. (See Sketch of Maneuver No. 3.)

The initial attack was very well executed. The supporting horse elements followed the combat cars within three or four minutes, and the objective could have been taken easily. However, the coördination of the subsequent movements of the horse and mechanized elements was not all that could have been desired, due to lack of experience in this type of operation.

The attack of the combat-car units proceeded from the initial objective to the Redoubts and then to Machine Gun Ridge, a total advance of about 5,000 yards. Its direction was approximately parallel to the line initially held by the 2d Cavalry and from 1,500 to 2,000 yards in front of it. One combat-car troop operated farther north against the enemy artillery positions.

The 3d (right) Squadron of the 2d Cavalry, noting that the combat-car attack had reached Machine Gun Ridge, advanced at 10:15 AM (45 minutes after initial attack) to Machine Gun Ridge, which it occupied at 10:50 AM.

The 2d (left) Squadron of the 2d Cavalry formed in regimental reserve after the combat-car attack passed its front.

The artillery batteries attached to the 2d Cavalry and to the 13th Cavalry (Mecz), acting as a provisional battalion, remained in their original attack positions to support the reorganization of the new position.

The 13th Cavalry (Mecz), upon completion of the attack, assembled in rear of the 2d Cavalry, completing its assembly at about 11:15 AM. It was then prepared to rejoin its brigade for further operation.

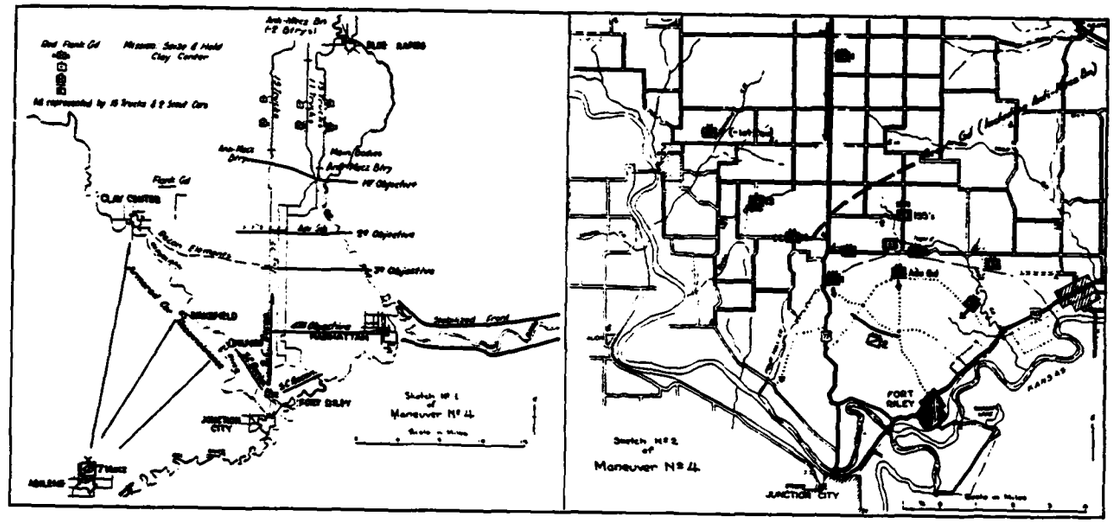
The flight of attack aviation was ordered to attack advancing enemy infantry columns on the north flank, which attack was made about 9:15 AM. A second mission was given the attack aviation against a battery of enemy artillery and a truck column (enemy infantry battalion) approaching Caisson Hill. This second attack was delivered at 9:55 AM.

Comments

The tactical missions were considered to be suitable and satisfactory. The technique of execution was not all that could be desired, due to the limitations imposed by lack of adequate terrain.

In this exercise horse cavalry fixed the enemy in position, and, except for small battlefield movements, held him in position, reported his dispositions, and prepared the way for the attack of mechanized cavalry. The movement of the Mechanized Brigade (less the 13th Cavalry) against the right flank and rear of the Red division prevented the movement of additional Red troops to the battlefield.

An attack by mechanized cavalry requires continuous fire support. The initial attack of the mechanized regiment was supported by field artillery and light machine guns. After advancing several hundred yards, the combat-



car elements passed beyond the effective range of light machine guns and was thereafter supported only by field artillery fire and very limited small arms fire delivered by the 2d Cavalry.

In this exercise, the attack of the mechanized cavalry was shown to be very effective when closely supported by horse cavalry. The reserve squadron of the 2d Cavalry attacked immediately in rear of the combat-car units and moved with equal speed toward its objective. Practice and experiment are essential to obtain the correct timing and coördination of the two elements. In this particular maneuver, a great improvement was noted in the movements of the horse units over than shown in Maneuver No. 1. In the first maneuver the horse units were too slow; in this maneuver their timing for the initial attack of the mechanized units was excellent.

The time required to commit the mechanized regiment from march formation to attack, with plans prepared but no orders issued, was approximately one hour. It is difficult to judge this time accurately because terrain limitations required advance over, and development from, a narrow road. It is not believed, however, that this time could be reduced to much less than forty-five minutes.

The liaison between the horse regiment and the mechanized regiment, prior to and during the attack, was excellent. Communications were very satisfactory, but it was noted that great reliance was put upon radio. Every effort should be made to utilize additional means.

The tactical missions of the attack aviation were not considered to be the most suitable. The initial mission was against infantry columns which could not have affected the main action, and which could have been delayed sufficiently by the scout-car elements. The greatest threat to the attack of mechanized units is the enemy artillery and anti-mechanization weapons. Therefore, it is believed that the attack aviation should have been concentrated on these elements just prior to the attacks of the 13th Cavalry. However, it was demonstrated that the communications with the attack aviation were successful, and that its attack could be delivered where and when desired.

MANEUVER NO. 4: October 25, 1938

Mechanized Cavalry Brigade, Assisted by a Regiment of Horse Cavalry, Operating Against a Motorized Infantry Division.

The purpose of this maneuver was to illustrate the employment of a brigade of mechanized cavalry, receiving coöperation from a regiment of horse cavalry; action necessary to stop a wide encircling maneuver by a motorized infantry division; and the defensive measures of a motorized column against mechanized cavalry. It was an extended maneuver, with the 7th Cavalry Brigade and the 2d Cavalry (reinforced by a battery of horse artillery) on the Blue side, and an outlined Provisional Infantry Division (3 regiments), represented by 6 scout cars of the 9th Cavalry, 54 trucks, a company of the 17th Infantry, and students of the Cavalry School, commanded by Lieutenant Colonel Heard of the 7th Cavalry Brigade, on the Red side.

Blue south, Red north. Main forces were stabilized east of Manhattan. Red army had a motorized infantry division available; Blue army had a mechanized cavalry brigade and a horse cavalry regiment available.

At the opening of the exercise, at 9:30 AM, Blue dispositions and missions were as follows: (See Sketch No. 1, Maneuver No. 4.)

7th Cavalry Brigade (Mecz) was at Abilene (25 miles west of Fort Riley), with its reconnaissance elements in possession of the crossings over the Republican River at Clay Center, Wakefield, and Milford. Its mission was to locate and destroy the hostile motorized force last reported at 7:00 AM in the vicinity of Blue Rapids.

2d Cavalry, covering the Blue left flank, was at Fort

Riley. Its immediate mission was to reconnoiter to Riley (town) and Milford, to report any movement of the hostile motorized force last reported at Blue Rapids at 7:00 AM, and to contact and delay the advance of Red columns. The 2d Cavalry was to coöperate with the 7th Cavalry, but was not attached to it, each operating under army control.

The Red Motorized Division was at Blue Rapids at 7:30 AM. Its mission was to move south between the Republican and the Blue Rivers, prepared to attack across the Kansas River between Junction City and Ogden. At 9:30 AM its leading elements had reached the line Clay Center —Garrison.

The Operations

Red Motorized Infantry Division:

Red reconnaissance elements arrived at Clay Center and found it occupied by a Blue (Mecz) reconnaissance detachment. Reds moved south, avoiding Clay Center, and destroyed the bridge at Broughton (south of Clay Center).

The Red flank guard arrived at Clay Center about 10:00 AM. The Blue reconnaissance elements had moved east to locate the Red columns, and the flank guard was enabled to occupy Clay Center, damage the bridges, and hold up the advance of the Blue 1st Cavalry (Mecz) for a considerable period of time.

Red reconnaissance elements moved south to Wakefield, where they held up an attempt of the Blue 13th Cavalry (Mecz) to cross at that point.

As a result of holding up the crossing of the main body of the mechanized cavalry, the Red division was enabled to advance south with little delay except to the right column. This column was attacked by Blue attack aviation and was also delayed by armored cars and by one squadron of the 13th Cavalry (Mecz) which had crossed at Wakefield. When this occurred, the Red commander employed his artillery and one company of his anti-mechanization battalion, marching with the center column, to flank the Blue armored cars and combat cars holding up his right column.

Leading motorized infantry units reached the Fort Riley Reservation by noon and gained contact with the 2d Cavalry. By 2:30 PM, the infantry division was well closed up and had secured commanding terrain on the north of the reservation. (See Sketch No. 2, Maneuver No. 4.)

2d Cavalry:

As stated previously, the 2d Cavalry was initially on the south of the Fort Riley Reservation, with only its scout cars on reconnaissance. At 10:30 AM, it sent Troop A to the vicinity of Randolph Hill to reconnoiter all roads to the north.

At 10:50 AM, the 2d Cavalry, through its scout cars, learned of the Red infantry movement taking place along Highway 77. At the same time it received a message from the 7th Cavalry Brigade to move north promptly to block Highway 77 and roads east thereof. The regiment then moved to Four Way Divide.

At 11:30 AM, the 2d Cavalry learned through its horse patrols that the enemy was one mile north of the reservation. The 1st Squadron was sent to Randolph Hill to delay. This squadron made contact at noon. The 3d Squadron was sent to Estes Gate at 2:00 PM, when it was apparent that the enemy was developing for attack. The 2d Squadron was sent to Four Way Divide to cover the withdrawal of the two advanced squadrons to a delaying position on the Redoubts--Morris Hill line when the enemy attacked the advanced position.

7th Cavalry Brigade:

As indicated above, the 7th Cavalry Brigade was delayed in its attempt to cross the Republican River at Clay Center and Wakefield. It, therefore, was unable to gain contact with the flank of the Red infantry division while it was moving, the only action being local actions between the mechanized brigade advance guards and the infantry division rear guards, and the delaying action against the right column, conducted by armored cars and by the combat-car squadron which crossed at Wakefield.

The Red infantry division was not fixed until it met the 2d Cavalry. The 7th Cavalry Brigade could probably have attacked about 3:00 PM, but the infantry division was well closed up by this time. The maneuver terminated at this point.

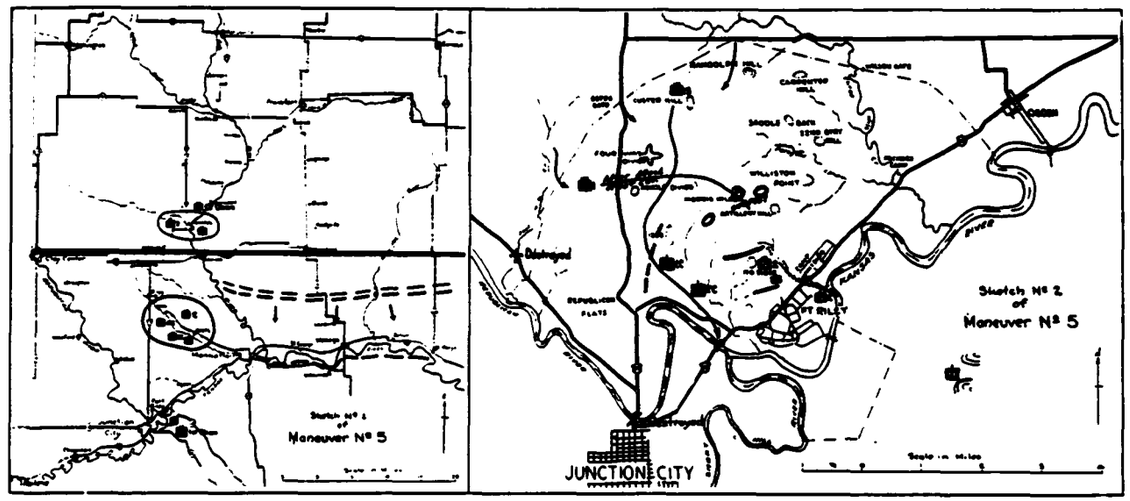
Comments

This exercise involved movements over large areas and operations on roads which prohibited development or movement across country. The initial dispositions and distances gave an advantage to the motorized division.

When the maneuver opened, the bridges over the Republican River were in possession of the reconnaissance units of the 7th Cavalry Brigade. When those units moved out on reconnaissance, the river crossings were left unguarded. The right flank guards of the Red infantry division, which moved in between these reconnaissance units and their main bodies, were therefore enabled to secure the bridges and delay the crossing of the Cavalry Brigade. The resulting operation became more of a pursuit against the rear of a fast moving infantry division than an interception by striking the head or flank of the columns.

This exercise illustrated the difficulty encountered in controlling the operations of a unit as large as the mechanized cavalry brigade when operating against defiles such as were the bridges over the Republican River. The brigade had no ground reconnaissance agencies deployed except the armored-car troops of its regiments. To have held these units to cover the crossings pending the arrival of the main bodies, from 30 to 35 miles in rear, would have forced reliance on air observation for an hour and a half. Sending the reconnaissance units ahead on a reconnaissance mission, as was actually done, exposed the crossings to seizure by the Reds. An alternative solution would have been to reinforce the reconnaissance troops with combat-car units to hold the bridges.

Another important illustration was the need for coördination of the action of all cavalry units in a locality.



The 2d Cavalry, in accordance with the draft of the problem, was not attached to the 7th Cavalry Brigade. It is believed that this should have been done.

The recurrent difficulties of communication and control when reliance is placed upon radio communication were also illustrated.

Attack aviation, operating on the Blue side, attacked the right column of the advancing infantry division and delayed this column.

This maneuver illustrates the effective possibilities of coöperation between widely separated forces of horse cavalry and mechanized cavalry, wherein the horse cavalry is used to delay and fix an advancing hostile force on its axis of advance and the mechanized cavalry may be used offensively against the hostile flanks and rear.

MANEUVER NO. 5: October 27-28, 1938

Two-sided Maneuver, Mechanized Cavalry Brigade Operating Against a Horse Cavalry Regiment Reinforced by Mechanized Units.

This was a two-sided maneuver. Blue (north) was the 7th Cavalry Brigade (Mecz) (less detachments). Red (south) was the 2d Cavalry, reinforced by two batteries of horse artillery, one platoon of armored cars, a squadron of combat cars with a section of mortars (from 7th Cavalry Brigade), an observation squadron, and an engineer demolition detachment. The maneuver was drawn to illustrate day and night reconnaissance by both types of cavalry, maintenance of contact with horse cavalry at night by mechanized cavalry, and combat of mechanized cavalry against horse cavalry reinforced by mechanized units.

Blue (north) and Red (south) main forces were in contact east of the Blue River. Red retirement south of the Kansas River was imminent. Blue had a mechanized cavalry brigade available at Randolph (30 miles north of Fort Riley). Red had a reinforced cavalry regiment at Keats (10 miles north of Fort Riley). Except in the Junction City area, bridges south of Clay Center and as far west as Salina had been destroyed. (See Sketch No. 1, Maneuver No. 5.)

At 5:00 PM, the 7th Cavalry Brigade (Mecz) was in bivouac in the vicinity of Randolph. It received orders to send reconnaissance elements at once to gain and maintain contact with an enemy cavalry force reported in the Riley —Keats area. At midnight it received orders to drive this force out of the area between the Republican and the Blue Rivers, and to seize the bridges near Junction City. A flight of attack aviation was made available to assist in the operation.

At 5:00 PM, the 2d Cavalry, reinforced as indicated, was in bivouac in the Riley—Keats area, with reconnaissance and delaying detachments on its front at not more than five miles from its bivouacs. Its mission was to continue flank protection from its present location until midnight, then to withdraw to the Fort Riley Reservation, and to remain north of the Republican and Kansas Rivers until 9:00 AM. After that hour, to withdraw south of the Kansas River, destroying the bridges after crossing.

The Operations

Blue (7th Cavalry Brigade (Mecz)) Operations:

Reconnaissance Phase:

The two regimental reconnaissance troops, starting at 5:00 PM, operated by phase lines and made a thorough reconnaissance of the zone of advance. This reconnaissance reached the vicinity of the 2d Cavalry after dark. When contact was established, information was obtained by sending a dismounted man into the Red bivouac. Aerial reconnaissance located the 2d Cavalry bivouac at 6:30 PM (before dark).

Withdrawal Phase:

The reconnaissance troops were able to determine that the 2d Cavalry had withdrawn, but were unable to follow the movements of the horse elements. They were able to

follow the movements of the Red combat cars, due to the noise of the vehicles.

March Phase:

The march started at 2:00 AM, without lights, 1st Cavalry (Mecz) with one battery of artillery via routes west of Highway 77; 7th Cavalry Brigade (Mecz) (less west column) via Highway 77 and routes east thereof. The march was controlled by the same phase lines used for the reconnaissance units, which units reverted to regimental control. Dust conditions were very severe. Due to the halts on phase lines, temporary loss of roads by some units, and to the dust conditions, the mass of the brigade reached the Fort Riley Reservation about 6:30 AM, four and one-half hours for the march of thirty miles.

Attack Phase: (See Sketch No. 2, Maneuver No. 5.)

The original plan of operations contemplated that the 1st Cavalry (Mecz) enter through Milford Gate and J. Dixon. Discovery of damage to the bridge over Four Mile Creek near the Milford Gate required that the entire regiment enter through J. Dixon. This caused a change of route, a delay of twenty minutes in getting into position, and a change in the brigade plan of attack.

The 13th Cavalry (Mecz) entered North Gate and Estes Gate and was ready to attack at 7:00 AM. The outpost of the 2d Cavalry on Morris Hill was withdrawn upon the approach of the 13th Cavalry (Mecz), but one troop of the combat-car squadron attached to the 2d Cavalry remained on Macomb Hill. The 13th Cavalry was then ordered to attack this combat-car unit and to seize the Highway 40 bridge over the Republican River, which attack it performed.

The 1st Cavalry (Mecz), entering through J. Dixon, was ordered to change its attack direction to that originally planned for the 13th Cavalry. This change of direction was performed. Although the attack directions crossed, the 13th Cavalry had cleared before the attack of the 1st Cavalry (Mecz) approached.

The attack of the 1st Cavalry (Mecz) did not reach the main position of the 2d Cavalry on Machine Gun Ridge prior to 8:30 AM, when the exercise terminated. This position was well protected by canyons.

Attack aviation was used against the Machine Gun Ridge position about 7:30 AM.

Red (2d Cavalry) Operations:

Bivouac Phase:

The bivouac, although concealed to some extent, was located by air observation at 6:30 PM. Attack aviation was directed against it, but approaching darkness prevented effective operation.

Outguards covered the crossings of Wild Cat Creek, south of which the regiments bivouacked. The Scout Car Platoon, 2d Cavalry, covered the roads on the east side of the bivouac area, and sent a section of four cars, each with one-half rifle squad, to hold the bridges over the Republican River on Highway 40, the bridge over the Smoky Hill River south of Junction City, and Engineer Bridge.

The attached combat-car squadron (2d Squadron, 13th Cavalry (Mecz.)), with an armored-car platoon, established a counterreconnaissance screen along the road three miles west of Highway 77, with armored-car patrols covering Highway 77 and the route through Milford.

The engineer detachment destroyed the bridges over Wild Cat Creek, the Washington Street Bridge at Junction City, and the bridge over Four Mile Creek on the Milford Road.

Withdrawal Phase:

This operation, starting at midnight, was accomplished as planned. As indicated above, the enemy reconnaissance was able to follow the movements of the combat cars on the west, but was unable to follow closely the movements of the horse elements.

Delaying Action Phase:

This phase proceeded as indicated in the description of the Red operations.

The result of the attack of the 13th Cavalry (Mecz) against the combat-car squadron would probably have given the bridge over Highway 40 to the Blues, due to preponderance of force in this area. This was an important but not vital bridge to the 2d Cavalry, as it still held the Engineer Bridge. An encircling maneuver against the rear of the 2d Cavalry would have required the Blue forces to capture the lightly guarded bridge over the Smoky Hill River south of Junction City; this operation no doubt was possible but would have consumed considerable time.

The position on Machine Gun Ridge chosen by the 2d Cavalry was protected by natural obstacles and would have been difficult to attack, especially as supporting artillery was in position on the south bank of the Republican River. Since the opposing forces were in close contact, the withdrawal of the 2d Cavalry across the river and the final attack of the 7th Cavalry Brigade were not attempted, and the maneuver was terminated at 8:30 AM.

The artillery attached to the 2d Cavalry had excellent targets, due to the exposed movement of the combat cars across its front. Its possible effect, of course, could not be judged, nor could that of the field artillery of the 7th Cavalry Brigade firing upon the 2d Cavalry.

Comments

The daylight reconnaissance of the armored-car elements of the 7th Cavalry Brigade, starting at 5:00 PM and conducted by phase lines, did not reach the 2d Cavalry bivouac in time to locate the enemy prior to dark. This reconnaissance was very thorough and included the necessary road reconnaissance for the advance of the brigade. It is believed that more information could have been obtained had the ground reconnaissance agencies been divided into two groups—one to go on long distance reconnaissance immediately to the enemy objective; the other to conduct a thorough reconnaissance of the zones of advance. Aerial reconnaissance located the bivouac area at 6:30 PM (before dark).

In the night reconnaissance phase, the armored-car elements of the 7th Cavalry Brigade (Mecz) were able to maintain contact with the combat-car squadron of the Red force, due to the noise of the vehicles. Information was obtained of the withdrawal of the horse elements, but accurate information of their routes of withdrawal could not be obtained in the dark. The dispositions of the Red forces on the reservation were not obtained until daylight, and then only the outpost position was located prior to the main attack.

The 2d Cavalry did not attempt any distant reconnaissance to locate the enemy to learn whether he was approaching, and if so, by what routes. Scout cars were used to hold bridges in rear of the 2d Cavalry. This may have been proper during the withdrawal, but during the bivouac phase these cars might have been used to better advantage on definite reconnaissance missions.

The march of the 7th Cavalry Brigade (Mecz) during darkness was at the average rate of approximately six miles per hour. It was made without lights over very dusty roads, the dust adding greatly to the difficulties of driving.

The use of combat cars by the 2d Cavalry for outpost during the night was considered questionable. They could have been held in reserve, while security was provided by the horse cavalry. The horse cavalry operated during the night without disclosing its movements and positions to the enemy, while the opposite was true of the mechanized unit attached to the horse cavalry.

The night operations of mechanized cavalry and horse cavalry in the battle zone are made at approximately the same speed. Mechanized reconnaissance is very limited at night, except for specific missions to verify information reported by other means, such as air service, secret service, and information from inhabitants. In an operation such as represented by this exercise, in which the mechanized cavalry is to operate against a mobile enemy and must operate at night, it can operate much more effectively with horse cavalry than alone.

In this exercise, the attack aviation was first employed against the bivouac of the 2d Cavalry as a result of the 6:30 PM aerial reconnaissance. Due to approaching darkness, it was only partially effective. A more effective employment was made the next morning at 7:30 AM, against elements of the 2d Cavalry on Machine Gun Ridge.

The outstanding illustration of this exercise was the extreme difficulty confronting a mechanized brigade which attempts to advance at night against an unfixed enemy and make a dawn attack. Preliminary operations after daylight are essential to locate the enemy main positions, which can seldom be determined by ground reconnaissance agencies without a reconnaissance in force. Mechanized reconnaissance can rarely, if ever, follow a moving enemy at night and accurately locate his dispositions.

THE END

LESSONS

EDITOR'S NOTE: Maneuvers are conducted to furnish training for commanders and staffs, to test results of garrison training methods and doctrines and to arrive at some conclusion as to the efficacy of such methods and doctrines; else, the expense and time involved in these activities could not be justified. In arriving at definite or arbitrary conclusions of a broad nature some care must be exercised to determine whether all factors involved warrant such expression. Lack of maneuver room, artificial restrictions, and a number of other considerations might lead only to localized conclusions rather than to those sufficient to establish future doctrine. Realizing these requirements, the following lessons derived from these maneuvers are listed as representing the opinions of some observers; also, they are presented more in the spirit of future consideration than as broad, general conclusions.

1. The tactical characteristics of horse cavalry and mechanized cavalry are largely complementary. Therefore, their combined employment against a common objective, if and when the situation permits, is usually more effective than the employment of either type alone.

2. Horse cavalry, by virtue of its unexcelled cross-country mobility, is especially able to furnish close support to mechanized cavalry on the battlefield whenever the situation permits or suggests combined operations.

3. The strategical mobility of mechanized cavalry enables it to afford opportune assistance to distant horse cavalry in spite of their initial wide separation. The tactical mobility and combat power of mechanized cavalry are valuable adjuncts to horse cavalry in the performance of its battlefield missions.

4. The strategical mobility of mechanized cavalry greatly exceeds that of horse cavalry but their tactical mobility is more nearly comparable, being dependent largely on the obstacles of terrain to which mechanized cavalry is relatively more sensitive.

5. Daylight reconnaissance is effectively accomplished by mechanized cavalry but, under most circumstances, horse cavalry is more suitable for night reconnaissance and close-in battle reconnaissance.

6. The whole matter of cavalry communications needs a thorough study from the ground up with a view to simplification, coordination, and other improvements.

7. Control of a mechanized cavalry unit of this size with the present facilities for command and communications is a difficult problem and indicates that no material increase in the number of organic units under one command should be attempted until adequate means and ability to control them have been tested and proven.

8. The machine-gun fire support within the Mechanized Brigade is inadequate, due primarily to the limited range and limited fire power of the light machine gun. It is believed this could be improved by the substitution of the heavy machine gun for the light machine gun.

9. In order to obtain the maximum combat effectiveness of cavalry as a whole, it is essential that the two types—horse and mechanized—be able to train together continuously.

A Fox Hunt—and Some Other Things

By Tommy Wadelton, Jr.

EDITOR'S NOTE: Again editorial judgment dictates that CAVALRY JOURNAL readers be furnished a gustful reading morsel. Not to be guilty of monopolistic tendencies, the CAVALRY JOURNAL is pleased to publish this story concurrently with *Country Life and Sportsman*.

The following letter affords some insight into the creative struggles of this twelve-year-old contributor:

Dear Major Kilburn:

Thanks for your letter. I am glad you liked my new story. There are some persons here on the post that think my mother writes my stories because my mother is a writer. I wish you would put it in that my mother would not do such a thing because that would be a very dishonest thing to do and my mother would not do it. The last story I did in this way: I woke up in the middle of one night and remembered I had not got my public speaking up. Well, I thought and thought and then I hit on the Fox Hunt because I knew that the teacher did not know much about Fox Hunts and if I made a mistake it would be O.K. Well, I told it in public speaking class and every one was interested and asked questions and I got a good grade. I wrote it down afterward and when you wrote and asked me for a story I fixed that up some and put the other things with it.

I hope you have a swell Christmas. I wish I could have some snow for Christmas for a change. I only had snow once in Nashville. Boy was it swell.

I am your friend,

TOMMY WADELTON, JR.

At Fort Oglethorpe, Georgia, where I live there is a Fox Hunt. A Fox Hunt is a meeting of ladies and gentlemen and civilians who ride horses after hounds that are chasing a fox, only sometimes it is not a fox, but a bag some foxes having been living on to make it smell. This is called a Drag Hunt. It is fine to watch the hunt riding through the green pine trees and the trees that have dead brown leaves on. The officers of the hunt wear red coats that are called pink. I don't know why, and the red looks swell going through the green and brown colors of the trees. Only the hunt officers wear red coats. Some of the others wear black coats with yellow collars and hard crowns to their hat to keep their heads from getting hurt when they bunk into trees. These are called the formal huntsmen. The rest wear loud plaid coats and their old hats and are called rat catchers. I don't know why they are called rat catchers either. Once the drag hunt turned into a pig hunt by mistake. The pack was running the drag through Sergeant Akers farm and they found a pig and chased him and bit his ear. All the hounds piled on him and he squealed like the dickens. I guess he did not like being a fox.

When one of the officers who have the fox hunting jobs are ordered away my mother thinks my father should have the job because my mother thinks my father is lots smarter than the officers who have the jobs. My father never wants to do it because he says any one who goes around looking for extra work is crazy, so he don't care when they pick out some one else, but my mother gets mad any way and thinks my father ought to be master of hounds or whipper in or what ever job is vacant. One time I was with my father and some officers were talking about getting some hounds to fill in the pack and when we were riding home my father said, "Tommy maybe we better not tell mamma they have vacant places in the pack or she will think I ought to have the job." My father always makes funny jokes.

This year when the hunt opened four soldiers rode around the post playing on horns. They started at the stables and rode down to the flag pole and met the hunt there. The officers of the hunt are: master of fox hounds; three whippers-in; and a field-master. The whippers-in take care of the hounds and make them mind, and the field master takes care of the field, which is all the persons who ride in the hunt except officers, and makes them mind. The master is the big shot and bosses every body.

When every one is there the master says, "good morning gentlemen." He does not say any thing to the ladies. Every one says, "good morning master," and then the master yells, "gone away" and they go. This is a drag hunt so a soldier rides ahead dragging the bag and the pack take after it yelling like blazes. This is called giving tongue or giving cry. Mother says in Ireland they call it belling or singing. Any how you must not call it barking or forget and call the hounds dogs or it would not be official. You must call your horse a mount and remember what the crys mean like "ware ditch," "hold hard," "ware hounds," and I forget the rest. I got yelled "ware hounds" a lot because I am not a very good fox hunter yet and got too close. This is called cutting off their tails when you ride too close to them. Tom and Dick Hoffman are swell fox hunters and they are only eleven and thirteen. I have only been out twice—it frightens my mother when I go. She thinks it is enough to have to worry about my father.

The hunt lasts about two hours. There are four parts to it. When they stop it is called a check. The soldier takes the bag up, when the hounds can't smell it any more they stop. Then every one gets off their mount, walk around, visit, and get drinks from the persons who follow around

the roads in cars. Then they mount to go on to the next check and do the same thing all over again. When they come to the last check the master says, "good day gentlemen," and the hunt rides home and stop at each others houses for cocktail parties and after that they go to a hunt breakfast. Persons who go to the hunt breakfast have fun. I go if I get invited. Last time Mrs. Tice who was the hostess invited me specially and I wore my new brown civilian suit. Mostly I have to wear my uniform. The food at hunt breakfasts is always swell. I can eat any thing I like so I have the food my mother does not have at home, because it is not good for a growing boy, like pickles and ham and coffee and hot biscuits and mince pie. My mother has tea every afternoon and when I was little she used to give me cambric tea which was just hot water and a little tea and milk and sugar, and now I hate tea. So I only drink coffee when it is strong with cream and sugar in it. At the hunt breakfast they sing hunting songs like, "Do ye ken John Peel" and "Drink Puppy, Drink" and "A-Hunting we will go." My father sings too but mamma and I go home because we like music.

My mother used to hunt in Ireland and she says they don't think much of drag hunts there; they call them "skrim-shankers." But she does not like to see the pack kill either. They call it breaking up the fox. She said when she hunted she always praved like crazy the fox would get away, because it seemed like she was inside his skin and knew just how he felt. One time she went to a hunt with her husband, not my father but another husband she had once. He had a little niece with him and it was her first hunt and he had her blooded. That means they cut off the fox tail and call it a brush and rub it on the person who is at the kill for the first time. My mother felt awful to see the blood on the little girl's nice face and she did not care so much for her husband for a while and he was sorry because he was a good man and did not like to hurt person's feelings.

My mother says over there they only hunt once a week because it takes them the other six days to sober up.

My mother told me a story about one of her ancestors. It is about horses and I think it is a swell story.

Once there was a man named Owen. He was an awful proud man and thought he was pretty good because he had a lot of ancestors who did noble deeds and got their names in the history books. He bragged that his family always married persons who were as swell as they were and that he had the best blooded horse in all Ireland and they all had pedigrees as long as your arm. Well, he had a stallion whose name was *Shawn Dhue*, as black as night and all of Owen's horses were black too. If one of the mares had a colt that was another color he sold it away to England or France or some far place. One night *Shawn Dhue* got out of his stable and bred with a mare that was just plain horse and did not have any good blood that any one ever heard tell of. When Owen heard of it he made the farmer who owned the mare sell it to him and he was going to have it killed because he did not want any cross breed of *Shawn Dhue's* hanging around. Before the mare had her baby Owen had to go to France where his daughter was in school. She was very sick and Owen had to leave suddenly and forget to have the mare killed. Well he was gone a long time before his daughter got well and when he did come back the mare had her colt and every one was talking about it because it was the color of new butter all over and did not have a different colored hair on it any where. Owen's daughter was named Ann and he thought more of her than he did his own life and did everything she told him to. So she told him not to have the colt killed because she liked it very much. He said if that was what she wanted it was O.K. with him but she could not keep it with his swell horses so he bought her a farm to keep her colt on. He was a very rich man and did not care what he did with his money.

The colt grew up to be a stallion and was he good! Ann loved her horse and trained it herself and when he grew up she put him in all kinds of races and steeplechases and won them and her father did not like it much because it did not have good blood and it made a sucker out of his horses who had lots of good blood. After a while it got to be a well known horse and lots of persons wanted to buy it but Ann would not sell it for love or money. One day a young man came to see if Ann would sell the horse to his boss and right away he fell in love with Ann but he did not think it would do him much good because Ann had such proud blood in her arteries. Well, he came back a couple of times and hung around until Ann got in love with him too, but they were scared of her father so they eloped away one night and it made Ann's father as mad as hops. He packed all her gold and jewels and dresses and sent them to her, but Ann sent them back because she was going to be poor and did not need such fine things, but she asked her father if she could have her horse and he sent it to her with an insult about cross breeds and Ann knew he meant her husband too. She loved her father, but enough was enough, so she got mad and to spite him sent her horse every place her father had horses running and jumping and she beat him every time. She went fox hunting the same time he did and she always got ahead of him there and when she took the stiff jumps her father refused she grinned. After a while her horse won so much money her husband was able to go in the horse breeding business and they stopped being so poor and got quite a little money. Her father kept on trying to beat her and sent to foreign lands for horses to improve those he had but Ann kept right on beating him. The horse's name was *Garth* and when Ann had a baby she named him Garth, too. In Ireland every one believes in fairies and a Garth is a place the fairies come out and dance on at night. All the persons who saw the stallion and knew how he was come by said the fairies had sent him, so that was the reason Ann named him *Garth*.

When the boy Garth was seven he was a pretty good rider and one day he was riding through a lane and he met his grandfather. He did not think so much of his grandfather because he was still mad at Garth's mother and Garth thought his mother was pretty swell. His grand-

father stopped him this time and said, "Do you know who I am?" and Garth said "I do so, you're me grand sire and a contrary old lad if ever there was one." Well his grandfather thought it was a good joke and that Garth was a good spunky kid and maybe cross breeds were not so bad after all, so he went to see Garth's mother and made up with his father and after that they were all good friends and Garth and his grandfather got to be pals.

My father and I take care of my mother most of the time and when she has to take care of herself it is not so good. Last year we drove to New York and my father could not go with us. When we came out of the Holland Tube mamma was kind of dumb about getting the right turn. I had not been there before and I was not so good either. A tough policeman blew his whistle at us and told us to pull over. He talked kind of tough out of the side of his mouth and said he was going to give us a ticket. My mother smiled and shook her head and said, "Svenska me Svenska," and the policeman said what was she saying, and my mother said, "no Eengleech," and the policeman started yelling like if he could make her know English if he yelled loud enough but my mother kept on smiling and saying, "no Eengleech" and "Svenska" and then the policeman looked at me and yelled, "Do you speak English?" I looked as dumb as I could and did not say anything. After a while the polceman rubbed his sweat off and said, "get the hell out of here you damn square heads," and we drove off and went down a side street and stopped the car so we could laugh and the persons on the sidewalk looked at us like they thought we were crazy. My father said he did not know how we got away with it because we have the wrong kind of faces to be "Svenskas," which means Swedish persons.

Once we were going to Nashville, Tennessee, and my mother was driving the car. We saw some wire across the road and a shoe right in the middle of it and my mother said, "that's funny, what is it?" It was a wreck. There was a truck at the side of the road and a car with the side all out of it and two smashed persons were hanging out of the car and there was human blood all over the road. Well, my mother started crying but my father got out and went to help the hurt persons. There wasn't any one around but us. My father came back and said to go to Murphysburg and get some help. My mother did not say anything but kept her face hid. He told her again and my mother said, "Oh I can't drive right through that blood" and my father said, "it's tough but you have to do it." My mother kept on hiding her face and did not go, so my father reached in and gave her a hard slap and said, "get going." My mother was so surprised she started driving and we went to Murphysburg and brought back a doctor and an ambulance. After things were fixed up and we were going on my father said, "I'm sorry but I was afraid you would quit driving forever if I did not make you do it," and my mother said, "all right but just don't make a habit of it." I think my father was pretty brave to slap my mother.

When I was a little boy I used to wonder how persons got together and were a family. I asked my father and he said one day he was walking along minding his own business and smoking a cigarette when my mother tapped him on the shoulder and said, "young man what is your name?" My father gapped his mouth open; he was so surprised because he was not used to having strange women speak to him so he did not say any thing at all and my mother said, "don't gap your mouth open like that you look silly; tell me your name." My father said, "my name is Thomas, mam" and my mother said, "well, Thomas, I am going to marry you." My father gapped his mouth wider than ever and my mother said "come, come now, no nonsense, come along and be married or I will give you a hard slap," so he went along and they were married and lived happily ever after. I used to believe it but I know now he was fooling—that gentlemen have to get down on their knees and propose honorable marriage to the lady and will I feel silly when I have to do it. You have to buy a license and have it sanctified by the church or a justice of the peace or you cannot have legal children.

My father said how I got to be his son: he came home one day and my mother had her hands behind her back and she yelled, "surprise, surprise," and told him to choose a hand. He pcked the right one and when my mother brought it around it had me in it and he said if he had chosen the left one he certainly would have been embarassed because when mother brought that around it had a black baby in it. My mother said how she got me to hold in her hand for my father, to choose was this way. When she was a little girl she read Mr. Barries' book about Peter Pan and she read it so often she got to know Peter pretty well. Whenever she went to London, England, she went to call on him, even when she got to be a big lady. In a place called Kensington Gardens the English people have built a statue of him and my mother used to go and talk to him about the island where babies live before they are born and Peter is the boss of. One day she went to say good-bye to him because she was going back to the United States. It was raining pretty hard but she did not mind because it rains so much over there you get used to it. She said good bye to Peter and went home and when she got there she was going to close her umbrella when some one yelled, "look out or you will drop me"; so my mother put down her umbrella without closing it and there I was sitting on top holding on to the ferule. I was all wet and my hair was slicked down with the rain and my mother knew right away I was a going away present from Peter Pan so she gave me a good hot bath and an aspirin tablet so I would not take a bad cold; and she combed my hair and brought me back to the United States. I think it is swell to tell kids stories like that because after a while they grow up and have to study biology and it is kind of messy. This year we had a fish to cut up and we had the same fish for a couple of days, and boy! did it smell before we got through.

This summer I was in New York with my mother and she said I was to pay bills and do the tipping so I could get some *savoir faire* which is French for not falling over persons feet or upsetting water at the table and getting the

right change. She told me ten per cent of the check was the right money for a tip, but when we left the hotel I had to tip the boy who brought down our bags a quarter and he gave them to the man at the door and I had to give him a quarter to put them in the car. I asked my mother why I had to give them each a quarter and she said it was an old Spanish custom but I guess she was joking. I think it is a pretty easy way to get money. My father says it is a racket.

We went to see the place where they are going to have the World's Fair next year but we could not get in and the buildings were not finished any way, so we went to Long Beach to stay with my cousins. When we came back to New York we had dinner at a sidewalk cafe. It felt kind of funny eating right out on the sidewalk with persons passing but the food did not taste any different. We went to the Heyden Planetorium and R. H. Macy and up in the Statue of Liberty. Then my mother had to write a story about the Youths Congress that had a meeting at Vassar College Po'keepsie, N. Y. We drove up Riverside Drive to the Hendrick Hudson Parkway to the toll bridge where we paid ten cents but it was something for the money because it had swell scenery and there was not so much traffic. We ran into a storm and it was so bad my mother thought we had better lay up for a while. We found a filling station that has a rest room. My mother was just going in the rest room when lightning struck the telephone and cut the wire and the telephone flew across the room so my mother said we were between the devil and the deep blue sea and we got back in the car. When we had gone only a little way the car skidded and we went up a bank and right along it sidewise for a good ways. I thought sure we were going to turn over but my mother got the car headed back toward the road and stepped on the gas. We made it all right, but boy! were we scared. Persons in cars stopped and said they never saw anything like it and admired my mother because she did not lose her head. My mother said she was practically unconscious all of the time. She said "Saint Christopher was looking after us." We have a Saint Christopher medal on the side of the car. He is the saint who was a ferry man and carried Jesus on his back across a river when he thought he was just a poor old beggar man who could not pay him for the ride. After that God made him the official saint of travelers.

My mother looked pretty shaky and a man got a bottle out of his car and gave her a drink of whiskey. I wanted to laugh because my mother is a prohibitionist and does not like to have persons drink whiskey, but she said the man was kind and meant well and she would have drank his whiskey if it choked her. When I told my father about the skid he said my mother has more guts than any one he ever knew because she is scared to death most of the time but she never lets that stop her when there is something she thinks she must do.

In September when I came home I started being a dormitory boy at school because it is twelve miles to go to school every morning and twenty-four by the time I get home at night. I start at seven-thirty and get home at seven. My mother thought maybe I had better stay there week days and come home over the week-ends. Well, I was in a room with two other boys and when my mother saw them she said, "Good Heavens," but I thought they were all right at first. We were all the same age. One was a scrappy kid that was always taking punches at boys for nothing. Me too. He was a skinny little shrimp and I did not want to hit him because you have to get mad and you get all hot and sweaty and then you fight and afterward some one always comes along and makes you shake hands and it is a good deal of trouble. My mother said to ignore him but it is pretty hard to ignore somebody who is kicking you in the shins on the sly when no one is looking. I am a big boy and when I do have to fight with boys my age someone always says, "look at the big bully," even if they are a good deal older. I look older than I am. I look as old as Bob Dillman and he is sixteen. My mother says only unintelligent nations and persons resort to force, but my father believes in a good sock in the nose when needed. The other roommate used to rush up to my mother when she came out and tell her how much money his father had and about his mother's jewelry and his aunt's house. My mother has not got much patience with persons who talk about money because she thinks manners and who your grandfather was and things like that are more important than money, but she kept on being polite anyhow. Well, the boy kept hinting to come home with me over the week-end and gave my mother his mother's address to write for permission to leave the school, but my mother said life was too short to have a face like that around more than you could help and kept putting him off with fair words. My mother picked up some of the day boys on the way to town and she asked them what they thought of my roommates because I was having trouble with them. One boy told my mother he did not think the boy she disliked most had very good manners because he spit on the floor all the time. My mother asked me did I ever see the boy spit on the floor in our room and I thought she was feeling bad enough, so I said no I never did see him spit on the floor, but I did not tell her about the spit places on the rug every morning. I guess he spit in his sleep.

I got disorder campus three weeks, one after another and did not get home for the week-ends. Once I got it for forgetting my tie and once for not sweeping under my bed. The last time I guess they just got used to putting my name down because I never did find out why. When I did get home I had a disease, and boy, oh boy, was my mother mad! She went out and took the school apart. I had to come home and be treated at the hospital here. Every time she took me there she got mad all over again. My mother is not very healthy and throws up easily so my father said, "Jeanne, try and be reasonable about this," and my mother said, "reasonable, reasonable, I've been reasonable so much I've broken out in a rash with it." She took me out for a week so I could get treated and the head master and coach came to see me. My mother thinks the coach

is a very intelligent man and has good ways with boys, I guess he has because all the boys are nuts about him. When they don't do right he bats them around and the boys don't mind a bit. I think he is swell. Well they talked and talked. My mother talked the most. She said what was there in the private school that costs a good deal of money that was not in a public school that was free and the head master said there was things in a private school that could not be put into words, and my mother said they certainly did not put the athletic foot they had out there into words. Any how I got an extra week's vacation and now I am a day boy again, and am I glad! Home, when it is time to get up my father comes in rubbing lather on his face and singing, "Get up you bums and whiches, put on your government breeches; I can't get 'em up, I can't get 'em up, I can't get 'em up in the morning." Instead of bums and whiches the song has two swear words but my father does not say them. I never get up and then he yells, "Mamma this fella won't get up," and mamma comes tearing in with my dog and sics him on me and the dog barks and tries to nip me. The cat comes running too and gets under every one's feet and we all have fun. At school they blow a bugle and you get up—or else.

The cat we have now is a kitten. It is new. My mother found a boy dragging it around by the neck and she talked him out of it and gave him a dime. She had to feed it warm milk with a medicine dropper and sleep it on a hot water bag. It was so weak it could only stagger and when it tried to meow nothing happened. Nancy, the girl next door, asked my mother if she invented a meowless cat. It got all right and now is a pretty good cat. My mother says she thinks its ancestors are questionable but it is doubtless by garbage out of ash can. She says most of her cats have been by garbage out of ash can because that is the only kind of cat she likes. Once she had a blue Persian that was very expensive and it was an awful stylish cat and would only eat certain things. She said it would sit and stare at her with a haughty look and make her remember one of her ancestors was hung in a Fenian Uprising.

One night my father was fixing cocktails and the kitten kept following him around meowing and my father said it was saying, "Whiss-keee, Whiss-Keee," and my father said, "no you can't have any whiskey, it is not good for cats," and my mother said, "no and it is not so hot for humans either." My mother is a prohibitionist.

Mr. Kipling wrote a swell story about a cat. It is in the *Just So* stories. My father gave it to me. In the book it says, "Tommy from Daddy 1930." That is a long time ago. I learned to read from that and the *Posterior of the Horse*. I used to sit on my father's lap when he was reading and he would show me the letters and what the words meant. So I learned to read. In Mr. Kipling's story a wild lady and gentleman hunt a cave to keep house in, when they find it they build a nice fire and have a baby. All the wild animals come and watch the fire because they never saw a fire before. The wild lady was smart and got the dog to be a friend and help the man to hunt, but the cat said, "no, I want to be wild and walk by myself." Then she got the horse to be tame and carry the wild gentleman when he went hunting with the wild dog, and she got the wild cow to give milk, I guess the milk was wild too. But she could not get the cat to be tame and he went around waving his wild tail and walking in the wild woods. He was a smart cat and after a while he wanted to go in and live by the fire and get some of the wild cow's milk, so he tricked the wild lady into letting him do it, but when the wild gentleman and the wild dog came home they said the agreement was only with the wild lady and had nothing to do with them so they said as long as cats lived all proper men would throw boots at them and all proper dogs would chase them up trees and so it has been from that day to this. There is a lot of "wilds" in that but that is how Mr. Kipling wrote it. That is what makes it funny.

It is an ill wind that blows no good and if I did not get Athletes Foot I would not have time to write this story.

☆ ☆ ☆

One military aspect of the need for preparing against future disturbed conditions along the frontier is the need thereby imposed upon us for maintaining considerable forces of horse-mounted cavalry; since, on both sides of the border there is a dearth of communications and of local sources of gasoline supply which would gravely impede the operations of troops wholly dependent on motor transportation. In such a terrain, horsed cavalry alone is adequate to the more extended duties of the service of security and information, insofar as these cannot be performed by the Air Corps or by armored cars operating directly on the roads.

—Page 67, *The Ramparts We Watch*,
by GEORGE FIELDING ELIOT.

Special Activities

This Shooting Business

By CAPTAIN P. M. MARTIN, Captain, Cavalry Team

Can marksmanship training methods be improved from the viewpoint of interest?

How can more good shots and cavalry team material be developed?

Here's the answer: The .22!

Having learned to shoot with a .22 I feel certain that much more could be accomplished with it than is now being done. As a troop commander my first experiments with the .22 were to supplement the service calibers. By returning young shooters that were having trouble with their service weapons to the .22 caliber, I found that what appeared to be hopeless cases of flinching were cured readily.

This success prompted me to go a bit farther with the use of the .22 the next season. By scheduling regular preliminary marksmanship instruction in the afternoon it was possible to take all young soldiers turned to duty through an additional course with the .22 during the winter months. There were several top notch shooters in the troop that were used as instructors. This afforded them an opportunity for extra shooting while teaching others.

Some skeptics will doubt the value of the .22 caliber training. The strongest argument against it is paradoxically its greatest advantage, that is, lack of recoil. It affords the young shooter a great opportunity to be grounded in fundamentals before he is subjected to the punishing effect of heavy recoil. Of course the economy of this type of training is obvious, and it can be carried on with rifle, pistol, and machine gun.

It is interesting that the best results in training shooters is obtained by bringing them up to their peak and then resting them for a long enough period to permit their complete regeneration of the energy expended. Repeating this process several times during the season is the basis of the cavalry team training. Using this knowledge in training an organization will produce astonishing results. Take the recruits just turned to duty, they have had one short course of marksmanship instruction. Now give them a bit longer and more thorough course. When these young soldiers arrive at the third course in the spring just prior to going on the range they will be able to assimilate more instruction and will be better shots their first year than many older soldiers were in three years.

Young soldiers are keen about shooting. As they gain in proficiency they desire to demonstrate it in competition. Noncommissioned officers enjoy match shooting, musketry problems, and take pride in training men for this work. Young officers enjoy this instruction and should be encouraged to participate in it as well as supervise it. Organization commanders should stimulate and encourage this desire to shoot. It is a challenge to their leadership.

I have mentioned musketry training with the .22, this can be carried on in conjunction with the marksmanship training. Moving target firing can be carried on as well. Small airplanes and mechanized targets can be used. One troop I commanded had an electric toy train for carrying a moving target.

The question may arise as to why the Cavalry Team is interested in organization training in marksmanship. Better shooting in the organizations will bring better shots to the team. The team officials feel that if the team members are used properly while with their organizations that they will be invaluable to the commanders. If a plan to use these highly trained instructors during the winter months is worked out, two very desirable results are obtained. As the saying goes "to learn something well teach it." Team men learn more by instructing than by continuous shooting. Organization commanders will see the advantages in this and be desirous of sending their best material to Perry.

Training in marksmanship is similar to golf. The latest systems of golf instruction tend to keep the novice off the course until he has been well grounded in fundamentals. The shooter may be handled in the same manner to best advantage. One of the best prospects for the 1939 Cavalry Rifle Team is a young soldier who was discovered on the gallery, shooting .22, in 1938. He reported as a member of the squad having never fired a shot with the service rifle up to that time. As stated, he is now an outstanding candidate for the 1939 Team.

The .22 is the solution to many of our problems.

Revised Tables of Organization Cavalry Regiment, Horse

(EDITOR'S NOTE: It should be realized that charts and comments contained herein apply only to revision of present tables of organization; the reorganization of Cavalry units is not involved.)

Tables of Organization for the cavalry regiment, horse, were revised, effective December 1, 1938.

The accompanying manning charts are published in explanation of the revised Tables. It is much easier to see the ideas back of the organization from the charts than from the Tables of Organization.

The War Department directed the revision of the 1928 Tables in order to include the new weapons and matériel which have been issued to regiments since 1928. The revision does not constitute a reorganization.

The 1928 regiment consisted of a headquarters troop, a machine gun troop and three rifle squadrons of two troops each. The revised regiment consists in peace of a headquarters troop, a machine gun troop and two squadrons of two rifle troops each; in war, it consists of a headquarters troop, a machine gun troop, a special weapons troop and three squadrons of three troops each.

The 1928 rifle troop, having 166 men which it was contemplated to use in war as two half-troops, has been reduced to a rifle troop of three rifle platoons and one light machine gun platoon.

The revised machine gun troop in peace consists of two caliber .30 machine gun platoons and one special weapons platoon, which include eight caliber .30 machine guns, four caliber .50 machien guns and two 60 millimeter mortars (37 millimeter guns to be used until mortars are issued). In war, this troop splits into two troops, a machine gun troop of twelve caliber .30 machine guns and a special weapons troop of eight caliber .50 machine guns and four 60 millimeter mortars.

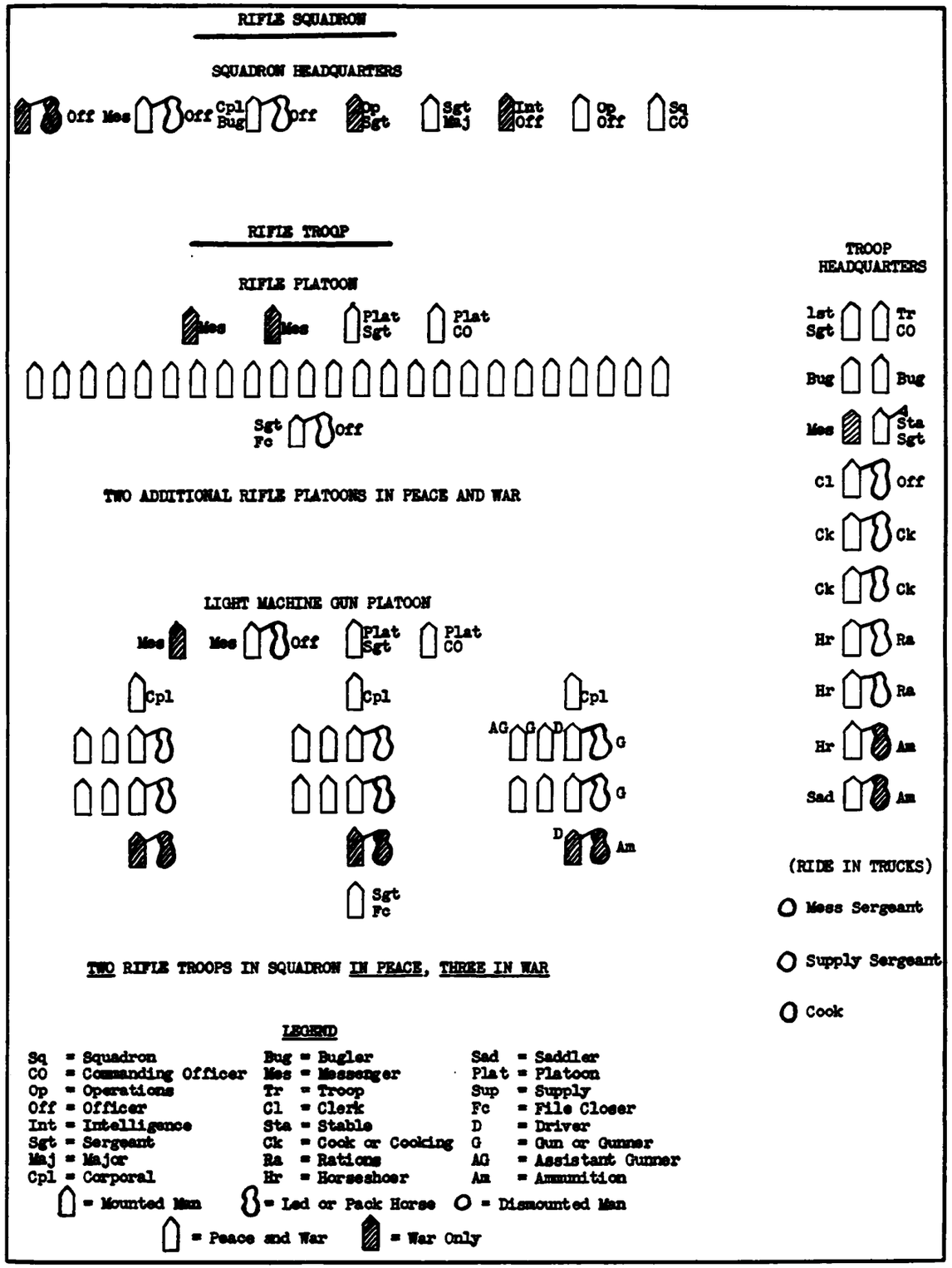
The headquarters and service troop has been revised to include modern equipment, consisting of a scout car platoon, each section of which has a motorcycle scout, a scout car as a command car for the regimental commander, a station wagon for a command post car, a maintenance truck and the usual allotment of kitchen and combat trucks. In addition to the motorcycles in the scout car platoon, there are four motorcycle sidecars in peace and seven in war. The adjutant and supply sections ride in station wagons. As shown in the chart, which is divided into echelons and groups, every man has a horse, or a seat in a motor vehicle, with no men left over to thumb a ride. In revising this troop, the underlying principle was to provide it with enough horses so that, should the regiment be separated from its motors, it can continue to function efficiently, provided other means of supply are attached.

The squadron headquarters have been separated from the headquarters and service troop and set up as separate units.

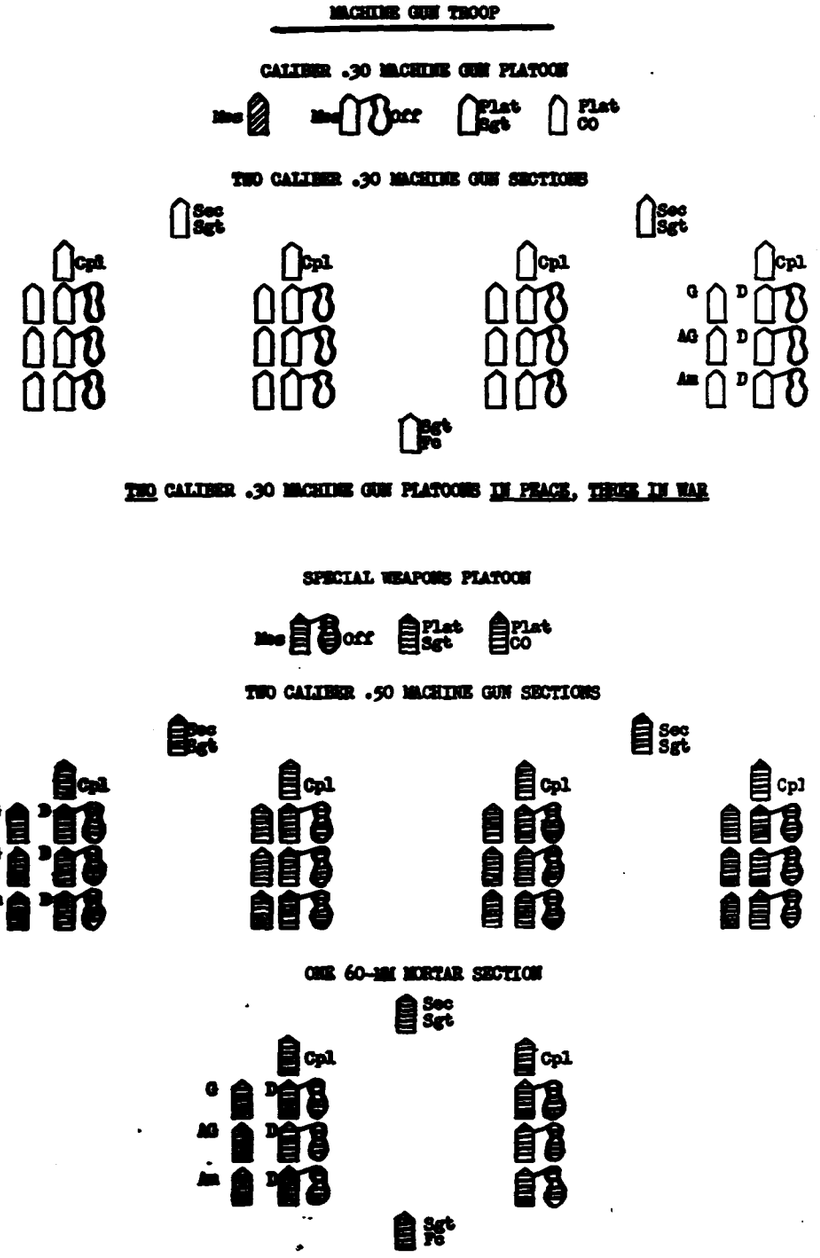
Throughout the Tables, men to perform necessary functions have been included and a modest increase in grades and ratings are shown.

All regimental commanders should organize and train their units as near as possible in conformity with the Tables, insofar as the men allotted to them will permit. This is the only way that defects in the Tables can be determined.

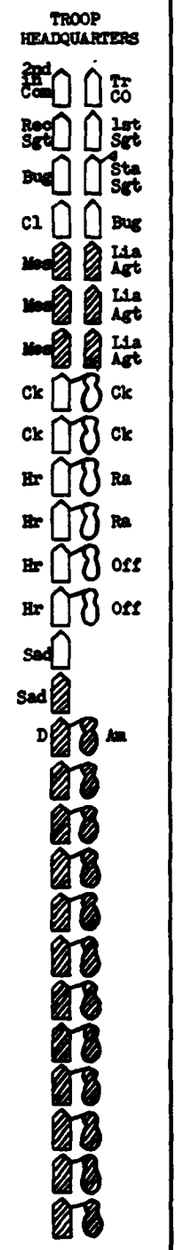
The tables do not constitute authority for promotion or reduction of enlisted men. These will be governed as heretofore by the yearly allotment of grades and ratings.



MACHINE GUN TROOP



TWO CALIBER .30 MACHINE GUN PLATOONS IN PEACE, THREE IN WAR



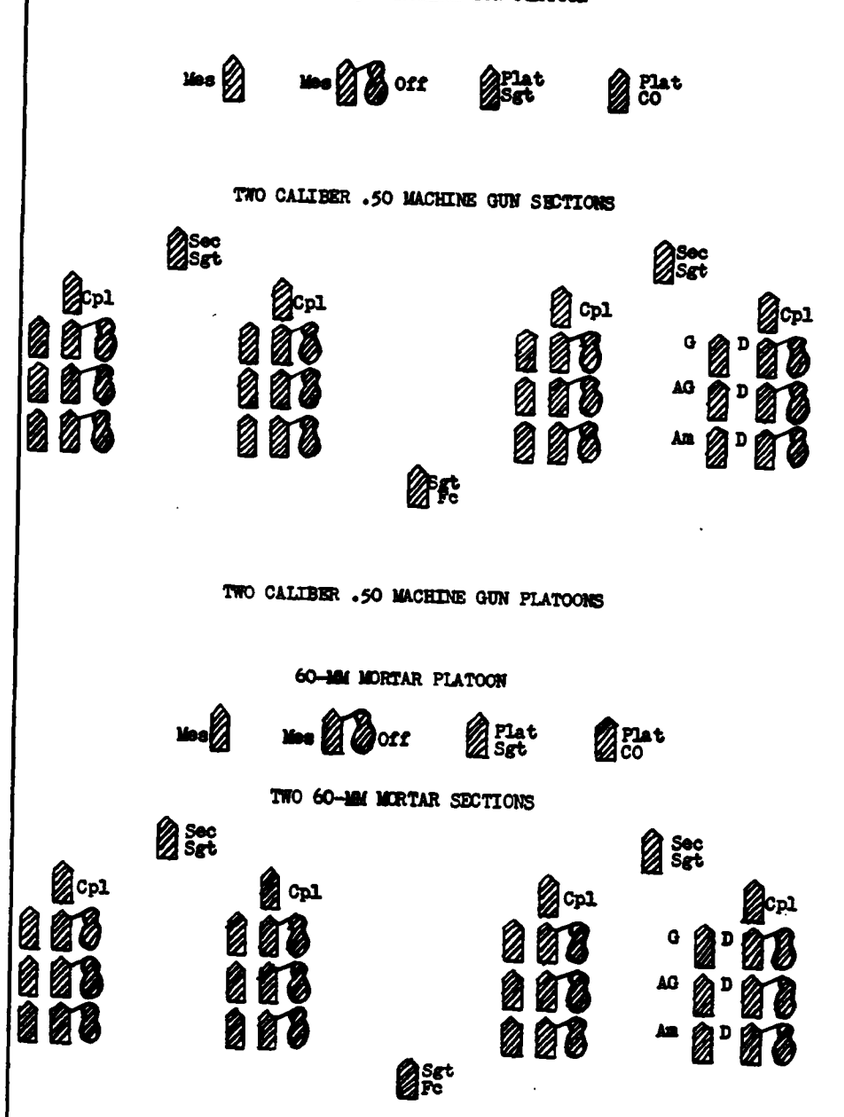
LEGEND

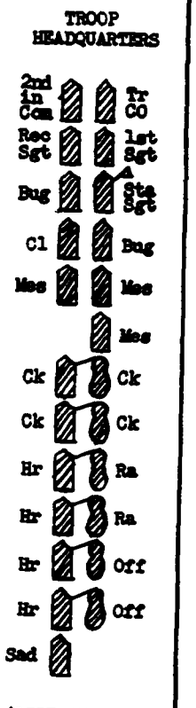
IN ADDITION TO THOSE OF RIFLE SQUADRON

Rec = Reconnaissance; Lia Agt = Liaison Agent; Sec = Section.

= Peace and War = War Only = Peace Only

SPECIAL WEAPONS TROOP





LEGEND

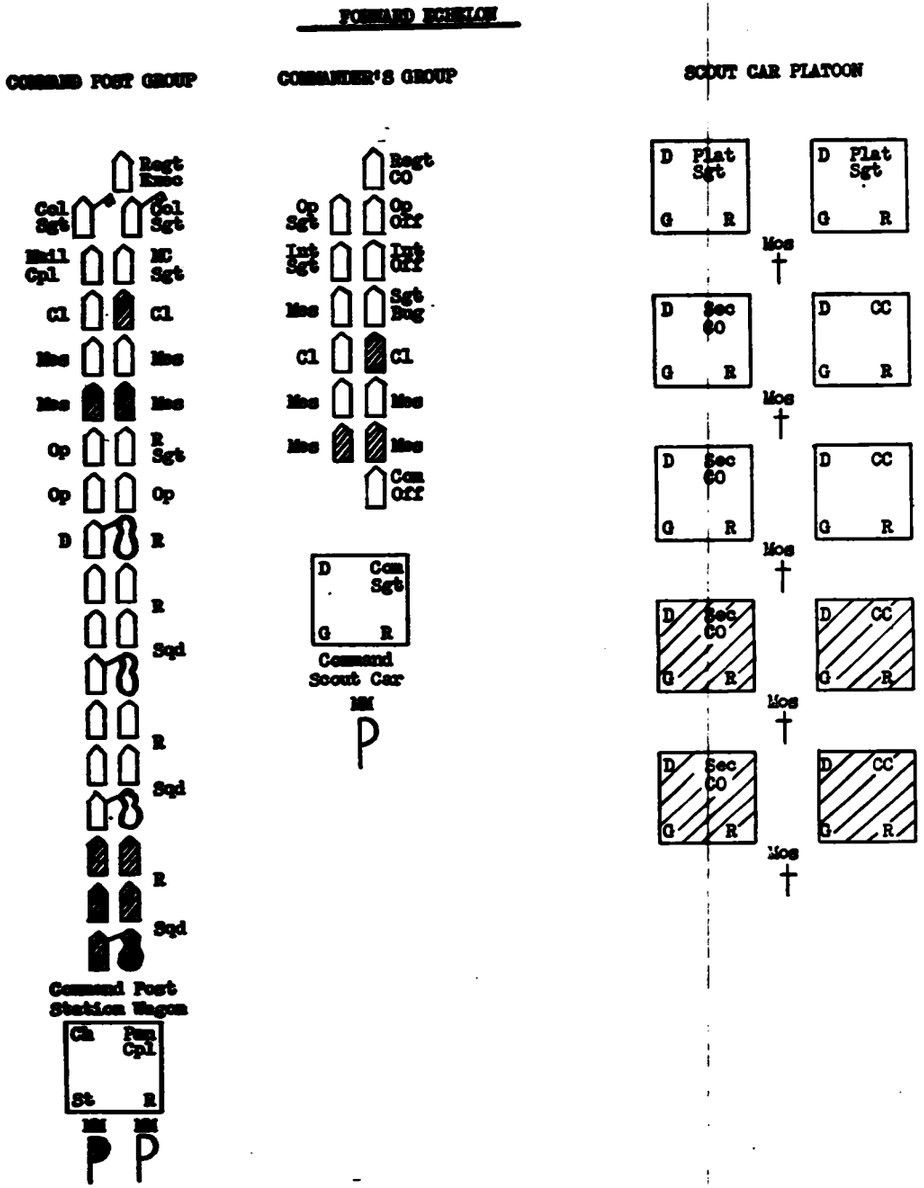
Same as for Rifle Squadron and Machine Gun Troop

CAVALRY REGIMENT, HORSE

HEADQUARTERS AND HEADQUARTERS AND SERVICE TROOP, MACHINE GUN TROOP, SPECIAL WEAPONS TROOP AND THREE RIFLE SQUADRONS OF THREE RIFLE TROOPS EACH IN WAR

HEADQUARTERS AND HEADQUARTERS AND SERVICE TROOP

FORWARD ECHELON



LEGEND - IN addition TO THOSE OF RIFLE SQUADRON AND MACHINE GUN TROOP

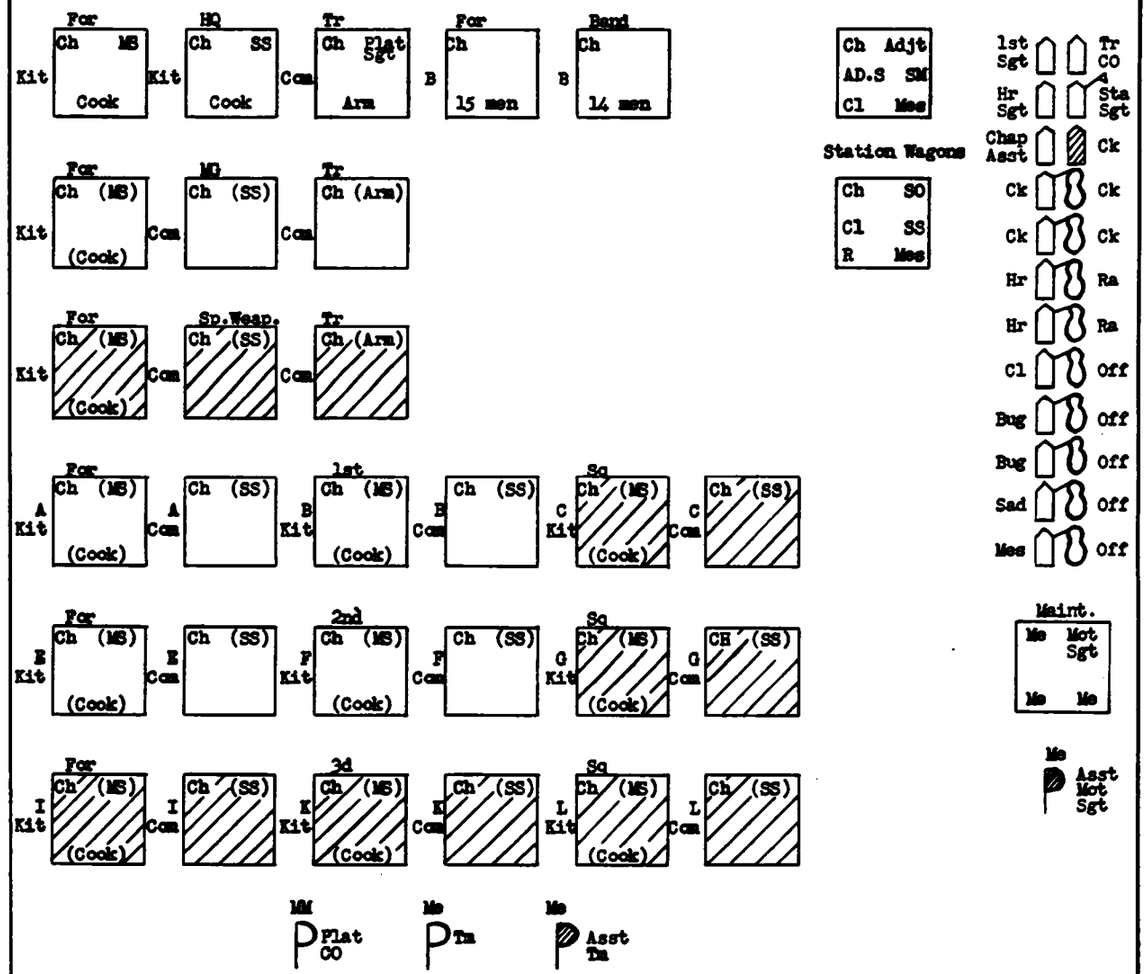
Mot = Motor
Mc = Mechanic
Adjt = Adjutant
SM = Sergeant Major
Ad = Administrative
SO = Supply Officer
MS = Mess Sergeant
SS = Supply Sergeant
Arm = Armored
Tm = Truckmaster
(——) = Man from another troop
P = Motorcycle with sidecar
□ ⌂ = Peace and War
▨ = War Only

CAVALRY REGIMENT, HORSE

HEADQUARTERS AND HEADQUARTERS AND SERVICE TROOP, MACHINE GUN TROOP AND TWO RIFLE SQUADRONS OF TWO RIFLE TROOPS EACH IN PEACE

HEADQUARTERS AND HEADQUARTERS AND SERVICE TROOP

REAR ECHELON



Each truck is armed with a caliber .50 machine gun; a caliber .30 machine gun; or a semi-automatic rifle.

LEGEND - IN ADDITION TO THOSE OF RIFLE SQUADRON AND MACHINE GUN TROOP

Mos = Motorcycle Scout
CC = Car Commander
Regt = Regimental
Com = Communications
MM = Motorcycle Messenger
Col = Color
MC = Message Center
R = Radio
Ch = Chauffeur
Pan = Panel
St = Stenographer
Chap = Chaplain
□ = Scout Car, Station Wagon or Truck
† = Solo Motorcycle

The Value of Cavalry on the Border

By SERGEANT KENNETH F. KELLER, 5th Cavalry

"Why do we have Cavalry on the Border?" This question has invariably been uttered many times in conversation among the military personnel of the various groups of the service and will in all probability be asked many times in the future.

To begin with, one must first know what Cavalry is. Briefly defined, it is that branch of the service composed largely of mounted troops trained to fight mounted or dismounted. The superior mobility which distinguishes it from any other combat unit, the mobility of its weapons and flexibility of fire make it particularly valuable for the rapid changes in situations and sudden engagements that must be met in time of combat.

The primary mission of Cavalry is to provide a highly mobile combat element for the army. This mission alone will clearly illustrate the necessity of maintaining cavalry on the border. However, its characteristics are determining factors in assignment of missions other than primary. Other missions assigned to the cavalry are: reconnaissance, counterreconnaissance, security on the march, at halts and in battle, offensive and defensive combat, delaying action, liaison, pursuit, raids, covering withdrawals and providing a mobile reserve.

In placing the cavalry on the border, it has definitely been given a defensive rôle. If attacked, it could delay hostile forces or hold terrain of tactical importance until friendly forces arrive.

Calculating the value of cavalry in regard to the border, it must be borne in mind that the border on the south is 1,993 miles in length from the Gulf of Mexico to the Pacific Ocean if the sinuosities of the Rio Grande River are considered. In active campaign, the sinuosities would have to be considered, and the most logical means of covering this distance would be by the employment of cavalry from strategic points along the border.

During the process of evaluation, there are numerous natural and physical obstacles which would confront troops. These obstacles would be practically impassable to infantry but to cavalry are in reality almost insignificant. Incident thereto, let us take a few of these obstacles and discuss them from a military viewpoint.

First, Road Conditions. Approximately the entire area known as the "Border" has but one road which is passable in all kinds of weather except during heavy rainfalls. At this time, hundreds of miles of this road are impassable for days and in many instances impassable for weeks to motor driven conveyances. This road in some places practically contacts the river but in other places it is more than 100 miles from the international boundary. Side roads connecting the main highway are such that in many cases only mounted troops could travel with speed. History shows that main highways are the very places that are avoided, and combat activities are never confined to the roads. During the months when rain is plentiful dismounted troops would find it difficult to move; this also applies to motor vehicles. In the months of dry weather the roads become so dusty that dismounted troops would be able to move only a short distance, and then with great discomfort to themselves. These conditions, however, do not materially affect cavalry.

Second, Terrain. The geographical structure of terrain bordering the area in question is of such nature that only mounted troops could maneuver readily. Maneuvers conducted in these areas have proved that the horse is a sure means of transportation which will meet the requirements of the situation and respond to the demands of the rider. Miles of this area, away from the roads, consist of steep hills covered with rocks of such nature that marching of troops other than by horse is practically impossible. Again, the reader is asked to remember that it is in places like this that combat occurs.

Third, Water. Water being one of the main factors to be considered with respect to troop movements, one could hardly consider any combat units other than cavalry operating in this area. Certain periods of the year, water is plentiful but this condition does not exist during the entire year. Watering places are in most cases miles apart. Dismounted troops could not reconnoiter for water after marching or participating in an engagement, but cavalry can do this even though it has marched 50 miles in that day, or participated in combat.

Fourth, Climatic Conditions. Very little need be said about the climatic conditions. Anyone who ever served along the border can state to what extent the sun casts its rays of heat on this part of the country and its affect on humanity. The point to remember is that regardless of how high the temperature, there is one thing of which we are positive, and that is, the cavalry will reach its destination. Recently on maneuvers, the temperature reached 110 degrees. At the end of the day the cavalry had marched 42 miles, established a main line of defense and held that position till relieved the following day by friendly forces.

The value of cavalry on the border can not be judged in dollars and cents nor figured by percentage. Facts and figures are evidence of its value. It should not be misconstrued. Cavalry activities fill the pages of our history and will continue to do so till the end of time.

Marching on Borium

By LIEUTENANT ELWIN T. KNIGHT, 6th Cavalry

"Could you, under modern conditions of hard roads, cover 500 miles in three to five weeks?" This question, quoted from the March-April issue of The CAVALRY JOURNAL, and referring to the feet of the horses, is of vital importance to every cavalryman. Quoting further from the JOURNAL: "Tests show the present model shoe is worn out after 100 miles on paved roads! . . . If we knew that the new field shoe would last, say 15 days, on pavement, what more could be desired?"

The questions outlined above have been answered! It *is* possible under modern conditions of hard roads, to cover 500 miles in three to five weeks! It *is* possible, with borium, to make our shoes last 15 days, or more, on pavement!

On a recent march, conducted partly in the interest of experimentation, the solution offered in the same issue of The CAVALRY JOURNAL to the questions quoted above was tested under campaign conditions. During the test, a reinforced platoon marched 371 miles in 15 days, including one day of rest. Of that distance, 118 miles was on pavement, 161 miles on graveled shoulders and graveled roads, and only 92 miles on dirt. Of the 36 horses that made the march, 5 were shod with borium, 23 with manganese, and 8 with regular shoes. At the end of the march, all 5 borium shod horses, 22 of the manganese shod horses, and none of the regular shod horses were still wearing the same shoes with which they started. The wear on the borium was negligible, and the only noticeable wear of the shoe was caused by improper spacing of the borium deposits near the toes, but even this left the shoe serviceable for many more miles. The manganese had worn smooth in most cases, and many shoes showed a great deal of wear. Incidentally, not one of the borium treated shoes had to be pulled before it had rendered a full month of service. *It is believed that under normal campaign conditions shoes properly treated with borium would wear until the natural growth of the hoof made reshoeing necessary!*

In addition to the wearing qualities of borium, it was noted that for the marching gaits, there was much less tendency to slip on pavement. Often a distinct pattern from borium digging into hard pavement was observed.

As has been mentioned, two types of metal were used, borium and manganese. The manganese was of the type trade marked "Fuzon Type T," and retails at $2.05 per pound. It is the hardest manganese made and was developed to compete with borium. The test showed, however, that its wearing qualities do not compare with borium and for that reason it will not be further considered.

The borium was secured in tube form at a retail cost of $5.00 per pound. One pound treated approximately 48 shoes, thus the cost of borium per shoe was about eleven cents. Since the cost of the normal garrison shoe is approximately eight cents, borium shoes seem rather costly in comparison until consideration is given not only to factory production methods lowering costs, but also to the fact that borium treated shoes will wear at least twice as long as garrison shoes. Of even greater importance is the fact that pulling the shoes too often will ruin the horse's hoof. Thus, in the event of emergency, the small difference between the cost of garrison shoes and borium treated shoes might easily be the difference between cavalry with horses and without.

The borium is easily placed on the shoe with an electric welding machine in about half the time required with the acetylene torch. The direct current machine with borium in tubes to conduct this type current is probably the best method of application. The tube is merely touched to the shoe at the points where borium is desired and the borium is fused as a deposit into the shoe easily and quickly. The size of the borium deposit may thus be regulated, insuring a uniform thickness and proper spacing.

The method of application described above, easy as it may seem, is not considered feasible within the regiment. Few regiments, if any, would have electric welding machines available, or the men trained to use them. Since the shoe may be fitted to the hoof after the borium has been applied, with no damage to the borium, it would seem that factory application is the answer. In addition, factory application would lessen cost, and insure a more uniform product.

The spacing of the deposits is the one phase of the borium treatment which must be handled with care. If the deposits are not at the proper place, so the shoe is out of balance, the shoe will be worn badly at the unbalanced points. The deposits must be on the outer edge of the shoe, particularly on the toe. While this is not of such great importance on the hind shoe, the much greater "roll" of the front shoes makes it imperative, otherwise

the toe of the shoe will be worn down as far back as the borium, and may necessitate reshoeing before the borium has even begun to show wear. This is best illustrated in *Figure 1*, a front shoe on which the borium deposits were neither balanced nor far enough forward on the toe. The shoe is badly worn back to the borium and especially on the unbalanced side. In *Figure 2* the borium deposits are balanced but are not far enough forward on the toe, thus the wear on the toe is noticeable but even. *Figure 3* indicates the borium deposits in better balance and farther forward. There is no appreciable wear on the shoe or the borium. In *Figure 4*, a hind shoe, the toe deposit on the right side is too far back, allowing some wear on the shoe on that side. *Figure 5*, a hind shoe, shows the borium spaced and balanced but not quite near enough to the outside of the shoe at the toe. However, there is no appreciable wear on the shoe or the borium. The shoes shown in *Figures 3* and *5* may be taken as most nearly correct in borium spacing and balancing.

It will be noted that on the toe of the front shoe there are three deposits of borium. Better results would probably have obtained had a solid half moon of borium been placed on the outer edge of the toe. On the hind shoe only two deposits were used. While this gave very satisfactory results, better results would probably have been effected had there been three deposits.

From the above it will be seen that there are two general rules to be followed in treating the shoes if the desired results are to be secured namely:

(a) Space the borium deposits so the shoe will be balanced.

(b) Place the deposits on the outer edge of the toe of the shoe.

Just as the feet of infantry must be properly shod, so must the "feet" of cavalry. Borium is the answer!

☆ ☆ ☆

The New Antitank Gun

The 37-mm. gun, M-3, on the 37-mm.-gun carriage, M-4, has been adopted as the standard antitank gun for infantry. This weapon gives the infantry regiment an antitank weapon that can cope with any foreign light or medium tank known to date. Its great accuracy, simplicity of fire control, and superior penetration, and its splendid mobility with its prime mover, make this one of the finest weapons of its type ever developed.

The gun and carriage complete weigh about 850 pounds. It is trailed behind a 4x4, half-ton truck. On roads the gun will trail at speeds of forty to fifty miles an hour without any side-sway or skidding. Across country the performance of the prime mover and the trailed gun is unequalled by any similar type of weapon. Gullies, shell holes, mud holes and slopes of twenty-six degrees are negotiated with ease.

When shell fire or the near presence of the enemy necessitates movement by hand, the crew can readily move the gun forward into position over varied and difficult terrain. The gun can be manhandled through woods, across deep ditches and shell holes, and across any stream whose bottom affords footing for the members of the crew. Streams as deep as fifty inches with sand or other hard bottoms are not obstacles to forward movement by hand.

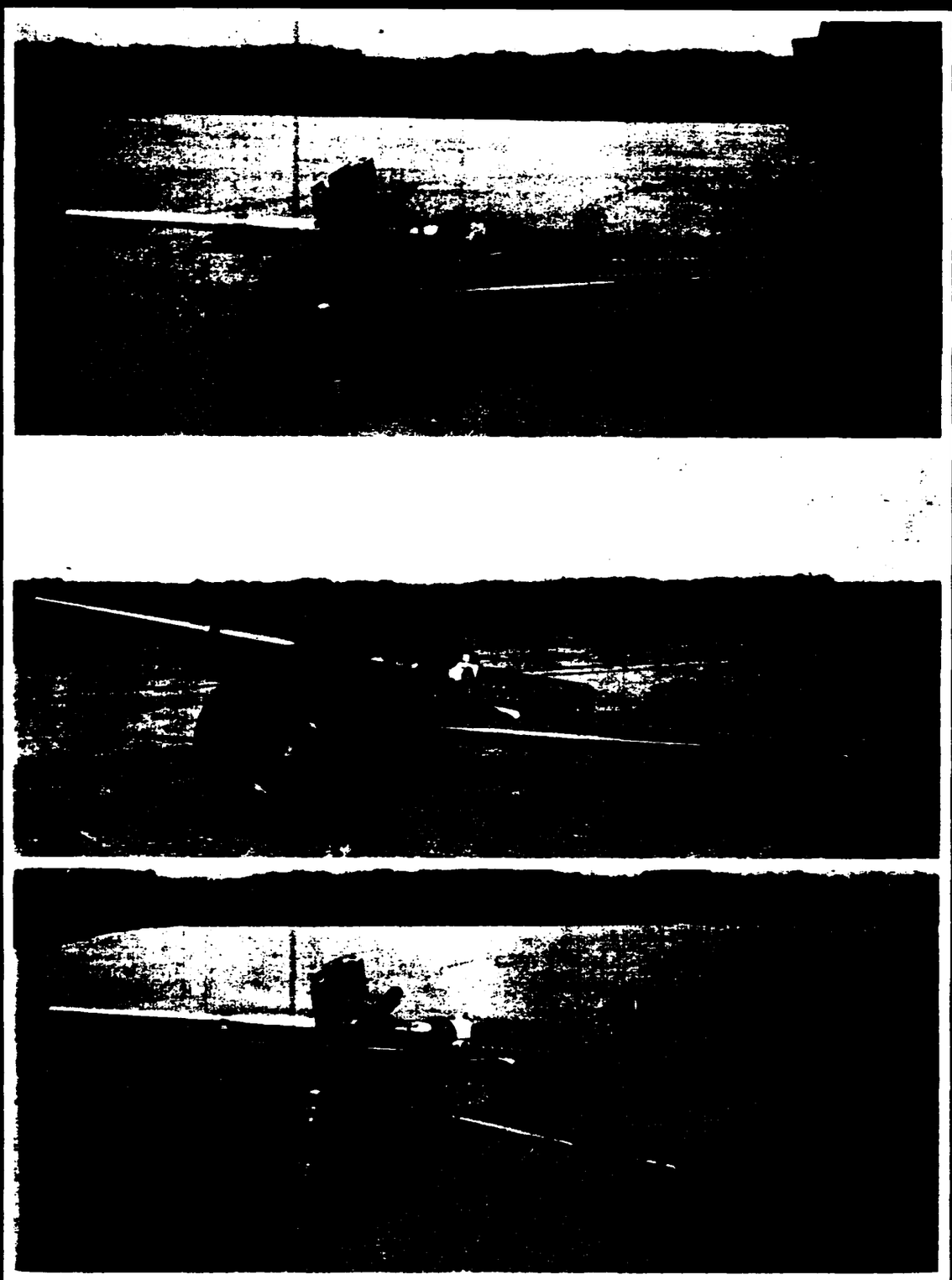
The gun commander is responsible for movement of the gun into firing position, selection of targets, and control of fire. The gunner, or No. 1 of the squad, tracks the target, and fires the piece. He is assisted in maintaining a high rate of fire by No. 2, who loads the piece. No. 3 maintains an adequate supply of ammunition within reach of the loader. Other members of the squad bring up ammunition from the truck or local dump.

The elevating and traversing controls and the trigger and sight are so arranged that the gunner can sight, track, and fire his piece simultaneously without ceasing any of these necessary operations. These operations and the operation of loading are so simple that a crew with limited training can fire twenty-five rounds per minute. Well-trained crews should easily reach thirty to thirty-five rounds per minute.

The gun will have two kinds of ammunition. The solid-shot, armor-piercing projectile will penetrate the armor of any known light or medium tank at a range of a thousand yards, even though the projectile strikes as much as twenty degrees from normal impact. A powerful high-explosive type of shell is being developed for use against personnel and enemy machine-gun nests.

The gun crew is protected from long-range small-arms fire and shell fragments by a shield of armor plate which extends clear across the space occupied by the operating members of the crew. This shield has brackets for attaching camouflage material. Camouflaged with materials that blend with the gun position, the weapon is difficult to detect until it actually fires. Concealment from air observation can be obtained by using a suitable camouflage net.

The tactical uses of this splendid weapon are to be developed by extended service tests.



Top—Coupled to truck. Center—Traveling position. Bottom—Firing position

Porte Cavalry

LIEUTENANT WILLIAM E. CHANDLER
14th Cavalry

Although great progress has been made in the motorization and mechanization of our army in recent years, most of the effort has been devoted to increasing the mobility of the Infantry Division and the organization of the 7th Cavalry Brigade at Fort Knox.

While it is true that some units of the 1st Cavalry Division were moved by motor transportation a few years ago, these movements were made with obsolete or improvised vehicles rather than with those now adopted as standard. With the exception of the transportation of small groups of animals no movement of cavalry units had been attempted with the present motor transportation until this summer.

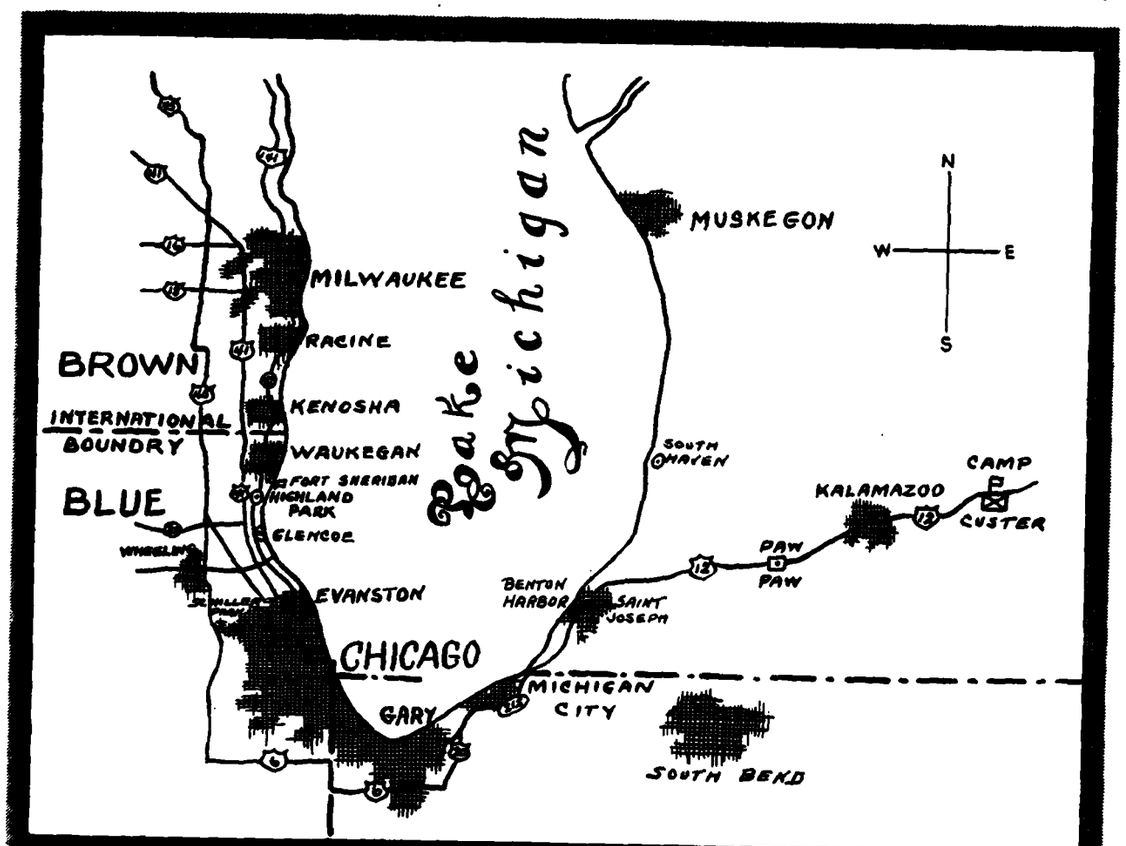
Realizing the strategic possibilities of transporting cavalry by motor in the theater of operations, the Corps Area Commander, Major General Hugh A. Drum and Brigadier General Karl Truesdell, commanding Fort Sheridan, agreed that the return of the 1st Squadron, 14th Cavalry from Camp Custer, Michigan to Fort Sheridan, Illinois, in August provided an excellent opportunity for training in such a movement. It was therefore decided to return the Squadron to its home station by motor under an assumed tactical situation with a view to:

a. Providing training in strategic movements.
b. Providing training in the tactics and technique of motor movements.
c. Determining the practicability of moving mounted units with present authorized transportation.

Since C.C.C. transportation could not be used for this purpose it was necessary to use the tactical transportation of units stationed at Fort Sheridan. As a preliminary survey indicated that the transportation available would only permit the movement of about one troop at a time, a problem was written requiring the rapid concentration of the squadron by motor in the area southwest of Fort Sheridan, wherein the first troop to be moved covered the movement and unloading of the second troop.

Preparations for this movement included the equipping of available cargo trucks with frames suitable for carrying animals, organization of a motor convoy, training of personnel in loading and unloading, and the preparation of loading tables consistent with the tactical situation.

The Squadron is equipped with one Type 4 semi-trailer, a homemade two-horse trailer developed experimentally



by the squadron for use as a horse ambulance, and one 1½-ton truck equipped with a two-horse frame. Obviously other available transportation must be modified to carry animals, but as there were no funds available for adapting cargo trucks for the purpose it was necessary to use enlisted labor and salvaged lumber.

Two types of trucks were available, the 1½-ton cargo model for which thirteen satisfactorily designed frames were available on the post, and the 2½-ton Dodges and Federals of the 61st C.A.C. (AA) for which a frame had to be designed. The frame for 1½-ton trucks, which has proved its usefulness at this station is constructed of 2 x 4's bolted together forming a wooden cage which fits snugly in the truck bed. The breast and tail boards are so placed that the horses' feet come just behind and in front of the wheel well on the truck floor. The breast bar is fixed whereas the tail bar fits in heavy wooden slots on each side of the frame. A separator bar runs from the center of the tail board to the center of the breast board. This fits in slots and is put in place after both horses have been loaded and the tail board placed. With breast boards, tail boards, separators and sides suitably padded, this frame provides a safe and comfortable conveyance for two horses.

The frame for the 2½-ton truck was constructed on the same basic pattern as the 1½-ton truck frame with certain modifications and changes to fit the different trucks. The 2½-ton truck is wide enough for three horses to ride facing to the front. These frames were built to place the horse directly over the wheel well which left about three feet between the breast bar and the cab of the truck. This space was utilized to carry two men, their equipment and forage. In order to allow for the weight of the additional horse the 2½-ton frames were constructed of 2 x 6 material. Due to the haste in which they were constructed and to the shortage of labor they were nailed together instead of being bolted. Separator bars were placed in slots in tail and breast bars as in the 1½-ton frames as it was found that the horses rode much more confidently when supported by this bar than when leaning against each other. The frames were constructed to fit the average horse and to place him over the wheel well. It was therefore necessary to brace the entire frame against the front wall of the truck body to prevent the whole affair from sliding forward, which was accomplished by pieces of 2 x 6 running from breast bar to floor.

Twenty-five of these frames were hastily constructed

Top: 1½-ton truck with frame. Center: 1½-ton truck and frame, showing separator bar and ramp in place. Bottom: Rear view of 2½-ton frame, showing tail board in place.

of old salvage lumber and ramps were built in sections about two feet wide and ten feet long. Two of these sections were carried tied to the sides of each frame. Four sections made a ramp for a 2½-ton truck and three for a 1½-ton truck. Demountable supports in the form of saw-horses were built to support the center of the ramps which were too long to support the weight of a horse alone. With these ramps it was possible to load and unload on the level road.

These preparations took about two weeks due to the necessity of finding material without expense to the government and the fact that only four carpenters were available to do the work. Given the necessary material a troop could easily build frames for its horses in one day or less.

A Provisional Motor Transport Company was organized at Fort Sheridan consisting of all available vehicles, the majority of which belonged to the 61st C.A.C. (AA). This company was quite sizable and contained the following vehicles:

13 1½-ton trucks equipped with two-horse frames.
25 2½-ton trucks equipped with three-horse frames.
1 1½-ton truck equipped with two-horse trailer.
1 Type 4 semi-trailer (six-horse capacity).
6 2½-ton trucks for cargo and personnel.
4 motorcycles.
1 gas truck.
2 kitchen trucks.
1 ambulance.
1 reconnaissance car.

This provisional company was capable of conveying 109 horses and 100 men with their equipment. The operating personnel consisted of six officers, including a medical and veterinary officer, and 104 enlisted men, also mainly from the 61st C.A.C. (AA). It reflects great credit upon the organization and training of this regiment that, although totally inexperienced in carrying animals, the entire movement was conducted without a single serious injury to the animals.

On learning that the squadron was to return to Fort Sheridan by motor the Squadron Commander instigated loading drills, using the vehicles with the squadron at Camp Custer. These drills were for the twofold purpose of accustoming the horses to being loaded in trucks and to give the personnel experience in loading animals prior to the day of departure.

On August 11, 1938, the Commanding General sent a message to the Commanding Officer, 1st Squadron, 14th Cavalry, to the effect that an insurgent labor faction in the neighboring Brown state to the north had assumed control of Milwaukee, invaded the Blue state, and was being opposed by detachments of Army and Navy troops at Waukegan, about fifteen miles north of Fort Sheridan. Blue forces were being slowly pushed southward.

The 1st Squadron, 14th Cavalry was ordered to proceed by motor and marching from Camp Custer to Wheeling, Illinois, about ten miles southwest of Fort Sheridan, where further orders would be received.

The Squadron Commander was also informed that the Provisional Motor Transport Company would report to him at Camp Custer late in the afternoon of 12 August.

The possibility of hostile interference with the movement demanded the formation of an advance guard and the maintenance, so far as possible, of the integrity of small units. This was rendered difficult by the composition of the Provisional Motor Transport Company, which was organized into four sections corresponding to the organizations of the 61st C.A.C. (AA) from which the vehicles had been drawn. This resulted in 2½-ton and 1½-ton trucks in each section, no two of which were alike. As this was the first movement of the kind undertaken by the 61st C.A.C. (AA) it was not deemed advisable to regroup the vehicles. Consequently the section with the least horse-carrying capacity was selected for the advance guard. This consisted of a rifle platoon of two squads and a light machine gun squad. To facilitate prompt contact with the Scout Car Section the pack radio and certain personnel of Headquarters Detachment were also assigned to this section.

Troop commanders were informed of the size and composition of the advance guard and the organization of the convoy with the capacity of each section. From this information they prepared loading tables, assigning men and animals to each vehicle.

The effective strength of the squadron on 11 August was 211 horses, 167 enlisted men and 11 officers, exclusive of Scout Car personnel. The Field Order for this movement directed the Squadron (less Troop A) to entruck at 7:30 AM, 13 August and move on Shiller Park, Illinois, a point about 30 miles southwest of Fort Sheridan, and to proceed by marching to the vicinity of Wheeling, with the mission of covering the movement and detrucking of Troop A at Wheeling on 15 August. Troop A was to remain to load heavy baggage, close camp and leave Camp Custer 15 August when the Provisional Motor Transport Company returned from Shiller Park.

Ample facilities for loading were available at Camp Custer in the form of freight platforms against which trucks could be backed. Loading of the Squadron (less Troop A) began in accordance with the loading schedules at 7:30 AM, 13 August. In spite of the loading drills previously held some difficulties were encountered in loading. Three horses backed precipitately out of a truck before the tail board was secured, taking frame and all with them. Another frightened horse fell out of a truck after being loaded and several frames were broken up by fractious animals due to the age and brittleness of the salvaged lumber from which they were constructed. By 9:30 AM all but two exceedingly unruly horses were loaded. In time of actual emergency these two animals would undoubtedly have been abandoned, but due to the necessities of peacetime service, another hour was consumed in inducing these two individualists to conform. By 10:30 AM the convoy was formed and moved out on the road.

Drivers of vehicles carrying animals were cautioned to use extreme care in applying brakes and rounding turns.

After the first mile all animals settled down and rode the remainder of the distance very comfortably, munching hay and looking around in a very contented fashion. Traveling at 20 to 25 miles per hour the column occupied about 2½ miles of road space. Scout car reconnaissance provided a certain degree of protection against ground attack, and air attack was guarded against by distances of 50 to 150 yards between trucks and by riflemen and light machine guns in open trucks distributed throughout the column. The efficacy of light machine guns in trucks without the aid of an anti-aircraft mount is very doubtful however.

The convoy arrived at Shiller Park, 30 miles southwest of Fort Sheridan at 8:30 PM, just at dark. Vehicles carrying animals were backed up to a curb and unloading begun. The wheels of the trucks were about six inches lower than the ends of the ramps which reduced the slope of the ramps but prevented the use of the trestles which had been provided, resulting in considerable loss of time in improvising trestles. The proportion of ramps to trucks, about 1 to 6, was undoubtedly insufficient but it is believed that time would have been saved by unloading in column on the level road where the ramps could have been used as designed. Undoubtedly loading would have proceeded much faster in daylight. Certain trucks had fallen out of the column for minor repairs and were late in arriving in camp, however unloading was completed by 10:30 PM and all animals were on the picket line. After caring for their animals the men collected their equipment and bivouacked nearby. Locating individual saddle equipment and packs in the dark was quite a task due to the darkness and the confusion during unloading. The trucks moved to a truck park about 600 yards from the unloading point and were serviced for the return trip to Camp Custer.

On 14 August the Motor Transport Company returned to Camp Custer to pick up Troop A and the Squadron (less Troop A) marched on Wheeling, Illinois, about 10 miles southwest of Fort Sheridan, with the mission of establishing a screen to cover the movement and unloading of Troop A at Wheeling on the following day. It was interesting to note that despite the 200 mile motor trip of 10 hours duration the horses were fresh and ready to go. Injuries to animals were confined to minor abrasions received when loading at Camp Custer.

Loading of Troop A at Camp Custer commenced at 5:15 AM, 15 August and proceeded very smoothly due to experience gained in observing the loading of the first group. The convoy cleared Camp Custer at 7:00 AM and was spotted at about 2:00 PM by an observation plane which kept Squadron Headquarters advised of the location of the truck column by radio and dropped messages for the remainder of the day.

Meanwhile the squadron (less Troop A) had established its screen north and east of Wheeling. Information gained during the afternoon indicated that the detrucking point of Troop A could be advanced to a point nearer to Fort Sheridan. When it became evident from airplane reports that the convoy would reach Wheeling about 7:00 PM, a new detrucking point was selected about three miles from Fort Sheridan and the Commanding Officer, Troop A was notified of its location.

The convoy arrived at the detrucking point at about 7:30 PM and unloading began, covered by Troop B and the Scout Car Section. Detrucking proceeded slowly as in the previous case due to the darkness and the insufficient number of ramps. As the command was to move out as soon as Troop A was formed, horses were saddled as they were unloaded and led to an assembly point in rear of Troop B. No serious injuries were reported from Troop A, either from loading or unloading. Horses were quiet and contented on the road.

When unloading was completed the Squadron assembled and prepared to move forward. At this point the problem was called off and the troops marched into Fort Sheridan, having completed in three days a march that took nine days in the reverse direction in June. Not a single animal was incapacitated for field work in spite of accidents in loading. On the contrary the animals were fresh and ready for extended field service. Due to the monotony of the long drive and cramped space available for personnel, the movement was much harder on the men than on the animals.

In addition to demonstrating the ease and safety with which Cavalry can be moved over long distances by motor, this movement brought out many points of interest.

The movement confirmed the principle that horses, to avoid injuries, should be loaded longitudinally, that is, with their spinal columns parallel to the direction of movement of the vehicle. If this is done it is only necessary to slow up for sharp curves or rough roads and the animals ride much more contentedly.

Since march casualties of vehicles are unavoidable it is impossible to maintain the integrity of all units during a motor movement. To minimize the confusion of mixing units each man should ride in the same vehicle as his horse and equipment.

On account of the pack horses of the light machine gun platoon and spare horses there are always more animals than men in cavalry organizations. To permit flexibility in loading, simplify loading plans, and to provide against breakage in frames, all cargo vehicles should be provided with horse frames.

While it is desirable that all cargo vehicles in a convoy be of similar type and capacity, this will not always be possible. However as regrouping vehicles results in less confusion than mixing units, vehicles should be grouped initially to permit them to be loaded in accordance with tactical considerations.

Time lost in loading and unloading reduces the time saved by motor movements. This loss of time could be materially reduced by providing a greater number of ramps and by making such moves more often for training purposes.

(Continued on page 96)

Your Journal

In the great commercial literary field a board of directors searches diligently for a managing editor with that sagacity to foresee the type of stories and articles which the versatile American reading public will like. In a professional medium such as The CAVALRY JOURNAL, the field is much more limited than one devoted to fiction and articles of a general nature. Therefore, reliance is placed upon generous voluntary contributors or editorial intuition in soliciting articles which will be both informative and interesting.

In order to determine some expression from the field on the type and choice of reading matter which should appear in The JOURNAL, the following line was inserted on proxy cards sent to all members within the continental limits of the United States: "The article I like best in recent JOURNALS was ....." Three hundred forty-seven replies to the question were received ranging as follows:

"Crazy Business," by Peter B. Kyne	146
General Hawkins	65
Colonel Schwien—Studies on Cavalry in World War	20
General expressions of approval	34
New M1 Rifle	7
Tommy Wadelton	5
"Bagging the Hedgehopper," and "New Face of War"	12
Mechanized Cavalry Articles	6
Maneuver Articles	7
Miscellaneous Choices	45
	347

In order to indicate that with reading, as with all other activities of the *genus homo*, "what is one man's meat is another man's poison"; to wit: note the following remarks taken at random from selected cards:

"Best article, 'Soldier Sources,' by Reilly; worst, Peter B. Kyne."

"Recommend less emphasis on JOURNAL articles on horseflesh, horseshows, old-time cavalry stories, etc., and more stress on modern cavalry. Modern weapons and methods have almost outmoded the 'Old Cavalry.'"

"Articles on actual experiences in handling men, in actual combat leadership, in small unit experiences are invaluable to junior officers."

"More 'horse' articles should appear in The JOURNAL—breeding, training, type, etc."

"Put in some simple ones."

The foregoing tabulation has been of great assistance in evaluating reader interest and choice. The 34 who registered general approval by the general statement of "They are all good" were very generous but of little help to the perplexed individual with eyeshade and pencil behind ear in the final selection of any particular article.

The above list of preferences, in reality, furnishes a very fair cross section of the type of articles which have recently appeared in The JOURNAL. From the professional point of view, emphasis, undoubtedly, has been laid on the main theme of "Cavalry in War" or the importance of the cavalry rôle in any future war involving the United States. The present Chief of Cavalry, in his one principal directive to the editor, has stressed the fact that, above all, The CAVALRY JOURNAL should furnish a free forum for the discussion of cavalry affairs. The JOURNAL belongs to its readers. Your preference for a discussion of any specific activity will not only be accorded the greatest attention, but will also receive much appreciation in the editorial office.

* * *

Horsemanship

On occasion the cavalryman encounters from those in high position the attitude that the horse is misfitted for the modern battlefield. Through a subsequent check it has been found that many of these speakers during the larger part of their services have felt great personal shortcomings in their own horsemanship. Through fear or aversion to the horse, these individuals are unable to appreciate how any other man can accomplish those things through the horse which have always rendered importance to the final successful outcome of military operations.

It is true that the care and maintenance of the horse in war, particularly modern war, is difficult. There will be animal casualties, and many of them, but unlike the machine the horse is not discarded but is capable of being salvaged through a period of proper care and convalescence. From the human angle it is easier to fight in a machine without either heart or entrails than in companionship with the warm-blooded animal for whom close attachment is formed in the throes of campaign and combat.

War is dangerous, and everything in its way in life and nature suffers from destruction. In this, the horse will have to risk destruction along with the manhood of the nation. So long as men and weapons on horses can furnish the most independently mobile force on the battlefield, so long will the horse be employed in war.

Dues

On December 31st there remained on the records of the Association a total of $1,228.50 which represented accounts receivable through membership dues. Unfortunately, the printer and engraver have not yet proven eleemosynary agencies and bimonthly make requests for reimbursement. These requests are much more comfortably met when money is in the bank rather than in accounts receivable. We agree with Banjamin Franklin, "A bird in the hand is worth two in the bush."

* * *

Machines, Maneuvers and Mud*

Recent operations in Spain have demonstrated again that it is men, and not machines, that fight wars. Our national defense planners should heed the comments of Maj. Gen. Hugh A. Drum on the recent maneuvers at Fort Knox, as printed in the *Illinois Guardsman*. Gen. Drum says:

"The proposal that motors replace all animals is an extreme view not warranted by experiences in China and Spain and certainly not in the terrain surrounding this CPX [command post exercise.]"

Some explanation of the difficulties is given in another article in the same issue, discussing a rapid movement required of Illinois' 33d Division, to support an attack of horsed and mechanized cavalry. "The problem of coordinating the movement of the division, after it had been assembled and entrucked, was quite difficult," says the official report. "Roads were scarce and there were few turnarounds."

Even with antiaircraft artillery and a regiment of tanks attached, the National Guard division does not have a high proportion of motors to its total strength, yet "very careful staff work" was required to make the rapid movement prescribed, and the solution is highly commended by Gen. Drum.

The exercise was carried out during a very rainy season, and unofficial reports are that the mechanized cavalry, tanks and truck trains encountered considerable difficulty except on paved roads. Many skeptics returned convinced of the importance of real cavalry in any modern scheme of war.

*Editorial, *The Milwaukee Journal*.

The United States Cavalry Association

Organized November 9, 1885

The aim and purpose of the Association shall be to disseminate knowledge of the military art and science, to promote the professional improvement of its members, and to preserve and foster the spirit, the traditions, and the solidarity of the Cavalry of the Army of the United States.—Article III of the Constitution.

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LETTERS to the EDITOR

The Army

Dear Sir:*

Something has come over the Army, I doubt whether you realize it. It's different, it's American, the men composing it are not any braver, as a matter of fact, a ribbon counter clerk is as brave as any army man, so are natives of Africa and Asia, the army has no corner on courage.

For years the American Army has been an institution without imagination, arrogant, dumbly stupid in following unyielding silly rules, it took 150 years for the Army to realize that the rank and file would do better work if comfortably clothed; remember when the army turned down the machine gun, remember how long it took to put a simple ring on the submarine so that a line could be tied to it in case of accident and the poor devils inside brought to the surface?

But something has happened to make this man's army an American Army like Geo. Rodgers Clark's Band, like Stonewall Jackson's men—fire, snap, personality, a hard hitting outfit eager and ready to tackle any job. The men have a sparkle in their eyes, they seem to have individuality; not officer ridden.

I went to Louisville, Ky., in my car one day when the Army was returning to Ft. Knox, it was necessary for me to weave in and out through the long line of trucks and tanks but I made good time, I was treated like a gentleman like the Army's paymaster, the American Citizen. I encountered utmost courtesy, no arrogance, I was conscious of efficient and business like courtesy, the trucks and other equipment kept on their own side of the road, and when parked, were on the shoulder, when occasion demanded, the men on motorcycles acted intelligently in directing the civilian traffic for the comfort and protection of citizens.

Your Army has come far in the past few years, somebody has had enough vision to realize that the American is an individualist—not a German machine.

This trip to Louisville completely changed my opinion of the Army and I am sure it is because the Army has changed not because my idea of what an Army should be has changed.

No I am not a nut—or an eccentric, I am a plain American Citizen, jealous of his freedom and his constitutional rights.

I am proud of our Army and if you have had anything to do with this new order of things, you have every right to be proud of your efforts. In these days of dictators all thinking men watch the attitude of the Country's leaders and especially the attitude of the army, keep it the way it is and the people will support it in an unlimited way when the call comes.

JACK KEELY, Owensboro, Ky.

*A letter received by the Commanding General, V Corps Area.

* * *

Dear Sir:

In this age of motor insanity, it does one good to read The CAVALRY JOURNAL.

The article—"Imagination Run Wild," by General Hawkins and "The Horse in War," by Major MacNamara, which I have read but recently, are sane, sound, presentations of essential facts. Please convey my congratulations to the writers.

WAYNE DINSMORE,
Secretary, Horse and Mule Assn. of America.

* * *

An Appreciation

Dear Sir:

General Farrand Sayre, U. S. Army, retired, has recently been awarded the degree of Doctor of Philosophy by Johns Hopkins University. Three years ago he received the degree of Master of Arts from the same university.

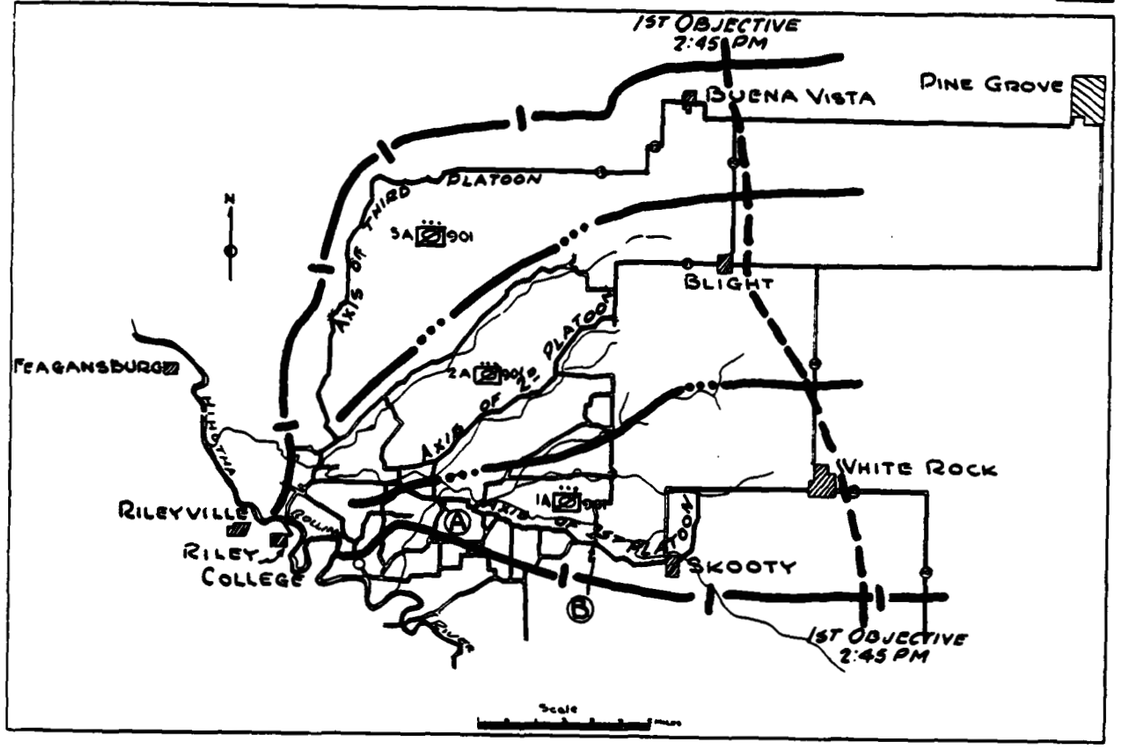
Is there another officer, retired or active, in the list of our army who has had that distinguished honor conferred on him by any university or college, let alone Johns Hopkins? I know of none. Besides the B.S. which by law will hereafter appear in the Official Register after the name of every West Point graduate, there are many names in the Register followed by A.B., A.M., LL.D., B.S., M.S., D.S. and initials of other collegiate degrees, but I suspect there is hardly another Ph.D. in the entire list; I am reasonably sure there is not another Ph.D. from Johns Hopkins. And many, if not most, of the degrees conferred on our officers by colleges and universities are merely complimentary, and carry no scholastic implication.

Not so General Sayre's Ph.D. He achieved it by five years of post-graduate study and research at Johns Hopkins, ending with an elaborate thesis—three years for his A.M. and two more for his Ph.D. And the marvel of it all is that General Sayre is seventy-seven years old. He has always been a student, and he has always been thorough, scholarly, intellectual; but to do five years of post-graduate work after one is seventy-two and win a Ph.D. from such a university as Johns Hopkins, if there be another such in the Americas, is a distinction, I venture to say, never achieved by one man in ten millions.

The theme assigned this distinguished scholar for his doctorate thesis was "Cynicism," and part of his dissertation

(Continued on page 82)

NOTES from the CHIEF of CAVALRY



What Would You Do?

DEAR "ED":

New Year's morning I woke up with a bad headache and thinking it was caused by something I "et" the night before, or that possibly I needed glasses, I dropped in at the station hospital for treatment. It was while under the influence of four aspirin that the medico gave me to dilate my eyes, that I had a dream. When I woke up I told it to him, and it is on his recommendation that I am passing it on to posterity.

Yours,

"SLINKOVITCH."

P.S.: The medico, Major I. Strayne, has never served with the mechanized cavalry, either.

* * *

I was in command of the 1st Platoon, Troop A, 901st Cavalry (Mecz) (Reconnaissance Troop.) At 12:00 noon our troop had arrived at "Rileyville College of Applied Arts" and had just received the following message from the regimental commander:

"Several motorized infantry regiments, some horse cavalry with mechanized elements and truck-drawn artillery are reported in the PINE GROVE area. At 11:00 AM these forces had not yet moved.

The 901st Cavalry (Mecz) will advance at 2:00 PM via RILEYVILLE and FEAGANSBURG against the enemy concentration reported near PINE GROVE.

Troop A, marching at 1:30 PM, will reconnoiter the zone as shown on attached map.

First objective to be reached not later than 2:45 PM. That line will not be crossed until further orders.

Missions:

(1) Report the location, strength, composition and movements of any enemy forces encountered in your reconnaissance zone.

(2) Determine the suitability of the road net for the advance of the regiment to the east or northeast.

(Signed) PRESTONE, Colonel, 901st Cavalry."

Upon receipt of the foregoing orders, Captain R. Moore Carr assembled us platoon commanders and gave us the dope. He gave each of us a zone as shown on the above map and he, with troop headquarters and the 4th Platoon (reserve), planned to march via Highway 57.

I moved out with the 1st Platoon as ordered and reconnoitered my assigned zone without incident until I arrived at a point 200 yards west of the stream crossing at A. Here my leading car came to a halt. A moment later the motorcycle messenger handed me the following short and cryptic message in code:

"Charlie McCarthy tight. Has not blurped yet."

which decoded read:

"Heavy log barricades across the road on the opposite side of the stream. Have received no hostile fire."

I immediately made a hasty approved estimate of the situation and said to myself, "And now, Mr. Slinkovitch, WHAT WOULD YOU DO?"

(EDITOR'S NOTE: Slinkovitch has requested us to ask you to decide what you would do, then read the next situation; and *then* turn the page to see what he did in both cases.)

After successfully applying the proper technique in the foregoing situation we proceeded with the platoon until we arrived at B. From this point we could see a small village about three miles to the east. We were in enemy territory and I had to plan for moving the platoon through this village. Again my inner voice piped forth in a rather gutteral laugh: "Ha! Ha! Slinky, old boy, now

WHAT WILL YOU DO?"—(See below.)

(EDITOR'S NOTE: Now you can peek.)

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Two More Cavalry Divisions Authorized

The Secretary of War has authorized the formulation of sufficient headquarters units to complete the organization of the 21st and 22nd Cavalry Divisions.

The 21st Cavalry Division comprises the 51st and 59th Cavalry Brigades, and includes the 101st Cavalry and the 121st Cavalry in New York; the 59th Cavalry Brigade comprises the 102nd Cavalry of New Jersey and the 110th Cavalry, including units located in Massachusetts and Connecticut.

The 22nd Cavalry Division will comprise the 52nd and 54th Cavalry Brigades. The 52nd Cavalry Brigade includes the 103rd Cavalry and the 104th Cavalry, located in Pennsylvania; the 54th Cavalry Brigade includes the 107th Cavalry of Ohio and the 123rd Cavalry of Kentucky.

The 24th Cavalry Division, already organized and commanded by Major General William K. Herndon, comprises the 57th and 58th Cavalry Brigades, located in Colorado, Idaho, Iowa, Kansas, Washington, and Wyoming.

It is believed that the remaining Cavalry Division of the National Guard, the 23rd Cavalry Division, will be authorized by the War Department in the very near future.

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A Solution

FIRST SITUATION

I instructed the leading car to cover the barricade with its guns, then moved my car off the road to cover. Then, while the driver and radio operator remained in the car and protected us with turret defilade, the rest of the car crew and myself made a dismounted reconnaissance, taking the sub-machine gun caliber .45 with us. The other section halted and remained in observation on the road about 300 yards to our rear.

SECOND SITUATION

First I endeavored to reconnoiter by observation, parked at a distance from town under cover.

Then I moved by bounds through the town with entire platoon. We split into sections but remained in visual contact on each cross street.

One section then remained in observation on the northeast exit of town while the other section turned back and made a detailed reconnaissance of the town, hastily interviewing certain inhabitants. (The road block previously located looked suspicious to me.)

NOTE TO EDITOR: In a later issue of The CAVALRY JOURNAL I may tell you about the medicos deciding that it was my teeth that caused the headache and the dream that I had when they pulled all my teeth out.

"SLINKY."

General Hawkins' Notes

The Difference is Truly Amazing

Ever since our Civil War the American cavalry has claimed a point of superiority over European cavalry because it was armed and trained to fight both mounted and dismounted, whereas, until after the World War, European cavalry was armed and trained to fight principally in mounted charges against cavalry, and dismounted only as an expedient. It had within itself no fire power to support mounted action. It was very poorly armed and equipped for dismounted action and had scarcely any training for that purpose.

Boastfulness is not a virtue, but certainly the American idea has been proved right in many campaigns. European cavalry officers were inclined to speak scornfully of American cavalry and declared that it was only mounted infantry. They asserted that it was impossible to instill into mounted troops the spirit of mounted action if they were trained also to fight dismounted. This was disputed by us, but it took the World War to prove that we were right. However, it is true that for some years before the World War our interest and dependence upon dismounted fighting, and the improvement in rapid firing rifles, together with the opinion of other branches of the service, had served to discourage any great faith in mounted action in our cavalry.

But the idea, both in Europe and partially in America, of mounted action was the charge in closed ranks. The open order mounted action, so well exemplified by Allenby's cavalry in Palestine and by the Canadian cavalry forces in France, was something that some few American officers had visualized for a long time. In fact, open order attacks, using the pistol instead of the saber, had been used in our Civil War, in our Indian wars and in the Philippine campaigns. Since we were armed with both pistol and saber, there were many arguments as to when to use one and when the other, but the advocates of the pistol and open order attacks were gradually gaining headway which finally resulted in the abolition of the saber some years after the World War. Before that war we were still under the influence of European tradition and practiced mounted charges with the saber in close order as well as pistol attacks in open order. After their experiences in the Boer War, the British cavalry had also a gradual change of opinion as to charges in close order and came to favor open order for mounted attack, especially against infantry, but they retained the sword and refused the pistol.

Faith in the mounted attack, even in open order, had so diminished in the American cavalry, in spite of British successes in South Africa and in the World War, that it was necessary to revive it by recent historical examples and by reasoning, without in the least impairing its interest and training in dismounted action. This was undertaken in 1919, and the result has been to make the American cavalry equally enthusiastic and confident in its ability to fight either way as circumstances may demand. This happy result has a profound effect on the rôle of Cavalry as conceived by the American Army. Naturally, with such a Cavalry, its rôle is enlarged many times. With magazine rifles and many machine guns and other weapons cavalry fire power is equal to that of the same numbers of infantry. With an automatic pistol by machine guns and artillery in the larger formations, the mounted attacks in open order take on a formidable character, even against infantry, when combined with dismounted attack and used in accordance with the terrain and other favorable conditions.

If we compare this kind of cavalry with that in Europe in 1914 the difference is truly amazing. The greatest drama of the World War was that period from the invasion of Belgium to and including the Battle of the Marne and the German retreat to the Aisne River. During this period cavalry was much in demand and did perform invaluable services. How very much more it could have done on each side had the French and German cavalry been armed and trained to fight on foot and to fight mounted against infantry when opportunity came! Such, however, was not the case. This cavalry was armed with a little carbine not much better than a pop-gun. It had no machine guns to speak of. Almost its whole training was to fight in close order charges against cavalry and to oppose infantry only very weakly and mostly by the use of its supporting artillery. Even in reconnaissance its patrols could not face smaller infantry patrols. Disdainful of anything about modern war that we had learned in America or that the British had learned in South Africa, the French cavalry went to war in 1914 equipped and trained and dressed like the knights of old, or certainly no different from the cavalry of Napoleon. They were poor horsemasters and did not know how to march long distances and preserve the strength of their horses. They were always waiting for the opposing cavalry to line up against them and charge in the approved manner. What good this would have done, even had they beaten their opponents, is not clear, since with the enemy cavalry out of the way they could do

nothing else. They could not attack infantry; they could not fight powerful delaying actions; they could not intervene in the battle effectually from the flanks or rear. Yet they did perform valuable services by virtue of their presence in guarding flanks or filling gaps between army corps or armies. They were feared more than they deserved to be, and they served to hold off the opposing cavalry which was no better than they were. A cavalry division or corps had always to have a brigade of infantry to support them. They called loudly for and almost refused to operate without this support. But they were gallant! A little later in the campaign, during the so-called race to the sea, the French cavalry fought stubbornly and well in trenches against the advance of the German wide sweeping movement towards the channel ports. However, this was an act of desperation and with the support of infantry and, though successful until infantry could relieve them, their success was not as great as it could have been and their sacrifice much greater than it should have been had they been armed and trained for dismounted fighting.

When the German army came down through Belgium and, taking the French high command by surprise, attacked the left flank of the combined armies of the French and British in overwhelming numbers, the French Fifth Army and the British Army on its left felt the brunt of the attack. The Fifth Army was attacked along the Sambre River and driven south. The British Army was attacked near Mons and also driven south. The great retreat had begun.

At all times during this retreat the British Army was separated from the Fifth Army by dangerously great intervals. The British left was constantly in danger of envelopment by the German First Army commanded by Von Kluck. Part of the time, cavalry was used to stop the gap between the two armies, but the great danger of envelopment of the British left caused the assignment of Sordet's cavalry corps to this flank early in the great retreat, and even after the French Sixth Army was formed on the left of the British; but in reading the accounts of the activities of this corps of three divisions, one is struck by the weak resistance it was capable of in delaying the march of the German army corps which was attempting constantly to envelope the British left. Delaying actions were fought principally by the corps artillery, and Sordet was constantly calling for infantry support behind which he could rest his weary horses and men. He had to march his cavalry long distances at night to enable it to bivouac at safe distances from the enemy, and in the morning it was marched back again long distances to resume his proper place in contact with the enemy. Thus, his horses were marched off their feet, and by the time the Marne was reached they were completely exhausted. Infantry brigades were sometimes attached to the cavalry corps and marched in rear of it at convenient distance and then halted in position so that the cavalry corps could seek shelter behind the infantry at night. The necessity for this was due to the fact that the French cavalry was unable to protect itself when dismounted.

The Germans were just as ineffective as the French. Their cavalry marched habitually behind infantry in trucks. They did not allow themselves, when they could avoid it, to become engaged with the French cavalry in a cavalry combat. Marching behind a battalion of infantry in trucks with a few cavalry patrols in front the German cavalry would throw forward detachments as though to meet the French, and then fall back upon the infantry. The French cavalry would pursue (in close order of course) and soon find themselves under heavy fire of German infantry and machine guns. These were small units of French cavalry in advance of larger units. Had the French advanced their covering detachments cautiously and then attacked in force, using open order and depth of deployment supported by fire of some dismounted units, even though they had no machine guns, they would have overwhelmed the small German infantry units and the cavalry behind them; but the French knew nothing but impetuous attack in close order, unsupported by any kind of fire. They lost many gallant men and horses. They believed in mounted attack, but their method was as old as the muzzle-loading muskets of a hundred years before. The German cavalry was as antiquated as the French, but they were smart enough to play these tricks on the French and to refuse to meet them in the old-fashioned way. Neither the one nor the other knew how to make a mounted attack in the modern way; and the modern way is a combination of fire and movement.

It took the British to show the new method during the war, but the French and the Germans never learned it and their reaction to failure was to give up mounted action completely. Since they were not equipped or trained well for dismounted action, they failed on both sides to perform in full measure the priceless services that their numerous cavalry should have given to their armies. Although, as said before, they did render invaluable service in filling gaps between corps and armies and in guarding flanks. they were not as effective even in those roles as an up-to-date cavalry should have been. The French cavalry corps did fight a successful delaying action against the German Tenth Reserve Corps at the Battle of Charleroi. It fought, no doubt, many small actions while guarding the British left during the retreat, but it did not and could not give the measure of security to the British left flank that a properly armed and trained cavalry corps should have given. The British Army, made up entirely of regular troops, saved itself against great odds by magnificent fighting and the help of its own single cavalry division.

After the Battle of Guise, in which the French Fifth Army had had some success in a counter-attack, it resumed its retreat toward the Aisne River, hotly pursued by the German First and Second Armies. The British had retired well back of the left flank of the French. A wide gap of some twenty miles lay between them. The German First Army was pressing hard against the French left flank and attempting to envelop it before the French could retreat far enough south to avoid being turned and trapped between the two German armies. The German First Cavalry

corps was dispatched around this flank. It crossed the Oise River at Bailly and turned east into the gap between the left of the French and the British Army to the southwest. The French Fifth Army was in a critical position with its left partially enveloped by German infantry and the German cavalry corps well around its left and rear. The French lines of communication, wholly open and unguarded, were in danger. If the German cavalry succeeded in occupying the passages of the Aisne River in rear of the French army the latter would have its retreat cut off for a time sufficiently long to enable the German overwhelming forces in pursuit to crush it in a serious disaster. Frantic efforts were made by the French to send some infantry from the group of reserve divisions on the left of the army to meet and stop the German cavalry. Only a few battalions and some artillery were able to take position to oppose this cavalry. It was an insufficient force to oppose a cavalry corps backed up closely as it was by strong columns of infantry, but apparently it sufficed. The German cavalry went no farther. Just what it did do is obscure, but obviously it refused to attack. Because an inferior force of infantry lay in front, it was stopped. The German cavalry, like the French, was not armed and trained to attack infantry except by close order charges, which were probably out of the question, or by dismounted action for which they were not equipped and which they did not understand. Thus, on account of false doctrine and antiquated equipment and training, the German cavalry lost an opportunity of stupendous possibilities. Had the German cavalry been indoctrinated with the idea of mounted attack against infantry, and trained to make such attacks in open order and successive waves supported by all the fire power of modern arms, this great cavalry corps would have swept over the few battalions that were opposed to it, thus saving the time that would have been consumed in making a dismounted attack. It would have been well on its way to dispute, dismounted, the passage of the Aisne by the French Fifth Army, but it did not make even a dismounted attack. It was not prepared to do either.

During the Battle of the Marne, when the Germans were in retreat, an interval of twenty miles was formed between Von Kluck's Army and Von Bulow's Army. The British Army and part of the French Fifth Army were pressing forward to occupy this gap. The British cavalry division preceded the army, but it was insufficient. Had a cavalry corps of three divisions, properly armed and trained, been available to send through this gap, it could have delayed the arrival of the German reinforcements which finally plugged the gap before the British and French infantry had time to get into it. Had a penetration in force been effected between these two German armies, the Germans might not have been able to halt on the Aisne, and the long trench warfare in France might have been shortened or perhaps avoided. What a magnificent result by the use of a single cavalry corps properly constituted and properly used.

Although the American cavalry had the right idea in principle, the idea of a cavalry equipped and trained to fight both mounted and dismounted, it had not much to boast of during the years just before 1914. It was not well trained to carry out the principle. Its horsemanship was only fair, although improving since the establishment of The Cavalry School at Fort Riley. Its marching was better than the French but not good enough. It had no clear-cut method of making mounted attacks. The importance of supporting fire was not well understood, and there was little uniformity in the training for this purpose. Like the infantry, it was well trained in rifle and pistol marksmanship but also, like the infantry, it was lacking in tactical training for either mounted or dismounted action. As in the case of other armies of the world, it did not appreciate nor understand the importance of training and skill in the use of cover for advancing troops. Platoon and squad organization and leadership were not well understood. It is only fair, however, to state that despite these defects our dismounted action, like that of the infantry, was as good as that of the European armies of that period. At least we can assert that had the European cavalry been as well trained for dismounted action as the American it would have rendered much more effective services than it did in the first month of the war.

At the present date the American cavalry is vastly improved in both mounted and dismounted action. The only trouble is that we have so little of it. Cavalry, like for example that in the First Cavalry Division, cannot be improvised. It takes time to make such cavalry. We should have during peacetime at least four full divisions of cavalry as highly trained as that we have, for instant action in time of need.

Since the World War our cavalry has improved its marching methods so that now it can march faster, for longer distances and with less fatigue. This method is uniformly understood in all regiments. Because of better riding, improved saddles, and better method, the old curse of sore backs has almost disappeared. Horsemanship has improved until now it is unexcelled anywhere. Bold and fearless riding enables our cavalry to traverse almost any ground at speed. It knows how to make mounted attacks with successive waves of deployed horsemen supported by machine gun and artillery fire. It knows how to make combined dismounted and mounted attack which under certain conditions is probably its most effective means of offensive action.

Our regiments are equipped plentifully with the best machine guns, and our machine gunners are as well trained as any. The regiments have antitank guns. They know how to take quickly the necessary formations for defense against hostile aircraft. They are trained to hide themselves in bivouac by taking advantage of the ground and such camouflage as the country affords and by dispersion in small units without showing any regular lines or groups. Officers and noncommissioned officers are well trained in platoon and squad leadership. Patrols are better instructed by simple and uniform methods. Rifle, pistol

and machine gun marksmanship has been maintained in a high degree of excellence.

For dismounted action, the troops are trained to leave their led horses in small groups under proper supervision and hidden where possible. The troopers are trained to advance on foot to the attack by skillful individual use of cover and by infiltration when the nature of the ground indicates such measures. They are instructed in the rapid construction of hasty entrenchments and in the proper posting of machine guns and riflemen for defense. Security measures on the march and in camp are well understood by commanders of small units, and the use of advance guards and covering detachments is becoming better understood by all commanders. Troops are being instructed in reorganization and bring order out of confusion in difficult and dangerous situations.

A few scout cars, armed with machine guns, have been supplied to each regiment to assist in scouting and security measures, thus relieving in some degree the fatigue of horses that would be used in such duties. Supply trains have been motorized, thus insuring quicker and better supply to cavalry troops. The best pack saddles in the world have been supplied to pack the machine guns, ammunition and other loads. Through the efforts of the signal corps, radio communications have been assured to the larger units.

There is great enthusiasm and a high spirit of adventure and enterprise in the United States Cavalry. Realizing that the infantry is the great mobile fighting force in the army, the cavalry, confident in its training and its ability to coöperate, is a smaller but not less important member of the army team and seeks only the opportunity to render those indispensable services to which the army is entitled. It is necessary only that the principles which now control the training of the Cavalry be continued faithfully and that its numbers be made adequate to its tasks. Its great rôle should be understood thoroughly by the army so that these things shall come to pass. However, it should be understood clearly that Cavalry cannot be used according to a formula. The great captains used it to do this or to do that as circumstances and conditions seemed to suggest to their imaginations, and their knowledge of its characteristics dictated its employment in any particular situation. Its rôle might be understood by the study of particular and isolated historical examples. There is no order or sequence that can be determined beforehand for its employment. It lies in the hands of the commander-in-chief or the commander of the force to which it may be assigned or attached and his use of it will determine his success.

One brigade of our cavalry has been mechanized. Its future is problematical. But we may be sure that it will do all that may be done with the equipment that the Government chooses to give it. One thing is certain. It can never replace the cavalry which we now call horse cavalry in order to distinguish it from the newly mechanized form of the same arm. Its best hope is that, in combination, it may reinforce and strengthen the cavalry arm. Accordingly, the old principle of American cavalry, fitness to fight equally well mounted or dismounted, is being carried on, utilizing all modern inventions and appliances, but never losing to the Cavalry its fundamental characteristics or its indispensable rôle.

Our Cavalry of today is fashioned by other hands than those of the commander who will use it. We can fashion it only to meet those various situations wherein history and our own experience and reflection have taught us it may be used. Surmounting all the sudden and drastic changes in armament throughout the centuries of history, the cavalry has always been able to accommodate itself sooner or later to new conditions. Our cavalry of today is up to that mark. Let those who follow us keep it so.

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All-Wheel-Drive Commercial Vehicles

The Marmon-Herrington Company, Indianapolis, manufacturers of All-Wheel-Drive vehicles report many unusual and surprising applications of their units to accomplish particularly difficult jobs in hauling and in the transportation of men and equipment. Especially is this true with respect to the company's conversions of standard Ford Trucks, commercial and passenger cars to all-wheel-drive.

The amazing tractive power of these all-wheel-drive vehicles, and their almost unbelievable ability to forge through deep sand, snow and mud, takes them into places where no other wheeled vehicles would dare to tread.

A recent purchaser of a Marmon-Herrington All-Wheel-Drive Ford coupe was the owner of a South American plantation, who plans to use the car to get about over thousands of acres of land, where no roads exist, to supervise the planting, cultivation and harvesting of his crops.

Hundreds of Marmon-Herrington All-Wheel-Drive Ford trucks and passenger cars are in constant use all over the world by explorers, desert and mountain travelers, oil scouts and other adventurous men whose work or recreation takes them off beaten paths and through the wilderness.

NOTES from the CAVALRY BOARD

"The Cavalry Board invites any individual, whether or not a cavalryman, to submit for consideration constructive suggestions or ideas relating to new equipment, improvement of standard equipment, or to any problem or project under study by the Board. The Board will also welcome suggestions as to new problems that may properly be considered. Communications should be addressed to the Director, Cavalry Board, Fort Riley, Kansas."

Armament for motor vehicles: The Cavalry Board has under consideration the advisability of replacing the caliber .30 machine gun, air-cooled, with the caliber .30 machine gun, water cooled, on all vehicles of horse cavalry. Whether or not the heavy machine gun can be operated on vehicles as efficiently as the light machine gun will be investigated, as will the comparative facility of removing the guns from the car mounts and placing them in action on the ground.

Machine Gun, Caliber .30, M1919 A4, modified: Six light machine guns have been modified to provide for quick replacement of the barrel from the front and to provide positive single shot action. A barrel jacket and muzzle cap are provided and so designed that when the latter is removed exposes several inches of the forward end of the barrel and permits of rapid replacement. The muzzle cap is held in place by a spring pin and can be instantly removed. A hinged trigger which operates in conjunction with an attachment to the back plate provides positive single shot fire or automatic fire as desired. Tests are being made to determine the advisability of incorporating these modifications in all light machine guns.

Individual anti-mechanization weapon: The Cavalry Board is engaged in testing an individual anti-mechanization weapon for cavalry. A Caliber .50 machine gun with bipod and butt rest has been received and tests begun to compare it with the caliber .50 machine gun with mount, tripod, M-3. In the near future it is expected to compare these weapons with one or more similar weapons of foreign manufacture.

Blank firing device for Caliber .50 machine gun (HB): Test of blank firing device for Caliber .50 machine gun (HB) will soon be completed. Development of an attachment for firing blank ammunition with this weapon has been carried on by the Ordnance Department for several years.

Pistol grips: Three sets of grips for the Caliber .45 automatic pistol, which were designed by Lieutenant Colonel James C. Long, 329th Engineers, O.R., have been received by the Cavalry Board for test. These grips are of wood with deeply corrugated surfaces in place of the conventional checked design. The inventor's theory is that the ribs of the corrugations will reduce movement of the pistol in the hand due to recoil. The object of the test is to determine whether or not they offer sufficient advantages over the issue items to warrant further action by the War Department.

Mines and obstacles for use against mechanized or motorized units: Troop A, 9th Engineer Squadron and the Cavalry Board are conducting experiments to collect data for the determination of doctrine, the development of Engineer technique, and the preparation of instructional matter. The experiments are divided as follows:

Antitank mines.
Antitank obstacles.
Road blocks.
Removal of antitank obstacles and road blocks (except mines).

Communications: The Cavalry Board is studying the subject of cavalry communications. This includes modification or replacement of pack radio set SCR-203, the adoption of a light radio set similar to the SCR-194 which transmits voice up to 7 miles, the redesign of panels for airplane liaison, and the preparation of codes which will speed transmission while maintaining temporary secrecy.

Reconnaissance vehicles: A number of new reconnaissance vehicles will be procured for issue to the horse regiments in the fiscal year 1940 and subsequent years. The Cavalry Board is now working on recommendations as to military characteristics of the proposed new cars.

One school of thought in the Cavalry believes that the ideal reconnaissance vehicle for horse units is a light, unarmored car which would be fast, very flexible, and possessing a high degree of cross-country mobility. This car would be inexpensive and easy to produce. It would depend for its protection upon its speed, mobility, and fire power. If destroyed it could be easily replaced. A type vehicle of this class is the Marmon-Herrington (Ford) 4x4 chassis which the Board has under study at the present time.

Others believe that we should continue development along the lines already established in the present M-3 scout car and that the ideal car will be armored at least to protect against small arms fire and will, in general, possess the characteristics of the M-3, except that it should have

a better horsepower ratio, shorter turning radius, and lower silhouette. It is believed also that the hull of this car can be redesigned to improve seating arrangement.

Very few Cavalry officers, however, believe that we should attempt to provide armor protection in reconnaissance vehicles beyond that which would effectively protect against small arms fire as to go beyond this would so increase size and weight and decrease flexibility and mobility as to make it unsuitable for reconnaissance.

Track and half-track vehicles have also been considered but, in their present state of development, apparently do not possess as many of the characteristics desired as do the wheeled vehicles with all wheels power driven.

A number of valuable suggestions as to improvement of reconnaissance vehicles have been submitted by cavalry officers who are operating these cars under field conditions. The Board is always glad to receive and consider these suggestions and it is hoped that others will be received.

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Letters to the Editor

(Continued from page 74)

tion has been published in book form with the title, ***Diogenes of Sinope, A Study of Greek Cynicism***. It makes an octavo volume of 140 pages.

Can one imagine a man's having a more tedious and uninteresting subject assigned him to study and write about? But General Sayre did the job with his characteristic patience and thoroughness. It is probable that no such complete research and study of the dull topic was ever made before by one person. The "Bibliography" names thirty-eight authors, mostly German and French untranslated, studied by him, and "Sources of Information in Chronological Order from Zenophon, 445-355 B.C. to Suidas, 10th Century A.D."

I make no doubt the professors at Johns Hopkins who selected and assigned the topic were disappointed at General Sayre's treatment and conclusions. They expected him to present Cynicism and Diogenes in a favorable light, after the manner of other modern writers. These have "idealized Cynicism and treated it as a modification of the teachings of Socrates"; it is so considered in the *Encyclopedia Britannica*. But I rather think General Sayre dug deeper in the subject than any other modern writer. He finds, by weighing and balancing all the information he has dug up, that "the teachings of the Cynics and those of Socrates differed throughout and were for the most part opposed to each other."

Old Diogenes the Cynic he strips of all virtues. He was banished from his native Sinope for debasing the coin—the author calls him a counterfeiter; he was a hypocrite, a beggar and a glutton—he died of indigestion brought on by gorging. "The stories about him are of dubious authority and frequently conflict with one another, but the outlines of his character seem visible through them. . . . He had lost his citizenship and could not, or at any rate did not, gain citizenship in Corinth or Athens; and so was a man without a country. He was of ill-repute because of his early crime and his indecent conduct; he had no human ties, no friends, no home, no property, no occupation, no ambition, no object in life." In other words, the author thinks the name "The Dog," given Diogenes by his contemporaries was quite fit. He doesn't believe that old Diogenes ever went about with a lantern looking for an honest man, or that he lived in a tub. In fact he thinks many of the stories that make up the "Diogenes Legend" are spurious.

The Army has reason to be proud of the unique accomplishment of General Sayre, and I am sure his old friends of the Cavalry join me in felicitation and in the hope that he may live many years longer and gain other scholastic honors.

M. F. Steele. Lieut. Colonel, Retired.

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November 10, 1938.

In battle, the lives and successes of our superb American fighting men should not be entrusted to improvised control and directing units. In fact, the fate of the nation may rest on headquarters units of this type as much as on the actual fighting of the combat troops. The answer is evident. We should have in existence and under training in peace, an adequate nucleus for each of these headquarters. In each army we shoud have an army and two corps headquarters and each division should have its headquarters.

—Major General Hugh A. Drum, U.S.A.
Comments on Second Army CPX.

BOOK REVIEWS

MORE ABOUT RIDING FORWARD. By V. S. Littauer, Captain, First Hussars, Russian Imperial Cavalry. Published privately by the author, Syosset, Long Island, N. Y. 192 pages. 19 illustrations and a chart in detail of a normal schooling program. $3.00. Reviewed by Captain Earl F. Thomson, 9th Cavalry, Chief Department of Horsemanship, The Cavalry School.

This volume is an excellent manual for any one wishing to train a young horse along the proper lines. It is easily read and can be understood by the inexprienced rider.

The author, Captain Littauer, has had over eleven years of experience in teaching the forward seat, and has been very successful in applying the methods he describes in his book.

The main theme of the book is that schooling, or proper training, is the foundation of good performance. It is written for the American amateur rider and does not attempt to present the art of horsemanship in its entirety.

After describing the development of the forward method of riding, the author gives the reader an idea of what to aim at in his training, and along what lines to work. He utilizes the Three Day Event in the Olympic Games for this purpose and gives an accurate description of what is required of horse and rider in this event. Personal observations on the last Olympic Games are given and several interesting pictures are included.

The author then, in an excellent manner, tells how to school a horse so as to make him "pleasant to ride." There is a very good chapter on "Longeing" and on "Placing the young horse on the bit." He emphasizes the very important fact that it is necessary to make the horse take the bit from the effect of the legs, and not from a pulling back of the hands. Another chapter describes all the different school movements used in the Three Day Event and how to obtain them from the horse.

The book contains a table showing the normal sequence of training movements. It was compiled by the author and Captain Eduardo Yanez, of the Chilean Army Horse Show Team. It is one of the very best features of this volume, and makes readily accessible a compact schedule of training movements arranged in the order in which they should be presented to the horse.

The chapter on jumping stresses the necessity for maximum freedom of the horse while jumping, and has some excellent sketches of the proper and improper method of jumping an obstacle.

The last chapter describes how to make a well planned training field for jumpers. The equipment includes everything necessary to give the jumper the exercises and experience to enable him to show in any field or ring.

This book will be found very useful to any one wishing to improve their riding or their horses.

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THE COMING STRUGGLE FOR LATIN AMERICA. By Carleton Beals. J. B. Lippincott Company. 401 pages, $3.00.

To those who realize that warfare for the past five centuries has had an economic background, the work of Carleton Beals will hold particular significance. The struggle now going on in Latin America and the struggles ahead all tend toward the final objective of natural resources. It must be realized that probably the greatest treasure house of raw materials essential for the current industrial era of the world lie within the confines of the republics that make up Latin America. Capital already thrown into this area, having produced communications and sufficiently stable governments to protect and permit commercial undertakings, makes this field of outstanding importance in the economic struggle for national existence. This is true particularly of those nations who are classified as the "have nots" and who now display the greatest aggressiveness in the Latin American field.

This book deals in great detail on the activities of Germany, Italy, and Japan in South and Central America. The author covers the manner in which German penetration is taking place. He states that the main tools employed by Germany are subsidized trade, the barter system, and close attention to cultural ties and understandings. He intimates that Italian influence is based more largely on banking influences in selected areas, close political ties and alliances; that Japanese trade has increased immensely but more through the principle of volume and low price merchandise; that the sale of munitions, including airplanes, is a matter which is given great attention by both Germany and Italy. Just why Latin American countries are trading resources for manufactured munitions in their desire to improve their armaments is not explained. Perhaps after all, warfare is a disease if Latin American republics feel impelled to sacrifice so much for armament when not one of them is faced with a potential enemy and all are protected from over seas movements by the Monroe Doctrine.

British interests, trade, and influence is on the decline, according to Mr. Beals. Great Britain, soon after inde-

pendence was won by Latin American republics, promptly solidified her position in that area through capital investments. From this source she was able until 1914 to dominate commercial activities in several parts of South America, particularly in the Argentine. Much of her trade was taken by the United States during the World War, and the remainder is now threatened by the barter system of the totalitarian powers and their subsidized foreign trade.

The author finds much to blame in American practices in Latin America. Although he is an admirer and disciple of the good neighbor policy, he seems to feel that outside evidences of good will as demonstrated by the North Americans are in the nature of a racket. He infers that our commercial buildup since the war has resulted largely from a form of disguised subsidy in our volume of loans to Latin America; that not only will these loans never be liquified but will now serve as a boomerang to new trade expansion in this area. Defaulted payments on bonds and American investments will serve to discourage any great volume of trade which might result in later admonitions on the settlement of these accounts.

One encounters several general contradictions throughout this volume. The reader is told that the existing positions of Great Britain and the United States are in great jeopardy; thereafter, he is told that the positions of these powers are predominant and will remain so for sometime to come.

The final portion of the volume is devoted to the future of Latin America. The author indicates that the countries involved are actually emerging from an historical era comparable to the United States during the early part of the 19th Century. A national consciousness is arising which is demanding national self-sufficiency; that before long trade barriers will arise in order to permit native industry to become firmly established. The real Latin American struggle is pictured in the following concluding paragraph of the book:

> The struggle of the people of the southern countries against militarism, against feudal enslavement, against mass serfdom, against foreign domination, against ecclesiastical exploitation—that is the only real struggle that exists in Latin America, that is the only struggle of importance.

For the informed on world politics and economics, this book is mandatory reading.

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TACTICAL AND ADMINISTRATIVE GRAPHICAL PLATES—DIVISION COMMAND AND GENERAL STAFF. By Francis G. Brink, Captain, Infantry, U.S.A. 77 sketches. 24 pages. Indexed. Published by the author. Price $3.00. Reviewed by Lieutenant Colonel John J. Bohn, 9th Cavalry, Chief, Department of General Instruction and Publications, The Cavalry School.

This note book deserves a better and more descriptive title. If and when republished plates and print should be enlarged for easier reading and scales should be added to the sketches to give an idea of time and space factors.

Captain Brink has prepared an ingenious, interesting, instructive and valuable work for the military student and also for the military instructor. His sketches graphically present the various types of maneuver by a force of all arms, and in each case the basic principles involved are shown with each plate.

Captain Brink shows the relation between tactics, terrain and principles in a brief, clear and understandable manner. The task of our Army educational system, especially in Regimental Schools, R.O.T.C. and Organized Reserve units and the Special Service Schools, would be greatly amplified if each instructor were furnished with a copy of this book.

The twenty-four pages making up this volume contain more military information of a practical nature than is contained in the same number of pages in any text known to this reviewer. As one looks at the sketches the logical action in the majority of cases is clearly and unmistakably indicated.

The reaction of those who have seen this book is the same in all cases and may be summed up by the question "Where can I get a copy?"

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LORD ROBERTS. By Lt. Colonel H. de Watteville, C.B.E., M.A. (OXON.), p.s.c. Blackie and Son, Limited, London and Glasgow, 1938. 168 pages. 8 illustrations. Indexed. Two maps. Price 5 shillings net. Reviewed by Lieutenant Colonel John J. Bohn, 9th Cavalry, Chief, Department of General Instruction and Publications, The Cavalry School.

This book contains a brief biography of Frederick Sleigh Roberts, Earl of Kandahar, and includes short descriptions of the stirring historical events in which the famous Field Marshal played a leading part.

From material which includes the Indian mutiny, the great vice regal durbars, campaigns in Afghanistan, the Boer War, and the first hundred thousand, through all of which runs the thread of life of a colorful character, one may expect a great story. However, this biography of one of the world's leading soldiers is written in the tone of a war diary or an official report. The book does not paint a living picture of "Bobs bahadur," idol of the British soldier, who added vast territory to the Empire, reorganized the British Army, and who, although small in stature, handicapped by ill health and the loss of one eye, still engaged in hand-to-hand fighting in the field and lived through to win a Victoria Cross and a field marshal's baton. For those with sufficient imagination to see behind the cold facts, this biography will furnish an interestig reference work and will provide a source of material for study of one of the most interesting and successful soldiers of modern history.

Of particular interest to the cavalryman are the fre-

quently repeated lessons throughout this story of many campaigns. One is that success in the field depends more upon leadership than upon any other factor. The other is that for decisive results in open warfare one must have mobile troops. If they are not in being at the beginning of a war, they must be created and trained to insure ultimate victory.

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RIDING. By Benjamin Lewis. Garden City Publishing Co., New York, 1938. 141 pages. Illustrated. Price $1.95.

Reviewed by Major Kent C. Lambert.

Riding, by Benjamin Lewis, is a beautifully illustrated book. It will, without doubt, help the intelligent beginner, who has a suitable horse. It will enable him to approach some degree of proficiency in riding without the aid of an instructor. Naturally, greater proficiency would be attained with the aid of a competent instructor.

The author's explanation of the balanced seat is basically in agreement with the teachings of the Cavalry School, especially with regard to the position of the upper body at various gaits and in the application of leg and rein aids. Minor differences, such as allowing the lower leg to move forward beyond the vertical position of the stirrup straps, to move the forehand over, to turn the hands inward when applying the direct rein, and position of the hands with the back of the hand down and nails up, while turning the horse to the right or left, are noted.

The author gives repeated advice to the rider about keeping the buttocks out of the saddle, but this will result in straightening the knee and standing in the stirrups. This position may get the rider comfortably over low jumps. However, when obstacles are high, weight on the stirrups and a straight knee will upset balance on landing. The rider will go forward and require the aid of his hands on the horse's neck to maintain position.

The author employs the term "forward seat" but interprets its difficulty from the Cavalry School. Actually the correct "jumping seat" is a lowering of the center of gravity. To accomplish this, the upper body is lowered toward the base of support, furnished by the lower legs, knees, inner thigh and crotch. The rider crouches in the saddle with the spine straight. To furnish a firm support, the legs should be fixed in the same position at the take-off, over the jump, and during departure from the jump. When this position is taken, the buttocks are out of the saddle. The knees, the inner thighs, and the crotch maintain position. The angles at ankles, knees, hips, and elbows should be closed. As Colonel Chamberlin says in his book, *Riding and Schooling Horses*, "The rider sits down." This statement, incidentally, was criticized by readers who did not understand what was meant.

Jump riders and instructors would profit by looking at the pictures of Colonel Chamberlin, Major Bradford, and Captain Thomson over the tops of big jumps. The ease and relaxation of both horse and rider in this position should be noted. Angles at ankles, knees, and hips are closed and upon landing, the riders are in complete balance and accord with their horses. These riders do not receive the whip of the upper body upon their horses' necks, which always results from opening the above mentioned angles and allowing the upper body to be driven outward and upward.

To sum up, as in most books on riding, there is much to criticize. There is too, a wealth of excellent advice and the green rider who masters all that is taught in this book will profit by it. With its help he may become a fair rider with a good position. If, however, he succeeded in achieving the position shown by each "correct" picture in the book, he would still have many faults to overcome before he could be classed as an excellent rider.

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ELEMENTS OF ORDNANCE. By Lieutenant Colonel Thomas J. Hayes, U.S.A. John Wiley and Sons, New York. $6.50.

Reviewed by Major Grayson C. Woodbury, Ordnance Department.

This book is a technical text designed for use by students at the Military Academy. It is an up-to-date revision of the 1929 text on the same subject by Brigadier General Earl McFarland, who in turn based his work on an earlier book by Major General Tschappat, former Chief of Ordnance.

The progress and development in arms and ammunition have made a new text on ordnance necessary, and the author in addition to providing up-to-date instruction for the Military Academy has made available to all components of the army a valuable source of information on our new weapons.

The field of design and production and functioning of our weapons to include those employed for antimechanization and antiaircraft purposes are well covered by this book. Theory, fabrication and operations of the new semi-automatic rifle are also described. The mechanized combat vehicles in use in our army today have received concise yet detailed consideration.

In the preparation of this text the author has taken advantage of opportunity to consult many of the officers of the Ordnance Department. Technical staffs of the producing establishments have also contributed. It is apparent that the latest and best professional information on the subject of this book has been secured.

The Weapons Departments of our special service schools, regimental commanders and instructors of our civilian components now have an up-to-date source of authentic information available covering the technical capabilities and limitations of our weapons and ammunition.

1st Cavalry—Fort Knox, Ky.

COLONEL HENRY W. BAIRD, *Commanding*

Since the return of the regiment from the Fort Riley Maneuvers great stress has been placed upon maintenance and combat firing. Most of the combat firing was at airplane and moving ground targets.

Colonel Henry W. Baird arrived November 12, 1938 and took over command of the regiment from Lieutenant Colonel Jack W. Heard who had temporarily been in command since the appointment of Colonel Chaffee to Brigadier General. Colonel Baird, who previously served with the First Cavalry at Fort Knox, Kentucky as executive officer under Colonel Bruce Palmer is now carrying on the splendid work of this distinguished officer.

The following is a list of officers of the First Cavalry and duties of each:

Colonel Henry W. Baird, Commanding Officer.
Lieutenant Colonel Jack H. Heard. President 7th Cavalry Brig. Mecz. Board.
Lieutenant Colonel K. G. Eastham, Plans and Training Officer.
Lieutenant Colonel J. F. Davis, Brig. Plans and Training Officer.
Major N. M. Imboden, Asst. Plans and Training Officer.
Major L. F. Lawrence, Brig. Communications Officer.
Major S. Boon, Commanding Second Squadron.
Major B. C. Andrus, Commanding First Squadron.
Major C. Unger, Brigade Motors Officer.
Major S. Higgins, Post Exchange Officer.
Major M. E. Jones, Regimental Adjutant.
Captain F. P. Tompkins, Member of 7th Cav. Brig. Mecz. Board.
Captain W. L. Barriger, Commanding Officer Machine Gun Troop.
Captain H. Engerud, Regimental Supply Officer.
Captain C. H. Bryan, Student Motor Transport Sch. Holabird, Maryland.
Captain D. P. Buckland, Assistant Post Adjutant.
Captain J. K. Sells, Commanding Officer Troop A
Captain D. Cameron, Commanding Officer Troop B.
Captain J. L. Ballantyne, Commanding Officer Troop C.
Captain R. B. Evans, Regimental Motors Officer.
Captain R. T. Willson, Post Special Duty with Brig. Motors School.
Captain W. Blanchard, Post Special Duty with W.P.A.
Captain C. Massey, Commanding Officer Service Troop.
Captain G. A. Williams, Commanding Officer Headquarters Troop.
Captain C. J. Mansfield, Commanding Officer Troop E.
Captain T. J. Brenan, Commanding Officer Troop F.
Lieutenant D. M. Schorr, Assigned to Troop F.
Lieutenant W. J. Dunn, Assigned to Troop B.
Lieutenant C. G. Dodge, Assigned to Machine Gun Troop.
Lieutenant P. H. Bethune, Assigned to Headquarters Troop.
Lieutenant E. M. Cahill, Assigned to Troop C.
Lieutenant C. E. Leydecker, Assigned to Troop A.

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1st Squadron, 3d Cavalry—Fort Ethan Allen, Vermont

LIEUTENANT COLONEL THOMAS H. REES, JR., *Commanding*

The 1st Squadron opened the winter season with a march to the Cavalry Camp on the Artillery Range at Underhill, Vermont. The temperature was just below freezing and a light snow fall about six inches deep made good footing for the horses. A hot lunch was sent out on trucks for the men as well as forage for the horses. The total distance marched was twenty-eight miles, and all men and animals made the hike in excellent condition.

A remount competition was held for the first twenty remounts on November twenty-first. Each rider was required to execute a memorized sequence of movements and then conduct his horse over a series of low obstacles. Prizes were given as follows:

1st Place, Pvt. Pffefferkuch, on *Amigo*.
2nd Place, Corp. Mercier, on *Jock*.
3rd Place, Pfc. DeMello, on *San Blas*.
4th Place, Pfc. Pouliot, on *Chopper*.

The first Winter Gymkhana was held in the Riding Hall on December 28th. With the usual packed house of close to a thousand spectators the Squadron presented an unusually good show.

A list of events and winners is given below:

Event No. 1. Musical Chairs:
1st—Cpl. Kuchko, Tr. B.
2nd—Pvt. Smith, Tr. A.
3rd—Pvt. LaBombard, Tr. A.
4th—Pvt. Savage, Tr. A.

Event No. 2. NCO Jumping:
1st—Cpl. Hazel, Tr. A, on *Lady*.
2nd—Cpl. Curran, Hq. Det., on *Socks*.

3rd—Cpl. Regnier, Tr. A, on *Banjo*.
4th—Sgt. Fardy, Tr. A, on *Mary Mary*.

Event No. 3. Equipment Race:
1st—Pfiefferkuch and Yursza, Tr. A.
2nd—Ross and Ross, Tr. A.

Event No. 4. Bucking Barrel:
1st—Pvt. Scott, Tr. B.
2nd—Pvt. Duhamel, Tr. A.
3rd—Pvt. Walker, Tr. A.

Event No. 5. Monkey Drill:
Twelve men from Troop B demonstrated bareback riding, including dismounting, mounting, vaulting, etc., one, two, and three horses, and forming pyramids.

Event No. 6. Mounted Wrestling:
1st—Cpl. Winnett, Tr. B.
2nd—Pvt. Short, Tr. B.
3rd—Pvt. Mele, Tr. B.

Event No. 7. Officers' Jumping:
1st—Capt. Wenzlaff, on *Milly Russell*.
2nd—Capt. Jadwin, on *Black Beauty*.
3rd—Lieut. McCabe, on *Elizabeth*.
4th—Capt. Rice, 3d Cav.-Res., on *Bud*.

Event No. 8. Musical Ride:
Troop A demonstrated the combined training of horses and riders in intricate formations.

A novel feature was introduced by the first appearance of the Fort Ethan Allen Hounds. Led by Colonel T. L. Ferenbaugh, M.F.H., and with Victor Constant, Jr., as Acting Whipper In, the hounds circled the hall apparently paying no attention to the audience. The scarlet coats of the riders made a pretty picture and the hunt motif was further carried out by the appearance of a "Tallyho" in which rode several of the young ladies as hunt spectators. The "Tallyho" was presented to the Squadron by Colonel Reginald W. Buzzell of Bennington, who commands the 172d Infantry (Vt. Natl. Guard). The vehicle has been in Colonel Buzzell's family for a long time and has made many a trip over Vermont roads in bygone days.

The New Year started in traditional form with another snow hike to the Artillery Range on January 4th. Starting with nearly a foot of snow and the thermometer at four below zero, the Squadron covered the fourteen miles to the Range in two hours and nineteen minutes. After caring for the horses, lunch was eaten and the Squadron returned to the Post. All personnel and animals were in excellent condition.

Instructions were received from Regimental Headquarters on January 6th with reference to the Cavalry Small Bore Championship Matches, and the troop teams are busy getting ready for the first match which is due to be fired during the week ending January 14th. Lieut. R. E. McCabe has been designated as Assistant Officer in charge of training at Fort Ethan Allen.

With the end of 1938 the 3rd Cavalry lost the services of Master Sergeant Hearld J. Carman, who retired after thirty years' service, all of which was in the 3rd Cavalry. He enlisted in Troop A in 1908, and was 1st Sergeant of that organization on October 31, 1938, when he was transferred to Headquarters Troop as Master Sergeant. Sergeant Carman was in France with Troop A from October 16, 1917, to June 30, 1919. He received a letter of commendation from the Corps Area Commander on his long service with the 3rd Cavalry, and a gold watch from Troop A, both of which were presented to him at a dinner given in his honor. The traditional review was tendered him and the good wishes of all officers and men go with him on his retirement.

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5th Cavalry—Fort Clark, Texas

COLONEL CUTHBERT P. STEARNS, *Commanding*

On December 5th, the regiment reluctantly bade farewell to Colonel George S. Patton who departed for his new station at Fort Myer. The troops were lined along the drive from the commanding officer's quarters to the main gate, the officers of the regiment, Lt. Col. John A. Robenson, commanding, and the Scout Car Platoon formed the escort. The regiment felt a great loss in the departure of Colonel Patton.

Colonel Cuthbert P. Stearns arrived on the Post December 10th, to assume command of the regiment. On the following afternoon a reception and tea dance was held at the Officers' Mess to welcome Colonel and Mrs. Stearns.

For the past two months the regiment has been engaged in an extensive training period. Both the individual and the collective training carried out on the reservation, combined with the eleven weeks of field training since April of last year, have brought the regiment to a high state of efficiency.

The Christmas holiday period was observed by the cessation of all regular drill for ten days. Troops held informal horse shows and hunts which were thoroughly enjoyed by all. Colonel and Mrs. Stearns received the officers and ladies of the Post on New Year's Day at their quarters.

The regiment and Brigade Headquarters Troop turned out January 3rd, in honor of Brigadier General Kenyon A. Joyce, who left Fort Clark on that date for Fort Bliss, where he assumed command of the First Cavalry Division. Colonel Stearns commanding, the General was escorted off the Post by the officers of the regiment and the Scout Car Platoon. The entire command was lined up along the road from the General's quarters to the main gate where the band was posted. The General left the Post, taking with him the regrets of the entire garrison, to the strains of Auld Lang Syne.

On the Saturday after New Year's the Post had an informal show, the classes of which included: I—Remounts (of six weeks' training, shown at walk, trot, and gallop and over 2-foot jumps); II—Officers' Green Jumpers. III—Green Polo Ponies; IV—Open Jumping. The last class was notable for the large number of entries and for the close competition.

There has been no polo activity since the first week in December, with the exception of one period per week of collective training for green ponies and instruction for the inexperienced officers. Weather permitting, Major James C. Short, the team coach, contemplates starting play around the first of February.

The months of December and January up to the time of this writing have seen a great deal of hard, fast playing in the Post Basketball League. All the troops of the regiment, Brigade Headquarters, and special troops have teams which have progressed remarkably since the beginning of the season. A Post Team has just been organized to play a few games during the remainder of the season. It played its first game with the 77th F.A., Ft. D.A. Russell, on January 13th and won 42-19.

With an eye on next season, a Post football team was organized last November, there having been no activity in that sport for over two years. It played two games during December, one with the 15th F.A. team from Fort Sam Houston, Texas, and the other with the Del Rio All-Stars (a team of ex-college players living in and around that town). Both games were played to a tie. 2nd Lieutenants Leonard Shea and John Carusone undertook a great job in training and coaching an entirely new team, and have done splendidly.

On the 14th of January, the Band and the Scout Car Platoon led the parade for the National Commander of the American Legion, Mr. Stephen Chadwick, in Del Rio. After a luncheon there and an excellent address by the Commander, the Scout Car Platoon returned to Fort Clark and escorted Mr. Chadwick onto the Post. At the Officers' Mess, he was received by Colonel Stearns and greeted at an informal reception by the officers of the command.

Brigadier General Jonathan M. Wainwright arrived at Fort Clark in January to command the 1st Cavalry Brigade. He and Mrs. Wainwright were met on the highway about one-half mile from the main gate and escorted on the Post by the officers of the regiment under Colonel Stearns and by the Scout Car Platoon. The regiment was formed on the South Parade, where it was presented to the General. On the following Saturday a reception and dance were held at the Post Officers' Mess in honor of General and Mrs. Wainwright.

Other than those mentioned hereinbefore, the following officers have departed from, or arrived at the Post since December 1, 1938:

Colonel John C. F. Tillson, Jr, to Baltimore, Md.
Captain Harry C. Mewshaw, to Ft. Bliss, Texas.
Captain Clifford I. Hunn, to Governors Island, N. Y.
Captain Eaton W. Bennett (MC), to Schofield Barracks.
Chaplain John F. Chalker, to Schofield Barracks.
Captain Leif Neprud (QM), from San Francisco, California.
Lieut. John R. Pugh, from Ft. Myer, Va.

7th Cavalry—Fort Bliss, Texas

COLONEL WILLIAM W. WEST, *Commanding*

The Troop basketball league came to a close on December 29, 1938, when Machine Gun Troop defeated Troop A in the two game play-off for the championship thereby winning a handsome trophy. A regimental squad of fifteen basketball players had been chosen and practice started. We look forward to the best team in the regimental series starting January 23, 1939.

On December 14, 15, and 16, a Post boxing tournament was held at the Army Y.M.C.A. The 7th Cavalry won three championships out of a total of five weights. Our Post champions with weights: Private Woods, featherweight; Corp. Wooldridge, welterweight, and Private Vinson, light heavyweight.

Troop E was the winner of the first half of the Troop bowling league which ended December 22, 1938. The second half will begin to roll about January 12, 1939. Our officers' bowling team continues to show too much class for the other officers' teams at Fort Bliss. On December 3, 1938, the regimental enlisted squad of two teams made a trip to Marfa and bowled against the 77th Field Artillery team there, winning one meet and losing two. This, however, was more than made up for when the 77th Field Artillery was defeated in straight games by our team on our own alleys.

Lt. and Mrs. A. H. Wilson became the parents of a daughter on November 25, 1938. Lt. and Mrs. A. J. Boyle became the parents of a son on December 17, 1938. Capt. and Mrs. Knudsen became the parents of a son on December 29, 1938.

Colonel West had this to say at the end of our training inspection on November 26, 1938: "Upon the successful completion of the Division Commander's Training Inspection, I desire to express my appreciation to the officers, noncommissioned officers, and men for the splendid showing made. The results indicate that the training has been well planned and well executed by the officers, that the leadership and ability of the noncommissioned officers are superior, and the spirit, willingness and morale of the men are everything they should be. The deficiencies in equipment, care of animals, and training which the inspection brought out, can and will be corrected, I know, before the next inspection. You may all well be proud to belong to the 'Garry Owens,' and I assure you I am."

On December 3, 1938, the 7th Cavalry polo team without the services of its star, Harry Wilson, for the last three periods was defeated by the Stanford University polo team by a score of 8 to 5. The Stanford team was given two goals by handicap. No regular schedule of games has been conducted recently but training and exercise have gone on with a view to future schedules.

On January 7, 1939, an informal regimental tea was held at the old 7th Cavalry Officers' Mess in honor of the Silver Wedding Anniversary of our regimental commander.

Losses since last notes: Major Ray T. Maddocks, de-

tailed on the General Staff and to duty as G-3, 1st Cavalry Division. 2nd Lt. Albert B. Turner and 2nd Lt. Hilbert S. Streeter to Troop A, 1st Armored Car Squadron.

Gains: 1st Lt. Caesar F. Fiore and 1st Lt. B. J. Heckemeyer from Troop A, 1st Armored Car Squadron and assigned to Machine Gun Troop.

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Headquarters, 8th Cavalry—Fort Bliss, Texas

On November 23d the regiment celebrated its organization day. On this birthday the regiment was 72 years of age, having been formed in 1866. In the brief history which was published to all members of the command, two very interesting facts were included:

"In May, 1888, the regiment concentrated at Fort Concho, Texas, preparatory to a march to Montana and South Dakota. Regimental Headquarters, Band, Troops "A," "C." and "D" marched from Fort Davis, Texas, to Fort Meade, South Dakota—1,800 miles. Most of the other troops marched 2,000 miles—Troop "H" from Fort Davis, Texas, to Fort Keogh, Montana—a distance of 2,613 miles. The regimental history states that this stands as the longest march ever taken by a Cavalry Regiment.

"Part of the march was over the Santa Fe Trail. Marks carved on stones and trees near the trail still bear mute testimony of troops who have long since departed on the longest of all trails.

"It took approximately three months to make this march."

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Of especial interest is the fact that the 8th Cavalry, in its history, has been awarded 91 Congressional Medals of Honor, some thirty-seven more than its nearest competitor among regular Army units.

On December 1st Captain H. I. Hodes was placed on special work with the 2d Cavalry Brigade and relinquished command of Troop "E" to Captain Thomas F. Sheehan.

The regiment celebrated Thanksgiving and Christmas in the traditional manner, all organizations having sumptuous banquets and impressive decorations.

On December 30th the regiment participated in a Division Review for visitors and guests of the Sun Carnival. And on January 2d the Scout Car and transportation platoons took part in the annual Sun Carnival Parade in El Paso.

The Machine Gun Troop has been designated as the organization to test the new slate blue uniform and its members were subjects of curiosity for several days following their change into the new clothes.

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9th Cavalry—Fort Riley, Kansas

LIEUTENANT COLONEL TERRY DE LA M. ALLEN, *Commanding*

A playlet, entitled "One Arabian Night," was presented by the Girl Scout Troop No. 5, Thursday evening, December 22nd in the Post gymnasium. The playlet was directed by Miss Eva Parker. A costume ball followed the playlet. Prizes were given for the most original costumes. Mrs. Ernestine Lewis won the first prize appearing as Martha Washington. Second prize was won by Private James D. Kimbrough as a fugitive from a chain gang, and Miss Juanita Wilder won third prize dressed as a Christmas tree.

The Christmas tree exercises for the regiment were held at the Post gymnasium Friday, December 23rd, at 4 PM. Christmas carols were sung by the 9th Cavalry Sunday School and presents were given by Santa Claus to all children of the 9th Cavalry, who were 12 years of age or under.

The Christmas dinner was served in the Mess Hall, Sunday afternoon, for all the members of the regiment, their families, and friends. A souvenir menu in booklet form with photograph of the commanding officer, names of all officers and members of the regiment with two fly sheets for autographs, a cut of the regimental coat of arms, its description and a brief history relative to the organization of the regiment and its present duties was given to everyone attending the dinner.

HORSE SHOW NOTES

The 9th Cavalry Regimental Horse Show under the direction of Captain Morris H. Marcus and 1st Sergeant Charles E. Pearson, Troop A, took place on the evening of December 28th. Under the able judging of First Lieutenants E. H. J. Carns, P. D. Harkins, R. W. Porter, and F. F. Wing, Jr., 9th Cavalry, it surpassed in attendance, color and performance all preceding Regimental shows.

The show included six classes. Events were as follows:

Event No. 1—Shuttle Race: Teams of four men. Each man riding bareback the length of the hall.

1st Place was won by Troop A—(Team) Pvts. Clanton Dawson, P. J. Patterson, Lester J. Smith, and Willis B. Carter. 2nd Place: Hqrs. and Service Troop—(Team) Pvts. K. Frasier, T. Jennings, C. A. Wilkerson, and M. D. Scott. 3rd Place: Troop G—(Team) Pvts. Harry Wilson, Sandy Smith, Pfc. J. Kerr and Leon Porter. 4th Place: Troop C—(Team) Pvts. C. L. Lewis, J. J. Johnston, A. Wiggins, and E. Rann.

Event No. 2—Bareback Jumping: The course consisted of varied jumps not exceeding three feet, six inches.

1st Place was won by Pvt. Dugless Daye, Troop C, on *Til Top*. 2nd Place: Pfc. James Kerr, Troop G, on *Windsor*. 3rd Place: Pvt. Kresson B. Frasier, Hqrs. and Service Troop, on *Portland*. 4th Place: Pvt. Harry J. Wilson. Troop G, on *Shamrock*.

Event No. 3—Privates Jumping: The course consisted of ten jumps not exceeding three feet and nine inches.

1st Place was won by Pvt. Vincent Bell, Hqrs. and Service Troop, on *McBeth*. 2nd Place: Pfc. James Kerr, Troop G, on *Windsor*. 3rd Place: Pvt. Leannert Carter, Troop B, on *Fraternity*. 4th Place: Pvt. Dugless Daye, Troop C. on *Dintate*.

Event No. 4—N.C.O. Jumping (Open): The course consisted of ten jumps not exceeding four feet.

1st Place was won by Corpl. William F. Tilman, Troop E, on *Anita Mentor*. 2nd Place: Corpl. Columbus Rudisill, Troop E, on *Royal*. 3rd Place: Corpl. Charles R. King, Hqrs. and Service Troop, on *Rolling River*. 4th Place: Corpl. Henry McGill, Troop A, on *Fraternity*.

Consisted of twelve jumps not exceeding four feet. Time limit: One minute and ten seconds. F.E.I. rules governing.

Event No. 5—Inter-Unit Team Jumping: The course

1st Place was won by N.C.O's Class—(Team) Corpl. Holmes, on *Gold Seeker;* Corpl. Seney, on *Ethel D.;* Corpl. Gronin, on *Tyrol;* Corpl. Pitts, on *McBeth*. 2nd Place: U. S. Cavalry—(Team) Sgt. Hunter, on *Eagle;* Corpl. Minthorn, on *Tarzan;* Corpl. Hyde, on *Coin Collector;* Corpl. Myers, on *Colonel*. 3rd Place: 9th U. S. Cavalry—(Team) Pfc. A. Johnson, on *Adalid;* Corpl. McGill, on *Don R.;* Corpl. Rudisal, on *Craig;* Corpl. C. R. King, on *Ansonia*. 4th Place: 84th U. S. Field Artillery—(Team) Sgt. Akers, on *Jimmie Too;* Sgt. Byrd, on *Jill;* Sgt. Tubbs, on *Bail;* Corpl. Jones, on *Reno Appet*.

Event No. 6—Musical Chairs:

1st Place was won by Pfc. James Cotton, Troop E, on *Kay Boy;* 2nd Place: Pvt. Jesse Rederick, Troop A, on *Chaffinch;* 3rd Place: Pvt. Leo Leeks, Troop B, on *Lassie;* 4th Place: Pvt. Green Blassingill, Troop C, on *Padre*.

Trophies, ribbons and cash prizes were presented by Mrs. Guy V. Henry, Mrs. Terry Allen, Mrs. H. E. Tuttle, Mrs. A. A. Frierson, Mrs. J. E. Theimer, and Mrs. P. D. Harkins. Music was furnished by the 9th Cavalry Band and refreshments consisting of hot coffee and doughnuts were served.

1st Sergeant Lemual Russell, Troop E, having completed 30 years of honest and faithful service was placed upon the retired list December 31, 1938.

9th Cavalry Officers' Bowling Team composed of Major F. A. Allen, Captain James H. Phillips, Captain C. W. Bennett, 1st Lt. E. H. J. Carns, 1st Lt. Scott M. Sandford, and B. S. Cairns defeated the Advance Equitation Class Team by a score of 2282 to 2255.

* * *

12th Cavalry (Less 2d Squadron)—Fort Brown, Texas

COLONEL DONALD A. ROBINSON, *Commanding*

Since September regimental basic training of individuals and platoons has been stressed to supplement the experience and training obtained during field service on the 1st Cavalry Division Maneuvers and the Third Army Maneuvers.

In November the Platoon Leadership Competition held the interest of the entire garrison. The contest was exceedingly close, and only until the final scores were computed was it possible to definitely select the winning platoon. This honor fell to the Platoon of Troop A led by 2nd Lieutenant McPherson LeMoyne.

A three-day proficiency test of the Machine Gun Troop was held on the Boca Chica Target Range under the supervision of Major Heywood S. Dodd from December 20th to the 22nd. All situations were based on assumed dispositions, but targets actually placed on the ground definitely outlined the opposing forces. Both types of machine guns and the 37-mm. guns were fired. The test proved that the troop training was satisfactory and that it was capable of promptly placing fire on varied targets under field conditions.

Basketball has furnished considerable interest during the past two months. The post league included five teams. Games were played on an outside court under lights at night. Troop A won the team competition and a Post Team is now training for games with teams representing Fort Clark and Fort McIntosh.

Polo has been started under the supervision of Major Harry A. Buckley. Practice games are played twice each week.

Eighty remounts are in training and promise to become better than average mounts.

Post improvements under the State W.P.A. program continues. Projects now under way include landscaping and beautification of the area known as the "island" where a National Cemetery was formerly located, and the erection of garages. Reinforcement of the Rio Grande River levee has been approved as a project and work has started. Completed projects include relaying of railroad trackage, completion of roads and regrading an area east of the Quartermaster Warehouses.

Lieutenant Colonel Harold M. Rayner having been detailed in the War Department General Staff departed on leave early in December.

Major Heywood S. Dodd has received orders for the Philippine Department to sail on the February transport.

* * *

13th Cavalry

COLONEL CHARLES L. SCOTT, *Commanding*

The regiment completed the supplementary target season during the month of December in good time to enjoy the Christmas holidays.

The enlisted men's Motor Mechanics School and Radio School are in full swing. The Officers' Schools, both mechanical and tactical, are well under way.

The 1939 training activities were ushered in on January 3rd and a problem in reconnaissance by the Seventh Cavalry Brigade in which all units participated. This exercise dealt principally with the reconnaissance agencies of the brigade, including the 12th Observation Squadron. The exercise stopped on completion of the reconnaissance phase and will continue subsequent phases of combat at a later date.

The Regiment is now engaged in combat firing with all weapons. This firing includes firing at moving targets from stationary vehicles, at stationary targets from moving vehicles, mortar firing with base plate on the ground and in the vehicle, and antiaircraft firing at tow targets. Much of this firing is of an experimental nature with a view to

testing a standardized combat qualification course for all weapons of a mechanized cavalry regiment.

* * *

26th Cavalry (P.S.)—Fort Stotsenburg, P. I.

COLONEL CLARENCE A. DOUGHERTY, *Commanding*

From October 8-29, 1938, inclusive, the machine gun elements of the regiment fired the yearly target practice at towed targets at Olongapo, Zambales, P. I. The intensive training of the machine gun personnel, prior to their firing, resulted in higher scores from that of previous years.

This year's continuation of field training period consisted of routine field training and numerous alerts. The main purpose of the alerts is to test the minimum time of loading and maximum loading capacities of trucks and trailers in accordance with the Loading Tables of the Regimental Alert Plan. Other purposes of the alerts, according to the regimental commander, are to enable the newly arrived assigned officers of the regiment to alert their units based on current standing orders.

From November 21-26, 1938, inclusive, Lieutenant Colonel Walter E. Buchly, 26th Cavalry (PS), with a small detachment, reconnoitered (on foot) the Zambales trails to San Marcelino via Floridablanca, Dinuluhan and Sinamal.

Lieutenant Colonel E. W. Taulbee and Captain P. A. Ridge, have received their orders for assignment in the States leaving on February boat.

The 26th Cavalry (PS), headed the 24th Field Artillery (PS), two (2) points in the last Post Boxing Tournament. The 57th Infantry (PS), copped most of the events garnering a total of 97 points against a sum of 29 points recorded for the 26th Cavalry during their dual track and field meet in December. Private 1cl. Amado Pascual of the 26th Cavalry was the outstanding contender in the meet.

The informal horse show of the 26th Cavalry was held on November 19, 1938, at which time, the remounts made an excellent showing.

Troop F, under Captain Donald H. Nelson, 26th Cavalry (PS), is preparing a musical drill exhibition for the coming annual exposition to be held at Manila, P. I., sometime in January.

The regiment left for a week in the field in the O'Donnell Area on December 9, 1938. Due to weather conditions and the nature of the terrain the regiment was supplied entirely by pack train.

A series of Sunday morning cross-country rides was initiated by the regiment in October. On October 16, 1938, General and Mrs. Grant entertained the officers and ladies at a delightful "hunt breakfast" after the ride. The officers of the 26th Cavalry were hosts to the officers and ladies of the post at a "hunt breakfast" following the November 6, Sunday morning ride. These rides are a source of much enjoyment for the entire post.

103d Cavalry—Tyrone, Pennsylvania

COLONEL BENJAMIN C. JONES, *Commanding*

The new year has started with good promise. Training inspections conducted in December disclosed a gratifying state of training and condition of equipment. Reports on small arms qualifications for the year 1938 evidenced earnest and effective effort on the part of all units. Remounts coming to the regiment toward the end of the year have brought our horse strength close to allotted strength. Tactical exercises for the 1939 field training period have all been prepared and approved.

It is a pleasure to announce the pomotion of 2nd Lieutenants Edward P. O'Kane of Troop A and Clarence P. Bryan of Troop F to be 1st Lieutenants. It is also a pleasure to announce the appointment of Staff Sergeant Charles B. Reed, Headquarters Troop, to be 2nd Lieutenant assigned to Troop A; of 1st Sergeant Harry C. Symmonds, Machine Gun Troop, to be 2nd Lieutenant assigned to Machine Gun Troop; and of Sergeant Francis Logan. Troop L, to be 2nd Lieutenant assigned to Troop L.

At the opening of this new year it is perhaps appropriate that the current roster of officers of the regiment be published. It is as follows:

Regimental Headquarters, Tyrone, Pa.: Colonel Benjamin C. Jones, commanding; Lieutenant Colonel Samuel B. Wolfe, executive; Major Benjamin T. Bell, surgeon; Captain Paul M. Kienzle, S-1; Captain John H. F. Bittner, S-2-3; Captain Clarence L. Bender, S-4; Captain Harry L. Saul, chaplain; 2nd Lieutenant Roy F. Baver, Jr., assistant S-1, and Warrant Officer Edward S. Calhoun, band leader.

Hq. 1st Squadron, Philadelphia, Pa.: Major Kirk Swing, commanding; 1st Lieut. Wm. J. E. Thompson, S-1.

Troop A, Philadelphia, Pa.: Captain Joseph H. Kifer. 1st Lieut. Edward P. O'Kane, 2nd Lieut. Charles B. Reed.

Troop B, Philadelphia, Pa.: Captain Lynn L. Detweiler, 1st Lieut. Joseph G. Rademan, 2nd Lt. Eugene A. Fischer.

Troop C, Philadelphia, Pa.: Captain George C. Sholl. 1st Lieut. Joseph M. Williams, 2nd Lieut. Robert E. O'Brien.

Hq. 2nd Squadron, Sunbury, Pa.: Major Geo. W. Schubert, commanding; 1st Lieut. Franklin D. Fry, S-1.

Troop E, Sunbury, Pa.: Captain Kenneth J. Hafer, 1st Lieut. Edward C. Fisher.

Troop F, Lock Haven, Pa.: Captain Foster S. McGhee. 1st Lieut. Clarence P. Bryan, 2nd Lieut. Adelbert A. Arter.

Troop G, Lewisburg, Pa.: Captain Daniel G. Snyder. 1st Lieut. Clayton H. Shunk, 2nd Lieut. Thomas G. Lewis.

Hq. 3rd Squadron, Philadelphia, Pa.: Major Edward J. Albert, commanding; 1st Lieut. Charles W. Roberts, S-1.

Troop I, Dubois, Pa.: Captain Walter N. McCreight. 1st Lieut. Robert R. Love, 2nd Lieut. Truman J. Norris.

Troop K, New Castle, Pa.: Captain George F. Seyffert.

1st Lieut. William H. Goehring, 2nd Lieut. Raymond K. Atkinson.

Troop L, Philadelphia, Pa.: Captain Joseph J. Wall, 1st Lieut. John B. McCloskey, 2nd Lieut. Francis Logan.

Headquarters Troop, Philadelphia, Pa.: Captain Charles T. Cabrera, 1st Lieut. John R. Dey, 1st Lieut. Henry L. Davisson, 2nd Lieut. Meredith Cooper.

Machine Gun Troop, Bellefonte, Pa.: Captain Herbert M. Beezer, 1st Lieut. Hall F. Achenbach, 1st Lieut. Frederick L. Shope, 2nd Lieut. Harry C. Symmonds.

Medical Detachment, Philadelphia, Pa.: Captain Cheston M. Hoskins, Captain James R. Skillen, Captain William S. Parker, 1st Lieut. Henry P. Schneider, 1st Lieut. Charles D. Coppes.

Major Maurice Rose, regular army instructor with the regiment, left on January 9th for three weeks duty at Fort Meade as one of the instructors at the III Corps Command and General Staff School. Major Edward J. Albert, commanding 3rd Squadron and Philadelphia Post of the regiment, left on January 16th for two weeks duty as a student at the same school.

The units of the regiment are anticipating visits during the current month from officers of the Brigade Staff. Close liaison is maintained between brigade and regiment at all times and these Brigade Staff visits are periodic and pleasurable affairs.

* * *

106th Cavalry—(Illinois Component)

MAJOR RALPH G. GHER, *Commanding*

Zero weather, together with Christmas holidays, curtailed somewhat the outdoor activities of the troops at the end of 1938. Indoor instruction continued without interruption, all units adhering to the training schedule.

Major E. A. Franklin, stationed at Springfield as Instructor, is conducting lectures on defensive combat for the officers of Troop F, Machine Gun Troop and Staff, stationed in that city. Captain Mark Plaisted was designated as commander of the Blue forces and Lieutenant Charles R. Bean commands the Reds. Other officers act as Chiefs of Staff, etc., and a very interesting map problem is being conducted which promises to continue throughout the school season.

The remounts received recently by Machine Gun Troop and Troop F are progressing rapidly in their training. They are now being ridden and accustomed to the excitement of troop drill. Fortunately, every horse in the consignment was easily trained and no difficulty was encountered in preparing them for service.

The band, located in Chicago and commanded by Lieutenant William F. Hewitt, participated in the horse show presented by the Lancers of the 122nd Field Artillery. In their black and white dress uniforms of Dragoons of the period of 1812, they presented a remarkable picture as they went through the evolutions of an intricate precision drill, playing during the entire drill.

The Springfield units have been fortunate in securing the services of a commissioned officer to take complete charge of stables and animals. Until November 1, 1938, the stables were supervised by the senior officer at the station, who was handicapped by lack of time from his private business. On November 1st, Lieutenant McCarthy of the Machine Gun Troop, accepted the responsibility of Stable Officer with a full time salary paid by the State of Illinois. This arrangement has relieved the troop commanders of a burden which was rapidly becoming too great in view of their civilian interests.

Troop E of Chicago, known as the "Black Horse Troop," participated in the ceremony in connection with the commencement of work on the gigantic Chicago subway system.

Major Gher, commanding the regiment in the absence of Lieut. Colonel Kenneth Buchanan on duty with the General Staff, War Department, made his monthly inspection of the Springfield units on December 20th.

Captain Crookston, Springfield, Regimental Adjutant, made an informal inspection of the Band in Chicago on December 6th.

The personnel of the regiment is greatly interested in newspaper articles to the effect that an Armord Car Squadron of Mechanized Cavalry is proposed for the State of Illinois. Another announcement to the effect that the 22nd and 23rd Cavalry Divisions are to be consolidated is the subject of considerable discussion as to whether or not a cavalry maneuver may be substituted during the coming summer instead of the routine tour of field training with the 33rd Division and attached troops.

With work progressing rapidly on the new Armory of Troop E in Chicago, and the nearing completion of the spacious armory of Headquarters Troop in Urbana, interest is centered on the proposed quarters of the Springfield units, Troop F and Machine Gun Troop. For several years these units have been handicapped by having offices and supply rooms in a civilian club buiding with their horses and equipment at the State Fair Grounds several miles distant. In spite of the tremendous handicap occasioned by lack of suitable quarters, the troops have been able to maintain a degree of efficiency and morale equal to the more fortunate units of the regiment. It is hoped that 1939 will see some provision made for stables and riding hall for these homeless troops.

* * *

112th Cavalry—Dallas, Texas

COLONEL CLARENCE E. PARKER, *Commanding*

On November 11th, the regiment commanded by Captain Campbell W. Newman, participated in the Armistice Day Parade held in Dallas. Captain Newman deserves great credit for the excellent manner in which he handled the regiment both during the parade and the march to initial point. This required a march of twenty miles on the part of some troops and to have all men and horses looking like "new pins," as they did in the parade, required careful inspection and supervision on the part of Captain Newman and his officers.

The horses were equipped with white bandages, saddle cloths, brow bands, and halters, and many complimentary remarks were heard from the spectators, as this fine looking mounted organization passed in review.

Troop E held its annual military circus and gymkhanna on Sunday, November 20, 1938.

Captain John A. Mann, 1st Lieut. Henry L. Phillips, and 2d Lieut. P. L. Hooper, the officers of Troop E are receiving just congratulations for the excellent, smooth, prompt manner in which the different events were run. There was no tiresome delay between events and the interest and enthusiasm of the spectators was maintained from the first to last event.

The program included: Silent Mounted Lance Drill; Jumping Classes for Noncommissioned Officers and Privates; Rescue, Equipment, Potato Races; and Musical Chair competition. The finale was Fire Jumping, in which Lieut. Hooper leading his entire platoon, jumped over and through six burning obstacles without a single refusal.

Captain W. T. Starr, who volunteered as radio announcer to help Captain Mann out with the program, made such a hit with his witty remarks and did such an excellent job in announcing and explaining the different events, that it is reported, large broadcasting companies have been endeavoring to secure the services of Captain Starr.

The Cavalry Leadership Platoon Tests for all troops, and the Squad Tests for the Medical Detachment and Band, being conducted within the regiment, are progressing most satisfactorily. These tests have awakened the keenest interest throughout the regiment and the enthusiasm and spirit being displayed by all units in this friendly regimental competition is most gratifying.

The 1st Quarterly Test for the squads in the Medical Detachment, was conducted on November 29th and 30th.

The marked improvement displayed by all squads prove the value of competitions during the Armory Training Period.

In the final ratings, for this phase of the test, the 1st Squad, led by Sgt. R. J. Halbert, stood first, with the 2d Squad, led by Sgt. J. E. Williams, a close second.

On December 10, Troop B, commanded by Captain William T. Starr, gave a most enjoyable Christmas party and dance at its Armory at Camp Tommy Tompkins. All officers and enlisted men of the troop, their wives and sweethearts were present. A delicious buffet supper was served and dancing continued into the wee small hours.

The annual Christmas Banquet of Troop F, was held on December 17th, in the banquet room of the Blackstone Hotel, Tyler, Texas.

This was the twenty-first consecutive banquet given the enlisted men by the officers of the troop.

During the ceremonies, Santa Claus appeared and presented Captain R. G. Philips, 1st Lieut. M. E. Hood, and 2d Lieut. Q. R. Tipton, the three officers of the troop, with Christmas presents from the enlisted men.

Colonel Clarence E. Parker, principal speaker of the evening, complimented the officers and men of Troop F, for their fine work during the past year and urged them to carry on.

The following listed noncommissioned officers won first places in the troop inspections and demonstrations, conducted by the regimental instructor, for the months of November and December, 1938:

Headquarters Troop

Best turned out mounted sergeant—Sgt. J. D. Sanders. Best turned out dismounted sergeant—Sgts. J. E. Lake and V. L. Walters tied for first place.

Machine Gun Troop

Best turned out mounted corporal—Corpl. F. J. Hays. Best turned out dismounted corporal—Corpl. J. P. Dobbs.

Troop A

Best turned out mounted corporal—Corpl. J. Smith. Best turned out dismounted corporal—Corpl. T. R. Wilkins.

Troop B

Best turned out mounted corporal—Corpl. J. W. McDonald. Best turned out dismounted corporal—Corpl. H. M. Bryant.

Troop E

Best turned out mounted corporal—Corpl. E. P. Blakemore. Best turned out dismounted corporal—Corpl. C. T. McHale.

Troop F

Best turned out mounted corporal—Corpl. B. F. Taylor. Best turned out dismounted corporal—Corpl. W. Willis.

The regiment presented Lieut. Allen B. Wallace, Headquarters and Staff with a beautifully engraved "tin cup" for killing the most tame ducks during the 1938 duck season.

It seems that Major Billy Cameron ordered Lieut. Wallace to kill sufficient wild ducks for a duck dinner in honor of the regimental commander.

After hunting all day without success, Lieut. Wallace spied, on the last pond of the day, 15 fat Mallards, swimming close to shore. He crawled 200 yards on his "tummy" and waited for them "to stop swimming," believing that when you are after meat for the colonel everything is fair. He then proceeded to slaughter the ducks and when his bombardment ceased, 15 Mallards lay dead on the water.

Sad to relate these ducks were tame pet Mallards with clipped wings, belonging to the children of Farmer Broundale who demanded $2.00 per from Lieut. Wallace.

As he reluctently paid the bill Lieut. Wallace remarked "A damn expensive duck-dinner even for the old man."

* * *

62d Cavalry Division
305th Cavalry—Philadelphia, Pa.

COLONEL VINCENT A. CARROLL, *Commanding*

The winter training program of the regiment has progressed very favorably. Luncheon conferences have been held every Wednesday at noon, while the equitation instruction has been carried on every Wednesday evening under Colonel Wilson's supervision. Early in December Captain Nolan, formerly with the British Cavalry during the World War gave an excellent talk on British Cavalry operations during that time. At the noon luncheon on December 21st, Captain Ed. Young regaled the members present with a number of amusing anecdotes concerning his experiences as a Supply Officer with the A.E.F., in France. From his talk, we learned a lot about the practical side of supply, which is not covered in the Training Regulations.

The Annual Regimental Church service was held at the Ithan Chapel on November 13th, Chaplain R. N. Gurley delivered an impressive sermon on the need of national defense in order to maintain PEACE in these troublesome times. After the service, the officers and their ladies repaired to the Merion Cricket Club for a social get-together as the guests of Colonel Vincent A. Carroll.

The Thanksgiving Turkey Shoot was won by Private Anthony J. Guida, one of the regiment's C.M.T.C. proteges.

Due to the heavy snows, which occurred late in November, the Mechanized Night Ride was postponed until March. We hope to report in a later issue, those officers who prove themselves successful in carrying out their mission under the cover of darkness.

A small Horse Show was held at the First City Troop Armory on December 21st. First place was taken by Lieutenant Iredell, with Lieutenant Gerry White coming in a close second. After the Horse Show we had a Christmas Party at the Lido Hotel. A fine time was had by all present, with thanks to Lieut. "Sam" Naftzinger our "generalissimo" of entertainment. Lieut. Naftzinger has promised us a formal dinner in January and a dance in February and judging from his past performances, these should be gala affairs.

Captain Harold G. Lacy, editor of the regimental paper, *The Stallion*, favored us with one of the best issues of that paper that has ever been published.

The following officers have been recently welcomed into the regiment: 2nd Lieutenants Douglas P. Adams, Edwin A. Hartley, George S. Iredell, Boris Y. Kutner, and Paul L. Petty.

Lieut. Adams is instructor of equitation at the Valley Forge Military Academy.

* * *

306th Cavalry—Baltimore, Maryland

COLONEL MATTHEW F. JAMES, *Commanding*

On November 2nd, the officers of the Regiment in Baltimore and vicinity heard Major R. G. Tyndal, Infantry, lecture on the "Rôle of the Infantry." Not only was the organization of the new Infantry Division discussed but slides of the new infantry weapons were also shown. Major Vernon J. Blondell, 306th Cavalry, gave the outline of the problem for the November 16th conference. At this conference Captain Thomas H. Mundy and Lt. Graham Dukehart were the instructors and the subject was "March and Advance Guard."

On November 15th a farewell dinner was given at the Longfellow Hotel for Colonel Henry W. Baird, who left us to take command of the First Cavalry, Mechanized, at Fort Knox, Kentucky. The honor and distinction of this assignment compensated to a great extent for our loss.

On December 7th, Major Wm. S. Roumbough, Signal Corps, gave an illustrated lecture on the "Rôle of the Signal Corps." This lecture gave all who heard it an interesting insight into the progress made in communications. The outline of the problem for the following conference was given by Major W. C. Warner, 306th Cavalry. On December 21st the conference was given by Captain Henry G. Sheen and Lt. Thomas E. Jarman, Jr., and the problem was "Mounted Attack." At this conference the new Senior Unit Instructor of the Regiment, Colonel John C. F. Tillson, Jr., met the Baltimore officers. We take this opportunity to welcome Colonel Tillson to the Regiment and we hope that his stay with us will be a long and a pleasant one.

The officers of Washington and vicinity were most fortunate during November and December in having an unusually interesting and instructive program, the outstanding features of which were lectures by Major General John K. Herr, Chief of Cavalry, on the "Rôle of Cavalry," and Colonel Bruce Palmer, Chief of Staff of the 62nd Cavalry Division, on "Horse and Mechanized Cavalry." Lectures were also given by the following officers: Captain Walter Gleason spoke on "Mechanized Vehicles and Weapons," Captain Guerra Everett lectured on "Mechanized Units," Captain L. E. Smith's conference was "Advance Guard Actions," while the subject given by Captain John Goodell was "Rear Guard Actions," and Captain Paul E. Hadlick's topic was "Squadron in Defense." Captain E. H. Daniel and Captain Wm. I. Irby gave instruction to the officers of the Machine Gun Troops.

Rides at Fort Myer have been held on every other Sunday morning under the direction of Lt. Col. Edward B. Harry and Major Edward A. Kane. Mounted drill with rotation in command, and cross-country rides have been provided on each occasion. The instrucion and practice secured at these rides should prove valuable in our training of the C.M.T.C. next summer.

The Regimental Pistol Team has been showing marked improvement, and new members have replaced some of those who were on last year's team. Challenges have been received for matches which have been accepted and these matches will be fired later on during the winter.

1st Lt. Theodore A. Baldwin, III, and 2nd Lt. Everett A. Luckenbach have been assigned to the Regiment. The War Department has accepted the resignation of 1st Lt. Isadore A. Handler. Recent promotions in the Regiment were: 2nd Lieutenants Josef E. Gellerman and Rowland F. Kirks to First Lieutenants.

Polo Squad, Norwich University.

retired, former commanding general, Missouri N.G.

Reserves included: Major Edward Brown, Minneapolis; Lieutenant Gail Fitch and Lieutenant Lew Fitch, Des Moines, Iowa.

Thirty-six Reserve officers in our vicinity are assigned the 15th Cavalry.

* * *

Norwich University

Following graduation June 6, 1938, the Junior Class started on its annual six weeks' R.O.T.C. march and camp. This detachment numbered 48 cadets, 2 regular army officers on duty here, 2 Reserve officers (a veterinarian and a doctor) and 15 enlisted men (truck drivers, cooks, etc.). The six weeks' duty was divided into phases as follows:

1st Phase. A cavalry march of 250 miles through the Green Mountains of Vermont on a big loop which started south, then west and north, ending at Fort Ethan Allen, Vt. During this march various tactical situations and war conditions were assumed and two night marches were made.

2nd Phase. Three weeks at Fort Ethan Allen where the cadets complete their known distance firing, qualifying 90%, and machine gun and combat firing. Also participation in the Fort Ethan Allen Horse Show where, in the R.O.T.C. Class, they captured first, third, and fourth place.

3rd Phase. The return march to Norwich University. This was made as a forced march, part of the distance being covered by daylight and part at night.

The University opened September 16, 1938, and found the new barracks, Cabot Hall, ready for occupancy. The Corps was 357 strong with 120 cadets in the first and second year Advanced R.O.T.C. and 230 in the Basic courses.

A vigorous fall drill schedule, including mounted and dismounted, close and extended order drill, pistol, Cal. .45 record firing, preliminary rifle instruction and equitation was successfully completed by November 26, 1938. During this practical period, extended order drill and combat exercises for small units was stressed.

The theoretical instruction period started November 28, 1938, and extends to March 25, 1939. Norwich, being a Class M.C. College, has 101 extra hours for Advanced Students and 165 extra hours for Basic Students above the War Department requirements. This enables the instruction to not only thoroughly cover the subjects prescribed by the War Department but to cover important additional theoretical subjects during the winter and additional practical instruction in the fall and spring.

Following the spring recess the units will again move outdoors on April 4, 1939, to put into practice the newly-acquired theoretical knowledge in preparation for the Annual Federal Inspection. This inspection will be conducted by the 1st Corps Area about the middle of May. All phases of the R.O.T.C. activities will be tested. It is felt that a high standard of training will again be demonstrated.

Lieutenant Colonel George S. Andrew, P.M.S.&T., has been responsible for a thorough and comprehensive design for training throughout the year. His close supervision and constructive corrections have been the springboard for high standards in the Norwich R.O.T.C. unit.

Horse shows, conducted as extra activities under Major Reinburg, are staged Carnival Week (indoors), Junior Week and Graduation (outdoors). These shows, well attended and smoothly run, are one of the highlights of cadet activities. Major Reinburg's loss next year will be keenly felt by Norwich University.

Polo, coached by Captain Ruffner, is enjoying its second year of expansion. There are now 15 complete teams participating in intra-mural polo. The varsity team has extended its schedule this year to 12 games, indoors and outdoors. To date they have won five out of the seven games played, losing to Cornell University and West Point. It is contemplated sending the team to the Indoor Intercollegiates in New York City March 26th. Polo has now been recognized by the University as a major sport.

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CONTENTS

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The Future of American Cavalry

By GEORGE FIELDING ELIOT

(Author of *The Ramparts We Watch*)

"Whoever," observes Von der Goltz, "writes on strategy and on tactics ought to confine himself to *national* strategy and tactics only, for no other can be profitable to the nation he is addressing."

To no nation in all the course of history have these words been more applicable than to the United States at this moment.

National strategy is largely a matter of geography. Military policy is largely a matter of providing the tactical means by which national strategy may fulfill its missions in war, and by its readiness to do so, reduce the risk of having to go to war at all. National strategy, national tactics, and military policy are therefore closely associated, are indeed indispensable parts of the same fabric. Only disaster can attend their separate consideration.

The ideal, of course, will never be attained. There will always be deficiencies and gaps, to be hastily filled up by extemporized means after war begins. Human foresight cannot become divine omniscience. Furthermore, there are economic considerations to be taken into account. Small countries with slim budgets cannot provide themselves with $70,000,000 battleships, for example, no matter how exposed to attack by sea; they will do better to devote the money available for their navies to the provision of submarines, coastal motor-boats and seaplanes.

But the United States today is in a unique situation. Possessed of economic stability and national wealth sufficient for all reasonable purposes, we are further advantaged by a geographic situation which relieves us of the major military preoccupations of other great powers. Provided only that we remember the need for *national strategy*, backed by *national* tactical equipment, we shall be secure indeed.

The fundamental difference between our military requirements and those of other powers are so great, and their effect upon our national policies so far-reaching (and so favorable to us as a people) that they cannot too often be recapitulated. They require of us the most careful and indeed ruthless examination of every instrumentality of warfare, of every element of our military policy and its strategical and tactical implications, with the single question ever in mind: "How are *we* going to use this in war?" Never mind how necessary it may be to Germany or Britain or Yugoslavia. What good is it to *us*?

In Europe, the era of air power has brought about tremendous changes. Every European nation must give thought, first of all, to defense against air attack: to purely defensive means such as antiaircraft artillery and pursuit aviation, and to the means of reprisal-bombardment aviation. We alone are not exposed to direct air attack by large formations. We therefore find our principal use of air power to be a reinforcement to our seapower, particularly the employment of long-range bombardment aviation on an exposed maritime frontier or in the defense of localities of particular military interest (Panama, Hawaii); and as a tactical element in our fighting teams (fleets and armies) which will always require a suitable air component. As long as we keep *hostile air bases* out of the Western Hemisphere, air power is therefore a greater help to us than it is a threat—a remarkable reversal of European conditions.

In Europe, every considerable nation has powerful neighbors who may invade it or its allies with great armies, and must therefore provide itself with armies of like power and resources. Even Britain, no longer a military island, has been driven to adopt this policy. We do not have such preoccupations, for we have no powerful neighbors; any army which invades us must come to our shores, or at least to the Western Hemisphere, by sea, as must any great air force.

The control of sea-communications is therefore our principal military consideration, the foundation of our national strategy and of our military policy.

When we leave the realm of strategy for that of tactics, we find equally significant divergencies from the European scene. The long-range bombardment plane, capable of acting at a considerable distance from its base, or rapidly reinforcing an outlying position, of conducting operations far to seaward or of patrolling between distant island outposts, is the air weapon of maximum interest to us, while to a European power expenditures on great range at the expense of bomb-load are largely wasted. Many European naval writers (even British) are today beginning to doubt the efficacy of the capital ship, having in mind the conduct of naval war in the North Sea, the Mediterranean, the Baltic; within easy range of enemy submarine bases and shore-based aircraft. Our naval problems, having to do with the control of oceanic lines of communication, must rest on the secure foundation of a strong battleship force, to which, if an enemy be not able to oppose it in kind, he must abandon the seas.

It is the same when we come to the ground forces. Barring two major calamities, against both of which provision may be made, it is difficult to see what we shall ever need of a mass army such as every European power must today maintain. Those two calamities are (1) our again undertaking to intervene in major operations on the continent of Europe, and (2) our allowing our general condition of armament by land and sea to sink to so low a level as to make the invasion of our territory, or that of one of our neighbors, a conceivably profitable proposition for any other power. Provision against the first calamity is a matter of ordinary horse-sense, which we may hope will possess sufficient strength to overcome emotion and propaganda; if it does not, at least we are not likely to undertake such a thing in default of allies in Europe, and will have time to prepare. Provision against the second calamity is a matter of keeping up a proper naval and military force, at such a level of training, equipment, and readiness to act, and so distributed and based, as to impose a prohibitive risk on any foreign power which may contemplate challenging us in arms.

It is clear enough that in our military problems, the navy must come first. The size and disposition of our fleet must of course be based on the size and disposition of the naval forces which it may have to meet in action. We should maintain a safe margin of superiority in fighting strength, coupled with a proper disposition of bases to

give the fleet a radius of action suitable to all probable contingencies in all vital theaters. For this purpose, however, it is essential that the main fighting elements of the fleet be kept concentrated, and on no condition divided between our two oceans. This will always entail the risk of having the fleet in the wrong ocean at the outset of hostilities, and imposes upon us the need for assuming a defensive attitude on the "exposed flank" until the fleet can arrive.

As to the bases themselves, it must always be remembered that a naval base is useless unless it is defended. Defense must be appropriate to the scale and character of attack which may reasonably be anticipated; but it cannot be left to the fleet, it must be the responsibility of localized or mobile elements of the army, reinforced as need be by local defense flotillas of submarines, torpedo craft and minelayers and by aviation of both services. Similar reasoning applies to air bases. The commander of a fleet, or of a strategic air formation, must not be tied down to the defense of his base. His freedom from such anxieties is absolutely essential to his efficient execution of the offensive missions for which his force is designed, and by which *only* it can justify its existence. Naval power and air power must always have the support of land power. The most cursory student of the military history of the British Empire cannot fail to observe how the growth of British naval power and colonial expansion was attended by the successive appearance in all the maritime theaters of the world of garrisoned and fortified bases, supporting and maintaining the fleet which in turn assured the communications of these outlying bases with the homeland, the British Isles, which was in itself the central base upon which the whole worldwide structure of Imperial power, linked together by sea-routes, depended. This system was able to maintain itself only as long as the central base was secure from direct attack save by sea; neither the central base, nor any of the outlying bases needed a garrison beyond that necessary for temporary and local defense until the fleet could strike at the communications, necessarily maritime, of the attacking force.

These various considerations, and the principles upon which they are founded, clearly indicate the rôle of our own army in our strategic plans.

First, to defend the bases of the fleet, both the home bases and the two great advanced bases—Hawaii and Puerto Rico.

Second, to insure the swift and protected passage of the fleet from one ocean to the other, by defending the Panama Canal.

Third, to provide forces necessary for defending one of our maritime frontiers against attack in the absence of the fleet.

Fourth, to provide small, quickly available expeditionary forces for missions of limited extent and objective, such as occupying an advanced base for the fleet, or driving a hostile force out of the territory of one of our American neighbors.

Fifth, to provide the framework for a citizen army of defense, in the remote contingency that our fleet should be defeated and our home territory threatened with invasion.

What sort of an army is required for these purposes?

Obviously, first of all, an army ready for immediate service. An M-day army, not an M-day-plus-60 army, still less an M-day-plus-6-months army; at least as to the first four missions. Historically, this is the sort of army which has always been required by a power whose military policy was primarily maritime. Not a great mass army of conscripts, of various degrees of removal from full efficiency, but a small, highly trained, regular army of professional soldiers, fully equipped to do particular jobs, and to do them quickly and thoroughly.

The army of a maritime power must possess as high a degree of immediate readiness for action as the fleet.

If, therefore, as to the functions to be expected of regular troops, we have determined upon unit strengths adequate to the performance of war missions, based on tactical considerations and on the extent and character of the armament to be furnished each unit, we must either maintain all units at war strength in time of peace, or we must have immediately available for each unit the proper number of fully trained reservists who can take their places in the ranks at a moment's notice. Where such reservists are not available, as in outlying possessions, the garrison units should be at war strength from the beginning. Where the nature of the arm, or the special degree of readiness required, makes the use of reservists inadvisable, units should likewise be kept at war strength. This may in some cases mean a reduction in the number of units; but the policy ought to be, under our peculiar military circumstances, to have a sufficient number of immediately available units rather than a much larger number available *in the dim and distant future*.

The division of responsibility between the regular army and the National Guard becomes quite clear when thus presented. M-day jobs should in general be committed mainly to the care of regular troops; the National Guard should be the backstop, the reserve for future contingencies, the framework for the citizen forces which may be needed if and as and when.

We may now—and about time, too! the cavalry reader will be remarking—examine the part which cavalry should play in discharging the various missions which our army may be called upon to perform.

In the first mission—defense of the navy's bases—cavalry has little to do in Hawaii or Puerto Rico; but in defending one of our home bases against a sudden swiftly striking raid, a fast-moving force of mobile troops able quickly to bring a high concentration of fire-power to a threatened point might well be all-important.

In the second mission—defense of the Panama Canal—terrain difficulties seem to limit the use of Cavalry: a small force of this arm could be usefully employed, however, for the protection of isolated landing-beaches and the trails leading therefrom, especially on the Pacific coast.

In the third mission—defense of an exposed maritime frontier—considerably larger forces of cavalry than in the first mission might be needed. Here again a force which could strike quickly and strike hard would be vital; the quicker and more powerful such an attack, the less likelihood of the enemy effecting a lodgment.

In the fourth mission—expeditionary forces—the terrain of the theater of operations would determine the value of cavalry and the extent of its participation in each case: in most Western Hemisphere theaters the chances are that one or both types of cavalry would be required.

For the fifth mission—providing the framework for a reserve force—cavalry in large numbers can hardly be provided, save at an expense out of proportion to the likelihood of a need for it. As General Herr truly remarked in The CAVALRY JOURNAL for January-February, 1939, American cavalry is a long way ahead of European cavalry in most respects; but there is one lesson we may learn from Europe: that there is no use counting on filling up a skeleton cavalry organization to war strength on mobilization. Indeed, Europe works the other way. European powers normally maintain horse cavalry regiments with an extra squadron (troop) over the war establishment. On mobilization, a five-squadron regiment takes the field with four squadrons, the fifth squadron (having taken over the sick men, recruits, and young horses of the other four in exchange for its own trained men and horses) forms the regimental depot. Squadrons have the same establishment in peace and war. The theory is that if you want cavalry at all, you want it right away. Of course it may be contended that in Europe conditions are different, with enemies glowering at each other across frontier lines. We have emphasized the differences between America's requirements and Europe's, but the state of readiness in which cavalry must be maintained is not one of them. This has particular reference to the third and fourth missions above stated, in which we might have to drive out an enemy who was trying to seize a position on our coast (for an air base, for example) or one which for that or some other purpose had invaded the territory of one of our neighbors.

It remains to inquire what sort of cavalry we need for the tasks it may have to perform.

For dealing with raids on our coasts, the character of the raid will have a good deal to do with the matter. An enemy attempting to set up an air base might well choose a remote locality, hoping to get his planes ashore and into action before he is disturbed. In such a case (because roads may be few or bad) horse cavalry might be able to reach him better than mechanized units. A more ambitious attack would necessarily have an important strategical objective, and would hardly attempt landing save where a suitable road net was available; hence, mechanized cavalry would almost certainly be able to get at the enemy quicker than any other ground element not immediately on the spot. In all such cases, the great requisite is speed. The quicker an enemy who is trying to effect a landing can be attacked, the better chance of catching him astride of the beach, or disorganized by air attacks, or by unknown terrain; the better the chance of cutting off some detached element, of breaking up his plans in general.

Even a single regiment of cavalry, possessed of the weapons assigned to it by our present Tables of Organization, ought to be able—if boldly and resolutely handled in anything like favorable terrain—to offer serious opposition to the landing and immediately subsequent operations of a very much larger force. Delay imposed by such cavalry action may not only enable other forces to arrive, but will produce congestion on the beach and consequently excellent targets for our aviation.

Remembering always that the principle of concentration must govern the disposition of our fleet, it should be a principle of our national defense that the Army, with the assistance of local defense units of the Navy, should always be able to defend one of our maritime frontiers. If the fleet were seriously engaged in one ocean, or the Panama Canal blocked, these defensive operations on the exposed coast might be of a protracted and serious character, requiring a considerable mobile force of all arms, adequate to deal with the maximum hostile effort which might be brought to bear against us; or, from another point of view, so fully ready to deal drastically with such a hostile effort as to render the launching of that effort unlikely. Here again is emphasized the need for an Army fully trained and equipped, possessing a high degree of mobility, and immediately ready for emergencies. For operations in our terrain, a proper proportion of cavalry is an absolute necessity for such a mission; the more so, as the superiority of our cavalry to foreign cavalry for the sort of operations which American terrain demands, would be likely to lead to those initial successes which are so valuable, not only intrinsically, but from the point of view of military and civilian morale.

For "limited objective" overseas expeditions of our own, our employment of cavalry (as already remarked) would be determined by the terrain of the proposed theater of operations. Mechanized cavalry is useful in quickly enlarging a beachhead, if the terrain permits. If penetration of the interior were demanded, either kind of cavalry—or both—might, according to conditions, be required.

For circumstances which might require operations in the territory of one of our continental neighbors, cavalry in considerable numbers might be the only arm which would enable us to "git thar fustest with the mostest men"—or the highest concentration of fire power, which comes to much the same thing. If we had to help our Canadian neighbors expel an enemy from Eastern Canada, for example, where there are at least a certain number of good roads, our mechanized cavalry would probably be first in the field. If Mexico were in question, we should have to put our confidence in horse cavalry to a larger extent.

How much cavalry do we need for these various missions?

It is a hard question to answer. A start might be made

by surveying as a whole the sort of mobile ground force we ought to have in the Continental United States. Theoretically, we are supposed to have nine infantry divisions of the regular army. Actually, we have one division pretty well organized, two more organized on paper, and a lot of scattered regiments. Many of the infantry and most of the field artillery regiments lack one or more battalions or batteries. Almost all of them are woefully short of modern equipment. But let us look forward to the better days which seem to be coming; let us anticipate that we shall build up a force of nine regular infantry divisions and fully equip and arm them. We can't do it all at once; perhaps we shall create a force of five divisions first, then add others until we have nine.

The infantry, despite all detractors and scientific forecasters, is still the basic arm for operations on the ground; a fact to which a one-time doughboy is proud to bear witness. These infantry divisions, therefore, are the foundation of our fighting force, the elements upon which we must depend for a decision. They have the two requisites of mobility and fire power. But it is a principle from which there is no escape that as you increase fire power (and the power of sustained effort) you decrease mobility. Infantry cannot retain its essential characteristics, the characteristics which make it the decisive battle element of armies, and at the same time have high mobility. There must be a separate arm for purposes requiring great mobility—for striking quick hard blows at a distant foe, for reconnaissance, pursuit and covering missions. Historically, this has always been true, the relationship between infantry and cavalry varying with the times and with the development of armament, without altering the basic need for a due recognition of the antipathetic qualities of sustained striking power and high mobility.

It is unfortunate, indeed, that so large a part of our American public (as the writer has had occasion to observe during a recent "National Defense" lecture tour) should have somehow acquired the idea that the new infantry division now being experimented with in Texas is an entirely motorized unit, and that in future great forces of all arms will "go roaring down the road" at forty-five or fifty miles an hour. As General Herr has pointed out, this is by no means the case, nor can be the case, and the need for a mobile force which can act at a distance or conduct the service of security and information is as great today as it was when Hannibal's Numidian horse spread out from the passes of the Alps to harry the plains of Italy.

Based, therefore, on a force of nine infantry divisions (three corps) what should be the cavalry component of our regular army?

We should, to begin with, bear in mind the need for a *balanced* striking force, complete in every element necessary for the performance of its various missions; indeed, this necessity for balance, for due proportion, and conversely, the need for avoiding over-emphasis on one element at the expense of others, is particularly necessary for American military policy. Just as the national defense, as a whole, must strike a proper balance between Army and Navy, and as the Army, as a whole, must strike a proper proportion between overseas garrisons, air force, harbor and antiaircraft defense troops, and a mobile ground force within the Continental United States, so in considering this last element, a proper proportion between those elements whose principal characteristic is sustained battle-action, and those whose principal characteristic is mobility, must be achieved. This need is the more imperative in the type of Army which seems best adapted for American purposes, limited in numbers and highly trained for particular types of missions.

Considered in this way, it appears essential that there should be added to the three infantry corps a cavalry corps, including both horse and mechanized divisions. Eventually, in the writer's view, our cavalry should have two mechanized divisions and two (possibly three) horse divisions. There seems to be sound logic in reducing the size of the present horse division by eliminating the brigade echelon of command and forming the division on the basis of three cavalry regiments plus the necessary supporting and auxiliary elements; however, both this and the proportion of horse and mechanized elements in the whole cavalry force can best be determined by experiment, by the actual constitution of a cavalry corps and subsequent field tests and maneuvers in the excellent terrain available in the southwest. All cavalry divisions of the regular army should be maintained at full war strength: if needed at all, they will be needed quickly. Cavalry is an M-day force.

Maintaining two mechanized divisions is favored because this arm cannot be improvised under any circumstances, and because with our increasingly good road net it forms such a powerful striking force, which can be quickly hurled against any enemy which may appear. For reasons of efficiency as well as economy, these divisions ought not to be split up, hence, if we have two of them, we can maintain one at Fort Knox, ready to act to the eastward (northeastward, southeastward), and another in the southwest, ready to act in Mexico or on the Pacific Coast.

Two horse cavalry divisions and the headquarters of the Cavalry corps should normally be maintained in the southwest, and the mechanized divisions should exchange stations at intervals in order that both might have the experience of training with the horse divisions under the Cavalry Corps command, in the favorable terrain existing in this region.

What steps can be taken immediately toward improving our cavalry organization? We have at present in the United States 14 regiments of cavalry, 12 horse and 2 mechanized. We have one cavalry division (horse) now set up. There are few serious obstacles in the way of creating another horse division, which would involve little more than creating the staff, train, medical units and special troops, bringing the 84th Field Artillery and the 9th Engineer Squadron to full strength, and assigning to the new division three cavalry regiments (since this would seem an excellent opportunity for testing a 3-regiment and a 4-regiment division side by side). The principal difficulty might be in changing the station of one or more cavalry regiments, which ought not to be a prohibitive barrier to progress. Next, the present 7th Cavalry Brigade (Mechanized) might be placed on a divisional status, with perhaps an additional mechanized cavalry regiment (for which purpose the 15th Cavalry might be rescued from the inactive list). When the corps staff and corps troops were set up, we should then have at least the beginnings of a real cavalry force; and with the benefits to be derived from working with it under field conditions, we ought to be able to form better opinions as to the details of cavalry organization, armament and training than at present. As quickly as possible, of course (as quickly, in fact, as trained men and horses and additional equipment became available) we ought to raise all the elements of these three divisions to war strength.

This would leave still unassigned 5 regiments of horse cavalry (exclusive of the Philippine Scout regiment, whose future is uncertain). Experiment might determine that some of these should be formed into a third horse cavalry division; but it is the writer's opinion that there always should be at least three horse cavalry regiments available outside of the divisional organization, for use as corps cavalry (for infantry corps) if needed, for temporary attachment to divisions requiring reinforcement for particular missions, or for small independent missions. For the latter purpose, their assignment to outlying posts such as the Presidio of Monterey, Fort Oglethorpe, Fort Ethan Allen, far removed from the two main centers of cavalry activity, would make it likely that at least a small force of cavalry would be available whenever wanted in an emergency. These regiments should remain horsed, but they might well have an increased allowance of scout cars and perhaps a platoon of combat cars each.

Viewed as a whole, the proposed plan would have the advantage of not breaking up existing regiments, with fine traditions and spirit. It would not require the immediate creation of new cavalry units (except the 15th Cavalry and five-eventually, nine—reconnaissance squadrons for the infantry division, which should be cavalry units forming part of the divisional organization). It would produce a considerable increase in the numbers of cavalry available, an increase largely confined to junior officers and enlisted men; this would be achieved by bringing existing units to war strength.

The eventual minimum cavalry objective, as the writer sees it, should include:

(1) A concentrated striking force of two or three horse divisions and one mechanized division, organized and trained under a single command, able to move quickly toward any theater where it might be required.

(2) At least one additional mechanized division, so that one will always be within quick and easy reach of either coast or either border.

(3) At least three smaller cavalry units so disposed as to be able to "fill in a gap" in an emergency.

(4) A reconnaissance element with each infantry division.

It is submitted that such an organization will enable our cavalry to perform any mission which may be required of it in war, excepting in a case where we might have to raise a large mass army; and for this purpose we have the National Guard Cavalry, perhaps supplemented by reserve regiments to be formed around nuclei of cavalry reserve officers. There will be plenty of time to get these Guard and reserve units ready if they are needed, for reasons already set forth—provided we do not fall into the folly of cutting down our first-line elements (fleet and regular army) below the level of safety.

Emphasis has been placed in this "cavalry plan" upon the matter of strategic distribution. This is just as important for the army of a maritime power as for the fleet. Time is all-important in modern warfare, when the range, speed and destructive power of the instrumentalities of warfare have been so enormously increased; Major General Rowan-Robinson, of the British Army, calls it the "fourth dimension" of strategy. The best ships, the finest troops, are of little use unless they are on hand when and where they are needed. Even a comparatively small force, if present at the decisive place and time, may be worth far more than a much greater force which arrives too late. Indeed, it may make the creation of the greater force unnecessary.

Many years ago, George Washington observed that what we need is not a large army, but a good one. That is as true today as it was when our first Commander-in-Chief wrote those words; and it applies to the cavalry as well as to every other element of the army. What we need is not a scattered lot of indifferently equipped squadrons and regiments at half strength or less, but a cavalry force trained, armed, equipped and organized to *hit hard, hit quickly* and *hit together*.

Above all, in this as in other military questions, we must continue to adhere strictly to the American point of view, to examine every military instrument in the light of American necessities. We reorganized our army in 1917 along European lines, to fight in a European theater alongside European allies. We are still suffering from the effects thereof, and from the trench warfare ideas acquired not only by military men, but by the general public. A start is now being made toward a new reorganization to meet American requirements. It is a healthy sign. We are altogether too prone to take as gospel the dicta of foreign military opinion; from such sources, and notably from British sources, has flowed much of the current insistence that cavalry is obsolete, a war of movement impossible, trench stalemate inevitable, and so on. Yet it should be apparent to any intelligent person that a war in Western Europe must be fought under decidedly different circumstances from a war anywhere in the Americas. The quicker we return not only to the conception, but to the practice—in training, in armament and in organization—of the principles of a war of movement, the better our army will be on the day when it again faces trial by battle.

PROMOTION....By Agrippa II

"Where there is no hope there is no life."—CONFUCIUS.

The question of vitalizing promotion of commissioned personnel in the Army has not burst suddenly into the open on the wings of emergency. It is a problem that has been appreciated in the War Department during the past fifteen years. Personnel studies exhibited as far back as 1926 drew an accurate picture of the days ahead. Among the more farsighted the proposition of age in grade retirement was advocated and discussed. Accordingly, the proposed bill now in the hands of Congress is the result of many years of study and is not a presentation of a situation which has suddenly grown acute.

Evidently, many are of the impression that current international conditions have motivated the initiation of action on this problem at this time. This is not so. The world has been facing a series of crises during the past eight years and will, in the present light, continue to face uncertainties for many years to come. The major problem involved is not one of today but one that becomes increasingly more serious as the years go by. This legislation is peace time planning, not a makeshift measure of the moment.

Many factors have contributed to the conditions which confront us today. The so-called hump created by absorbing an unbalanced block of wartime officers in 1920 was predicated and envisioned primarily upon measures incorporated in The National Defense Act, passed by Congress in that year. That act provided for an American Army of 280,000 men and 18,000 officers. Upon that basis the gradual and successful absorption of a large block of officers appeared a justifiable assumption. The attrition which would have ensued from a commissioned strength of 18,000 reasonably would have largely absorbed or eliminated the danger of the hump which has since developed. Those responsible for the policy which initially brought into the service this block of officers of relatively the same age, but extending over wide limits on the promotion list, could not have foreseen the resultant stagnation in promotion, for they planned on sufficient vacancies to absorb incoming increments at a reasonably high rate of attrition. The present crisis in promotion has resulted largely from the curtailment in the provisions of The National Defense Act. As that act and its subsequent restrictions were promulgated by Congress it would appear that it is the responsibility of Congress to ameliorate resultant conditions and restore to the Army an assured efficiency for the future with justice to all and partiality to none.

Chart I

American mortality figures have shown for years a rate of approximately 11 per thousand. An investigation of actuary figures among commissioned personnel shows that no such rate is applicable to this group. In fact, the rate is so low that from an insurance point of view it is perhaps the best risk of any circle in the country. Due to the rapid promotion which took place in the pre-war group of officers who came into higher rank at a relatively junior age, the outflow due to age has in no way assisted toward the solution of a reasonable rate in the promotion attrition.

What is this "hump" on the promotion list? In reality is it the presence on the list of some 4,300 officers with relatively the same length of service and very close to the same age? Chart I demonstrates more clearly than can words the existence and meaning of that term. Roughly, the vertical scale indicates the number involved; the horizontal scale, the ages involved—both as of June 30, 1938. As an example, on the horizontal scale take the line representing 47 years of age. Going upward to the captain curve, one sees that on the foregoing date there were approximately 84 captains of that age; going farther up the chart one finds 285 majors; and still farther, 390 lieutenant colonels.

The chart likewise indicates the presence of officers from captain to colonel, inclusive, in the upper age brackets. Actually, under desirable conditions, such a chart should show only colonels to the right of the year line representing 52 years of age; instead, one sees at that age: 20 captains, 56 majors, 105 lieutenant colonels.

The heavy dotted line running diagonally downward across the chart represents the best possible age line under an attrition of 3.8. (The attrition figure 3.8 has been the figure of the average rate of attrition in the Army for the past 70 years. Under an attrition of 4.35 this line would be even more favorable.) The slope of this line is based on a promotion list strength of 10,500. For grades at appropriate ages, all grade curves should hew closely to that line. Look at the chart. Age grade curves above the line are out of proportion to a balanced promotion list and show up as the "hump."

As time continues this hump will move slowly and gradually to the right until it absorbs completely the entire grades of colonel and lieutenant colonel. In the meantime, all personnel to the left of it will continue to be represented by the lower grade curves on that part of the chart. When the right edge of the "hump" hits the year line of 63, retirements for age will accelerate rapidly. By that time, however, officers in the grade of captain will be well along in years and those in the grade of major will be well into their fifties. As the "hump" surges out of the service as a group, another similar group will have appeared behind it as the existing number of vacancies are filled. The vicious circle will then be complete.

Four years ago Congress saw fit to enlarge The Corps of Cadets. This year, 1939, the country will benefit from that action. Approximately 450 young graduates will be available to the service. Under present conditions that number of vacancies do not exist. The proposed increase in the Army may suffice to absorb the great bulk. As these young officers look ahead under present conditions, however, they will do well to realize that although they go through the grades of 2nd and 1st lieutenant with reasonable length of service, they will, as captains, follow a long, long trail.

If no legislative action is taken at this time let us examine what the future holds for the great majority of the commissioned personnel. Glance at Chart II. Should attrition continue at the present low figure the grade of colonel and lieutenant colonel will be reserved for those in the extreme upper age bracket. The figures on the left represent the beginning of a fiscal year. The next column under colonel shows which year group enters that grade for that fiscal year and at what average age. For example, take the fiscal year 1948. The upper half of those officers who entered the service in 1916 will attain the rank of colonel at an average age of 56. The senior files of the lower third of the war group (who were commissioned in 1917) will attain the rank of lieutenant colonel at an average age of 55. Those who came into the service in 1924 will become majors at an average age of 47. The picture is not good.

	Colonel		Lt. Colonel		Major	
July 1st	Year Group	Average Age	Year Group	Average Age	Year Group	Average Age
1940	1910	54	1917	47*	1918	50+
1941	1911	53*	"	47	"	46
1942	1911	54	"	50+	"	48
1943	1912	55	"	50	"	47
1944	1912	55	"	50	"	47
1945	1913	55	"	57+	1921	47
1946	1914	56	"	56+	1922	47
1947	1915	56	"	54	1923	47
1948	1916	56	"	55	1924	47
1949	1916	57	"	56		
1950	1916	58	"	57		
1951	1917	59	"	58		
1952	1917	60	"	63		
1953			"	59		

*(Irregular)
+Scattered.

CHART II: Average age by year group of officers entering grade in the fiscal years shown — attrition 2.5%.

Chart III is presented merely as a graphic representation of the situation. The graphic curve designated (1) indicates prospective promotion for age in grade under the attrition figure of 3.8 which was the average during the past 70 years. It is possible that those who drew up The National Defense Act in 1920 visualized and planned on a rate close to this figure. Curve (2) shows what is happening today with an attrition of approximately 2.2. Curve (3) represents the situation under the desirable attrition figure of 4.35.

For an impartial study of this problem three distinct groups have to be considered; namely, the pre-war, war, and post-war. There is a widespread opinion that the bulk of those who would be effected by the proposed legislation are mainly in the war group of officers. This is not so. The initial pressure from this legislation strikes those in the pre-war group. One might say that a large portion of this group are being forced out by pressure from be-

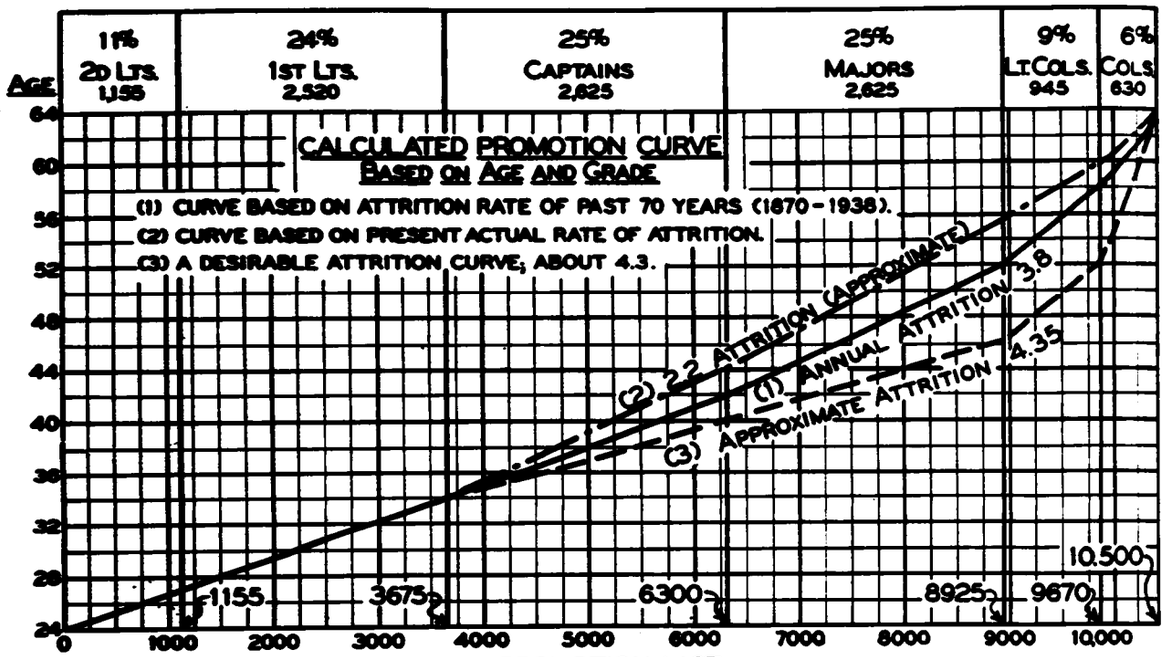

Chart III

hind. In the same breath others hold the view that pressure is on the war group, as they form a block for future advancement of post-war officers. Actually, any discussion confined to the effect on any group is without justification. A serious situation confronts the efficiency and welfare of the American Army, and the proposition of national defense surmounts any consideration of any individual or group of individuals. When you consider the fact that the *senior post-war officer* under present conditions will not reach the rank of major until 1945, or after 25 years as a company officer, the situation is apparent.

Assertions of injustice in this legislation are without foundation. Those who find themselves in the grade of captain or in the lower bracket of the grade of major manifestly accepted commissions at an age far in excess of that considered normal for such appointments. For instance, any captain now 55 years of age must have accepted a commission during his middle thirties. Such an individual knew at the time that the commission was accepted that any future possibility of eventual high rank in the army was beyond a reasonable hope. Congress in recent years saw fit to assist in a solution of the problem by authorizing voluntary retirement on the basis of retired emoluments at 2½% per year of commissioned service. The new action is far more adequate and generous. It provides full retirement prerogatives to any individual affected.

Some of those who are unsympathetic to the proposed legislation appear to hold views that the problem can be solved by other means. One nationally known commentator has even suggested that the entire block be promoted and that any surplus in these higher grades be furloughed for a period of years to civilian life. This does not answer the question at all. This proposition in no manner fulfills the necessity of vacancies in the higher grades through which an increased attrition will result sufficient to provide a free and normal flow of promotion. It is also said that the country will lose the services of highly trained officers, any and all of whom are potential material for corps commanders in time of war. Anyone placed on a retired list is not lost to the country in case of war. The mere scratch of a pen can restore him to active duty. Others say that under the proposed plan we are sacrificing trained officers for new and untrained second lieutenants. That is true today, but looking forward only four years we would find the older officer merely an older individual, while in the lieutenant with four years service we would have a trained, valuable combat officer.

Others preach the plan of promotion by selection up or selection out. The present system of "Class B" is in reality a system of selection out. When it is realized that for the past fiscal year a total of only 11 officers of the 8,800 in the grades from captain to colonel, inclusive, were classified on their efficiency reports below the rating of "very satisfactory," the fallacy of such a plan needs no further discussion. Many feel that promotion might be based on selection, particularly when considering the post-war group of officers. So many factors enter into this proposition as to suggest its discard at once. In any system of selection someone has to do the selecting. In the navy, under this system, this duty falls to a selection

board. There can be no doubt, considering human nature, that personal knowledge of an individual frequently works to his advantage. Therefore, the first factor which enters into a system of this kind is "Whom do you know, or who knows you?" Even one member of the board favorably impressed by former contact with an individual may introduce the possibility of a sympathetic consideration. In the event that none of the candidates for promotion are known to any members of the board, the manner in which their record is presented is a formidable factor. Where one individual's record is presented in able and persuasive fashion that individual may be more fortunate than should his record be presented by one less articulate or less persuasive. Any such system just does not work equitably and satisfactorily to all concerned.

The system proposed by the legislation now before Congress is the most reasonable and the most equitable that can be devised. It prejudices no one. Separation from the service becomes only an accident of birth or date of acceptance of a commission. It reserves to every individual perhaps civilized man's most precious possession—self respect.

Should the proposed bill fail to materialize the problem is still with us. It is one which eventually must be answered. The longer it is delayed the more acute it will become, and if delayed another ten years, the most stringent measure will be necessary to rectify the situation. The measures taken at that time will make the present proposals seem mild and generous indeed. If remedial measures must be taken, why not now?

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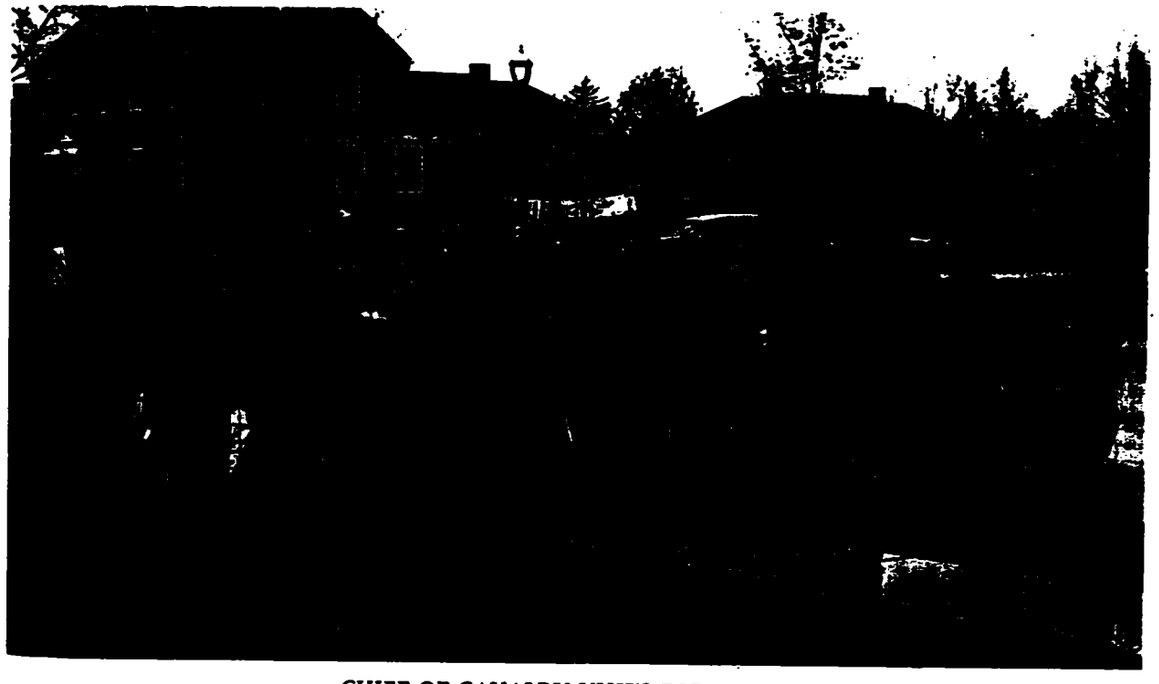


CHIEF OF CAVALRY VISITS FORT KNOX

Major General J. K. Herr, the Chief of Cavalry, and Brigadier General Adna R. Chaffee, commanding Seventh Cavalry Brigade, in conference with officers at Fort Knox, Kentucky, prior to a tactical ride conducted during a recent visit by General Herr.

New Developments in the Organization and Equipment of Cavalry

By LIEUTENANT COLONEL R. W. GROW, Cavalry

When we gauge new developments of any arm we consciously or subconsciously consider the progress made since the World War. The American forces came out of the Meuse-Argonne a proven army that had stood the test of modern battle and was pretty well equipped with the best material of the day. New developments in equipment, in most cases, can therefore be traced directly to our own World War experience. Such is not the case with our cavalry and to this may be attributed much of the misconception of this arm today. Practically no American cavalry saw service as such in the World War. Not only did American cavalry lack war experience of its own on which to base subsequent development but the American Army lacked experience in combined action with cavalry although splendid opportunities for decisive successes by means of cavalry coöperation were presented at Saint Mihiel and later in November, 1918. It is, therefore, only natural that the casual student is inclined to think of cavalry either in terms of our Civil War or the French and German cavalry in 1914. Only the more thorough investigator will research the eastern and near-east fronts where the British cavalry, particularly, approached the American standard.

Our heritage of 1865 gave us a running start by the time of the World War but this war offered no opportunity to determine in battle to what extent we had outstripped foreign cavalry in methods and equipment. All we know positively is this: During the World War, the greatest success was always attained by that cavalry which most nearly followed American doctrine, both as to employment and equipment. Therefore, we do not believe it unreasonable to assert that the World War proved American cavalry doctrine to be sound. This doctrine, which has undergone no basic change, charges cavalry with the execution of those missions which require a highly mobile fighting unit. It contemplates the employment of cavalry in large groups in a war of movement, the only type of warfare that we can visualize on this continent or in fact in any theatre other than the congested areas of western Europe. It calls for the rapid maneuver of intensive fire power in favorable and decisive directions in well coördinated coöperation with the main forces. Of secondary importance as a whole but frequently of primary importance during certain phases of a campaign are the missions of covering the main forces—security and reconnaissance, seizing key positions, covering withdrawals, etc.

In one sentence, the job of cavalry is to move and fight; to move faster on the battlefield than any other ground force, and to fight for limited periods with the intensity and power of Infantry.

There is nothing new in this doctrine from that exemplified by Wilson at Nashville and Sheridan at Appomattox. It was closely approached by Allenby in Palestine and by Budeny in the Ukraine in 1920.

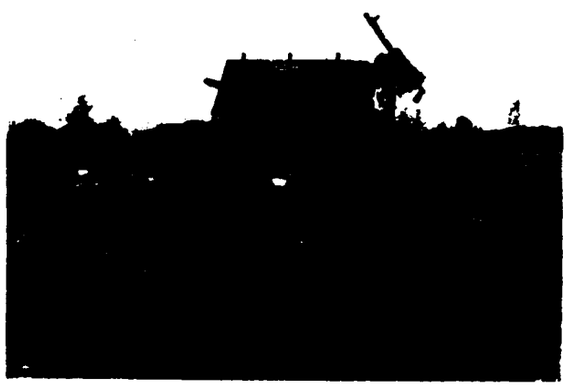
New developments are confined to means; means for mobility and means for fire power. The most important of these is the "iron horse." Cavalry exists because there is a need for battlefield mobility—cross-country mobility—greater than man alone is capable of. This need has always existed. It probably always will exist. The means that make this type of mobility possible are inherently and inseparably a part of cavalry. New developments in organization are simply modifications to make the new means most effective.

The infantryman in a truck is still an infantryman and must fight as such. The truck on the highway is but a modern form of strategic transportation, a few years ago represented only by the railroad. The truck on the battlefield is limited to the transportation of supporting weapons—it has no place in the front lines. But, when we apply a means of battlefield transportation to the individual soldier in such a manner that the troop units are self-contained for offensive and defensive combat, are homogeneous and flexible, then we have created cavalry. It matters not whether the means are elephants, horses or combat cars provided they are suited to the situation. When better horses are made of steel and rivets than of bone and sinew, cavalry will utilize them.

To summarize: Cavalry is a combat arm brought into existence by the need for high battlefield mobility and fire power. American cavalry doctrines have proven sound in the acid test of war. New developments, particularly the iron horse, point the way to improved means to implement the cavalry arm.

The iron horse has resulted in the term mechanized cavalry. The mechanized cavalry regiment and brigade today consist of a grouping of units each using a special form of combat vehicle designed for a specific purpose. The basic vehicle, the combat car, is designed, like the Infantry tank, primarily for assault. The various types of scout cars, personnel carriers, motor mounts, etc., are each designed to meet a requirement such as reconnaissance, security, or dismounted fire action, all in support of the combat car units.

In other words, there exists today no single type of iron horse capable of forming the means of transportation for a complete cavalry tactical unit. We believe such an iron horse to be the ideal—the objective; a horse from which our cavalryman can fight mounted or dismounted.



The Cavalry Combat Car

one that he can use equally well for reconnaissance or for pursuit, for the assault or for defense.

Because we must proceed from the known to the unknown, we started with the tank, a World War development. We improved it enormously over the early models, injecting features required for cavalry, and brought forth the combat car. The modern combat car possesses the chief characteristic required in cavalry's iron horse, namely: high mobility across country. However, it lacks such characteristics as silence and good observation, desired for reconnaissance; the ability to hold ground desired for defense; and the ability to operate against determined defense without supporting fire, thus demanding the close coöperation of other troops. In other words, no combat car unit is a self-contained tactical unit; no combat car unit alone can carry out the cavalry rôle. Therefore, since no single iron horse has yet been developed which at once combined the indispensable characteristics of the combat car and the other required characteristics, it has been necessary to specialize to the extent of utilizing other combat vehicles for supporting rôles. Obviously the close coördination required can be attained only if all vehicles have comparable cross-country mobility. So far this desirable objective has not been attained.

The accompanying photographs of present equipment indicate the new trend of development.

Only a track-laying vehicle provides satisfactory cross-country mobility. Squad of four. One caliber .50 anti-tank machine gun and three caliber .30 machine guns. Armored against any man-handled weapon except our own caliber .50 machine gun at close range. New developments under consideration and test include Diesel engine, longer track base for greater stability by lowering the rear idler, new turret design to increase flexibility and fire, and many others. In short, the trend is toward improvements rather than an entirely new design. Also, we are still working on a convertible development which, if found suitable, will permit long peace time marches to be made on wheels at small cost, tracks being used in the maneuver area or theatre of operations.

The scout car is the principal support vehicle and is being used for three purposes: Reconnaissance, transportation of supporting machine gun and rifle fire power, and as a mortar carrier. Various scout car designs are in use. Each year's procurement contains improvements over the previous year's model. This car accommodates a squad of 8 without radio or 6 with.

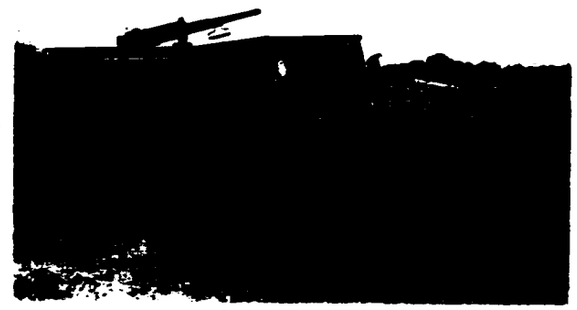
The Cavalry is satisfied that neither the scout car type nor a half-track vehicle is an entirely suitable solution to the problem of a support vehicle. Search for a solution has now resulted in renewed studies of a full-track vehicle with a body similar to this one. Our 1939 body features a seating arrangement in which personnel face front, rear and flanks, thus assuring uninterrupted observation in all directions, as well as facility for employment of weapons.

A smoke weapon to support combat cars by blinding hostile antitank guns is a highly important element of a mechanized cavalry unit.

All of the wheeled vehicles discussed here are, of course, all wheel drive and armored.

The improvements in mechanical design from year to year are truly astounding and we may well look with confidence on the evolution of our combat vehicles. The tendency today is generally to two breeds of iron horses; the one of the combat car type, primarily for assault; and the other of the scout car type, either wheeled or half-track or possibly full-track, for the transportation of supporting troops and weapons. Of these features we are certain: All combat vehicles must be armored to the maximum extent compatible with high mobility; cross-country mobility of supporting vehicles must be greatly improved; the present high speed must be maintained; and every effort must be bent toward simplicity, uniformity, and mechanical improvement.

It is quite apparent that mechanized cavalry, as it exists today, is incapable of carrying out the entire cavalry rôle. Rapid as have been the strides made, it is impossible to foresee the time when cavalry can function effectively without placing its principal reliance on the horse. Therefore, our efforts in mechanization have been paralleled by very important new developments in horse cavalry. I will take time only to name them. With reference to mobility, the mule and escort wagon have been entirely eliminated in favor of the truck. Animal-drawn transportation has disappeared. When truck transport is



The Scout Car. Used also as personnel carrier.

impossible, we resort to pack and supply by air. We are relying on the Quartermaster Corps to maintain a sufficient nucleus of trained pack troops to insure the availability of this type of supply transport in war. The truck also offers an opportunity to take part of the load off the troopers saddle in most situations. The Phillips pack saddle, undoubtedly the best in the world, had made the mobility of supporting weapons almost the equal of that of the individual trooper. The breeding of our horses has improved immensely under the guidance of the Remount Branch. The horse regiment and each higher unit includes organically a scout car unit of tremendous value for rapid general reconnaissance and to assist in command and communications. Radio, both vehicular and pack, and motorcycles are important factors in mobility. These auxiliaries—the scout car, motorcycle, truck, and radio—give the commander of the horse unit the means by which he can exploit to the maximum the potential mobility of his horses. Observation, command, communications and supply have been stepped up so that no longer is the fighting component forced to delay while control agencies, no more mobile than itself, are performing their necessary preliminary functions. With reference to fire power, the cavalry regiment has the new semiautomatic rifle; supplementing the heavy machine gun of World War days, each troop contains a platoon of light machine guns; the peace strength regiment has a platoon of antitank guns (caliber .50) and a section of 60-mm. mortars, doubled in war. All of these are new developments since the World War. It is no exaggeration to state that the horse cavalry today has more than twice the battle effectiveness of the splendid regiments that accompanied Pershing into Mexico.

The trend in development today includes the following: The development of a more suitable light machine gun; particularly one that can be carried on the trooper's saddle, thus eliminating the pack horse in the combat echelon of the rifle troop. Great strides have been made in the past year toward improving the caliber .50 machine gun until we are convinced that this is the best man-carried antitank gun in the world. There is a more extensive use of motorcycles and a general simplification and co-

Half Track-Personnel Carrier

4.2" MORTAR AND MOUNT

Each mechanized cavalry regiment is equipped with six mortars which are used to place a concentration of smoke on that area in which are located those hostile antitank guns most apt to interfere with the success of the attack.

ordination of communications. Increased mobility, both horse and mechanized, demands more efficient means and methods of control. You have no doubt noted that the horse division includes a light tank company. The Chief of Cavalry believes a combat car squadron to be a much more appropriate unit. This will be given consideration in any reorganization of the division. Such a unit would not, of course, be self-contained but would operate in close support of the horse units.

The question of the proper proportion of horse and mechanized cavalry is highly vexing. Considering the uncertainty of our future theatres of operation, it can never be satisfactorily settled in time of peace. After giving full consideration to all factors involved, the Chief of Cavalry is of the opinion that today a cavalry corps consisting of three horse and one mechanized divisions represents a balance calculated to meet our most probable requirements. Such a corps would actually be about one-half motor and one-half horse, due to the very large number of motors in the horse division. The power of such a corps would be tremendous. When you think of its high speed reconnaissance agencies, enabling the commander to utilize promptly the mobility of his mass, and then the fluid striking power of his horse divisions supplemented at the most favorable time and direction by the crowning blows of his mechanized division, you gain a conception of tremendous mobile power at the disposal of an army commander.

Cavalry is no longer solely responsible for distant reconnaissance except in those rare instances in which air forces cannot operate. Neither is it the only arm capable of a rapid parallel pursuit or a rush to fill a gap in the line, except when truck-borne Infantry cannot operate. Combat aviation is another powerful agent of pursuit. These new developments have, however, merely served the more to emphasize cavalry's unchallenged rôle—participation in battle under circumstances which demand the highest degree of battlefield mobility. In its participation in battle, the new developments have extended cavalry's sphere of action and speed of maneuver. They enable cavalry more than ever to choose a favorable direction of attack. Mechanized cavalry, in particular, is a serious threat to hostile rear installations. Not that these in themselves will often

be the objective, but rather that the most favorable direction of attack will often be from the deep flank or rear. As a consequence, a system of all-around antimechanized defense has become necessary. Any defense of rear installations should be based on taking full advantage of natural obstacles, particularly streams and heavy woods. These are reinforced by artificial obstacles on roads. In the final analysis, the only satisfactory defense is gun fire and every Quartermaster soldier must be a fighting soldier. There is no reason why every truck should not mount an automatic weapon supplied with armor-piercing ammunition. Service troops cannot always depend on the protection of combat arms.

Because the backbone of mechanized cavalry is the combat car, shock action is usually visualized as the culmination of an attack. This is by no means an invariable rule. The tremendous fire power of its automatic weapons is the measure of its effectiveness. The mobility of the combat vehicles affords a flexibility to the fire power that creates a constant threat to flanks and rear wherever maneuver is possible. Rear installations should, therefore, be kept under the close protection of combat troops or held well to the rear and in relatively inaccessible areas; while supply convoys should operate well dispersed in daylight, if not protected, and operate to the maximum extent practicable at night.

Not only is mechanized cavalry capable of rapid distant employment by itself but it has served to greatly extend the sphere of action of horse units when the situation permits their coördinated operations. Their characteristics are complementary. While the mechanized unit provides high strategic mobility and a powerful attack on favorable terrain, the horse unit adds security particularly in thick country and at night and can develop a strong offense on any terrain, and an exceptionally strong and flexible defense.

The outstanding new development in cavalry is the coordinated use of horse and machine. This development is in its infancy. The future offers a tremendous field in which one of the chief problems of cavalry will be to establish and maintain a proper balance so that in any theatre of operations we may be assured of having the most effective combination of mobility and fire power.

* * *

SUMMARY OF CURRENT CAVALRY DEVELOPMENTS

HORSE UNITS.

Command Echelon

One additional scout car was set up for each regiment this year as a command vehicle, also a "command post" truck per regiment. Both are radio equipped. Thus the commander, staff, and message center are provided means in addition to horses to facilitate and expedite their functions. One-half ton trucks (station wagons) are also set up for the regimental adjutant and supply officer's section.

As equipment becomes available, much greater use is being made of motorcycles to supplement radio and the mounted messenger.

Reconnaissance Echelon

New model scout cars have a larger personnel capacity in order to provide more men for dismounted reconnaissance which is always necessary to supplement observation from vehicles.

Intensive research is also being conducted in the field of much smaller unarmored reconnaissance vehicles and in the use of motorcycles as reconnaissance agencies.

Combat Echelon

Intensive research is being conducted to develop a better light machine gun for the rifle troops. A more mobile and more effective antimachine gun weapon in the form of the 60-mm. mortar is just now replacing the wartime 37-mm. gun. In the war organization this mortar and the antitank gun (caliber .50) are combined in a special weapons troop. This troop and the heavy machine gun troop are under the regimental commander's control to use as general support for his more mobile and homogeneous rifle squadrons.

It should be particularly noted that all echelons of the brigade can function if completely cut loose from their motors provided pack train or air supply is set up.

Mechanized Units.

The principal tendency in vehicular equipment is toward reduction in the number of types. In other words, less specialization and more flexibility.

In employment there is a trend to greater use of mobile fire power and less reliance on shock. We may expect a rapid development of improved methods and principles of combat following the expansion of the present mechanized cavalry brigade to a division, which is now an approved project of the War Department. Details of organization are being worked out. Improvements in vehicles themselves are too numerous to attempt to list. They concern mechanical dependability, cross-country mobility, greatly improved gun mountings and facilities for operating weapons including improved stability in motion, communications—exterior and interior—flexibility of power plant, etc., etc.

General.

Great strides are being made by studies and combined exercises and maneuvers in developing the maximum effectiveness of cavalry as a whole through a proper use of horse units and mechanized units independently, but especially, when the situation permits, through the use of the two in coöperation.*

*Lecture delivered at the Quartermaster School, March, 1939.

Maneuvers and the Umpire System

By LIEUTENANT COLONEL JOHN S. WOOD, Field Artillery

Peace time maneuvers, if properly staged, provide an occasion for the assembly and movement of troops, for their upkeep under field conditions, for the collection and dissemination of military information, and for the issue, transmission, and execution of orders. These maneuvers must have a well-considered and clearly defined tactical object, but it must be understood that the tactical lessons to be learned can relate only to the possibilities listed above and not to actual combat, for the simple reason that fire is absent. No matter how many reams of umpire instructions are turned out, the effects of fire assessed as losses in maneuvers are highly imaginary. The decisions as to the outcome of any local contact are pure guesswork and no real tactical conclusions can be based on them.

The only useful tactical information obtained during maneuvers is comprised in the answers to the following questions:

Was there a definite combat mission?
Was it understood by the troops?
Were they in position and ready to begin its execution?

Actual contacts between combat units lend an air of reality to the exercise but mean nothing in so far as real combat is concerned. In army maneuvers, particularly, the small local decisions are of little concern to the army or corps commanders, and there is no need of maintaining an elaborate system of umpire communications to indicate the exact situation of small units at each moment of the action. In any case, these small decisions should be governed by general umpire instructions as to phases of action and not by some umpire's guesswork as to possibilities of fire.

With this understanding of the real purposes and possibilities of maneuvers in general, plans for umpiring and control can be relatively simple and much more practical in execution than the unwieldy system developed in our recent army maneuvers. The burdensome and largely useless complexities of this so-called Umpire System were first encountered during the First Army Maneuvers at Pine Camp, New York, in 1935. Hundreds of miles of umpire wire were laid by a signal battalion, telephones for umpire use were hung on trees and bushes at every turn, imposing umpire headquarters were set up with a special staff and giant situation maps, and a horde of about two hundred umpires, equipped with flags, cow bells, Klaxons, blank forms, and an arm load of umpire instructions, descended on the troops involved in three or four little division meeting engagements. The system was awe-inspiring and stupefying in its results. Notes made at the time by one of the umpires concerned, together with similar notes made during the Second Army Maneuvers at Fort Knox, Allegan, Michigan, in 1936 read as follows:

1935

"About one hundred and fifty senior officers were assembled at Pine Camp two weeks prior to the maneuvers for the purpose of instruction and reconnaissance. A sort of umpire's school was held in the mornings, leaving the afternoons free for reconnaissance. The school periods, in the manner of most of our Army Schools, were devoted to an elaborate elucidation of the obvious, the instructors reading from the mimeographed instructions for umpires or from the exercise problems—in my opinion a sheer waste of time. These gatherings offered a pleasant renewal of acquaintance and a reunion of old friends but little else. The military work involved could have been accomplished in a fourth of the time. In the future, Old Home Weeks of this sort should be cut down from a fortnight to a maximum of four days.

"The exercises were two-sided maneuvers covering about a week's time, together with a motorized march exercise for the First Division. Considering the limitations of ground and the state of training, the problems were well conceived in that they provided a logical meeting of opposite forces, which is all that is required in a two-sided maneuver. In their execution, however, so many arbitrary rulings were made to limit initiative that much of the purpose of the maneuvers was defeated. As announced, that purpose was, aside from the mobilization and supply problems involved, the combined tactical training of troops and commanders. I am afraid that the conduct of the exercises presented a picture of Indian fighting rather than a demonstration of modern combat. The assumption

that air forces were not present, prohibition of the use of advanced motorized reconnaissance elements, our antiquated advance guard formation, the lack of tanks, and the slowness of transmission of umpires' decisions were factors in this."

* * *

1936

"The umpire system which has been built up at the last two army maneuvers is becoming more of a burden than a help. There might be some excuse for it in a stabilized situation, but it does not conform in any way to the requirements of modern war of movement. The present scheme of installing an umpire wire net, involving hundreds of miles of wire and whole companies of operators, is too burdensome and complicated in any situation.

"The separate umpire net and operations map are artificial and meaningless. Special umpire information may be received at times through a short-wave radio net for umpires, but I believe that the army commander, as chief umpire, should control the maneuvers mainly according to the information received from his two forces through tactical agencies. This will force insistence on such information. Things must be so controlled in war, why not in peace? The unit umpires can be given the general plan for the development of the maneuvers and can force events accordingly at points of contact, the main moves being controlled by the army commander (chief umpire) as part of his command of both forces. Eliminate the area umpires and use unit umpires only—their function being strictly limited to determining the probable effect of fire and tactical dispositions at any given point. They will consult together and the senior umpire on the defensive side will make the final decision in accordance with the general plan of the army commander. Conferences at the end of each phase and the general orientation for the next phase will be directed by the army commander himself."

* * *

As happens so often in our army, the rather simple instructions contained in the small provisional Manual for Umpires of Field Maneuvers have been enlarged, obscured by a flood of mimeographs, and erected into a system requiring specialists for its installation. The sad part of the whole thing is that some of these self-elected specialists have been allowed to continue the development of the system until even small scale maneuvers can not be staged now without the whole complex and cumbersome set-up. The umpiring of small problems involving only reinforced brigades now requires the service of hundreds of umpires and whole signal companies for the communications involved. In sharp contrast, the umpire staff of the Italian maneuvers of 1938, involving two corps of two or three actual divisions each, comprised only 68 officers.

The further spread and aggrandizement of the umpire system should be resisted throughout our army by all who are concerned with the conduct of maneuvers. Let us get down to reality in this as well as in the purposes for which maneuvers are staged.

The umpiring should be as direct and unobtrusive as possible. The suggestion of the Manual that umpires be detailed from among the qualified senior officers of the troops participating in the maneuver, their commands being taken over by juniors, is particularly sound and should be the general rule. With this arrangement and with a small directing group, using short-wave radio and fast motor transportation, maneuvers can be umpired quietly and effectively by a surprisingly small number of officers. Signal units can be released for their proper uses, as demanded by the tactical situations of the exercise; and commanders can function freely, unhampered by the mass of useless and artificial restrictions so often imposed during our recent maneuvers.

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MAXIM LXVI

IN WAR THE GENERAL *alone can judge of certain arrangements. It depends on him alone to conquer difficulties by his own superior talents and resolution.*—NAPOLEON'S MAXIMS OF WAR.

THE GLORY OF THE SOLDI

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A DISCIPLINE OF CHARACTER IS THE ONLY DISCIPLINE THAT WILL STAND THE STRAIN OF WAR.

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"It is military discipline which constitutes the glory of the soldier and the principal force of armies." Thus wrote Carnot in 1811. But the celebrated Marshal Saxe, who had rediscovered cadenced marching—lost since the time of the Romans—and had changed his armies from straggling mobs into orderly forces, had proclaimed fifty years previously that: "All the mystery of military discipline is to be found in the legs and he who thinks otherwise is a fool." Even at this time "discipline" was used with widely different meanings.

An early drill regulations for artillery published in United States in 1797 was entitled: *A System of Discipline of the Artillery of the United States of America, or the Young Artilleryman's Pocket Companion*. Duane's drill regulations for the Infantry, adopted officially by the Adjutant General of the Army, March 19, 1813, was entitled: *Regulations to be Received and Observed for the Discipline of the Infantry*. In spite of its title, this was purely a manual of infantry drill. But Duane remarks in it: "The principle of discipline most prevalent is terror, cruelty and degradation. . . . The soldier is treated as the outcast of the earth, and however different he may be when he enters the ranks, the manner of his treatment too often transforms him into the miserable slave which he is presupposed to be." So Duane, too, used "discipline" in two different senses.

Wellington, in one of his dispatches, wrote: "The fact is, that if discipline means obedience to orders, as well as military instruction, we have but little of it in the army." And here again is a double meaning.

In our present Army Regulations the same confusion of meaning is retained, although an effort is made to assimilate the two senses into one. "Military discipline," it reads, "is that mental attitude and state of training

which render obedience and proper conduct instinctive under all conditions." It is to be doubted whether any amount of training will give birth to an instinct, but that can be skipped as unimportant. The discipline of today has descended from the hoary past of armies when "passive" obedience was *de rigueur*. However, a sentence farther on we find that: "it (discipline) is developed primarily by military drill," thus returning to Saxe's conception that "discipline is to be found in the legs."

"Discipline" derives from disciple. Originally it referred to the instruction imparted to disciples and hence, a particular course of instruction. From this the word evolved to mean "instruction having for its aim to form the pupil to proper conduct or action, or the training of scholars or subordinates to proper or orderly action by instructing or exercising them in the same." At this stage in its evolution the word proper was used to signify "training in the practice of arms and military evolutions" and as such was used by Duane. But soldiers were punished when they broke ranks or got out of step, hence punishment given for infractions of discipline (drill) became known as disciplinary punishments. And likewise, when an organization drilled well, it was said to be well disciplined, that is, obedience was prompt and simultaneous. So finally discipline became associated with obedience and control.

Today Webster defines discipline as "control gained by enforcing obedience or order." But a prominent soldier, in a lecture delivered a few years ago, said: "A man is physically well disciplined when he may be trusted to perform efficiently all the varied duties of his branch in moments of stress *without thought*," presumably by command. A robot, in other words. But an automaton is useless in war today. In the Russian army, in the World War, the peasant, not long released from serfdom was disciplined in the ancient mode. And what was the result? "If the Russian army was found wanting in Eastern Asia," wrote Baron von Freytag-Loringhoven, "this was due above all to the fact that it proved incapable of adapting itself to the conditions of modern war. It afforded no opportunity for the training of the individual soldier in self-reliance in war." The Russians could perform their duties "without thought." They could not perform them without commands; their "discipline" was one cause of disaster.

Since before our Civil War, new conditions of battle had demanded a changed discipline. But military institutions and traditions have an appalling permanence. Changes are always at least a generation behind realities. The high command loses touch with the soldier, with the front line, with the basic element of armies. The second lieutenant of today, when he becomes a general, will make the changes that now are due. But by then a whole new set of conditions will demand, and may not receive, new treatment.

In no respect is this illustrated better than in the history of our own regulations on discipline. Disciplinary regulations first appeared in Army Regulations of 1821. These were copied from the French. The deadly parallel shows their kinship:

U. S. Army Regulations, 1821.	*French Regulations, 1792.*
It is the intention of the Government, that there be established in every regiment or corps, and throughout the army, as one corps, a gradual and universal subordination or authority, which, without loss of force, shall be even, mild and paternal; and which, founded in justice and firmness, shall maintain all subordinates in the strictest observance of duty. It requires that all enlisted soldiers shall be treated with particular kindness and humanity; that punishments, sometimes unavoidable, shall be strictly conformable to martial law; and that all in commission shall conduct, direct, and protect, inferiors of every rank, with the care due to men from whose patriotism, valour, and obedience, they are to expect a part of their own reputation and glory.	It is the intention of the Government, that there be established in all regiments a gradual subordination, which without losing any of its force, shall be mild and paternal, and which, founded on justice and firmness, avoiding all arbitrariness and oppression, shall maintain all subordinates in the observance of duty. It is desired that soldiers shall be treated with the greatest humanity and kindness and that they shall never be wronged; that they shall find kind guides in their superiors; that the punishments that some may merit shall conform to the law, and that the officers shall conduct, direct and protect them with the care due to the men from whose valor and obedience they are to expect a part of their glory.

This paragraph was omitted in the 1835 regulations, but in 1841 it reappears with the following paragraph added:

U. S. Army Regulations, 1841.	*French Regulations, 1792.*
In all that concerns the good of the service, the Government requires that the superior shall always find in the inferior a strict obedience; and that all orders shall be executed with alacrity and good faith; but in prescribing this kind of obedience, it is understood that orders shall not be manifestly against law or reason; and that every superior is strictly enjoined not to injure those under him by abusive or unbecoming language, or by capricious or tyrannical conduct.	In all that concerns the good of the service and public decorum, the Government desires that the superior shall always find in the inferior a passive obedience; and that all orders shall be executed literally and without delay. But in prescribing this kind of obedience, it is understood that all orders shall be conformable to law or founded on reason; and it forbids any superior of whatever grade, to allow himself any abusive language toward his subordinates.

The French regulations of 1792 were slightly rewritten from those of 1788. These had been prescribed by the King to correct abuses in the army that were leading to wholesale deterioration of discipline. They were corrective of the conditions of that time and that country. In the United States they should have had no application. We already had the fine regulations of von Steuben, used at Valley Forge, and afterwards published in 1799, under authority of Congress. Their nature can be judged from the following extract:[1]

INSTRUCTIONS FOR THE CAPTAIN

His first object should be to gain the love of his men by treating them with every possible kindness and humanity, inquiring into their complaints, and when well founded, seeing them redressed. He should know every man of his company, by name and character. He should often visit those who are sick, speak tenderly to them, see that the public provision, whether of medicine or diet, is duly administered, and procure them besides such comforts and conveniences as are in his power. The attachment that arises from this kind of attention to the sick and wounded is almost inconceivable; it will, moreover, be the means of preserving the lives of many valuable men.

It is probable that the high reputation of the French Army under Napoleon led to the slavish copying of their regulations. Drill, too, was adapted from the French. But it is curious that these prescriptions should have been retained for almost a hundred years, with minor revisions, until some additional American material was added in 1915.

In the century and a quarter that had passed since the original regulations had been written, citizen armies had replaced mercenary armies, shoulder-to-shoulder fighting had given way to independent action by the smallest units, and the soldiers themselves had more education and higher ideals than the officers of the old armies. But conceptions of discipline had changed little more than had the regulations. Officers of our war army were as kindly and democratic as the nation, but many thought there was some military magic in a domineering manner, a loud voice, and hours daily of formal drill. Little men, exercising authority for the first time, made discipline an excuse for personal tyranny. It was realized that discipline is the cement that holds armies together, but it was striven for on the model of Frederick the Great, although reforms had commenced in Germany in 1857, in France about 1875. Moreover, our Civil War had given us a model far better than any furnished by Europe.

ALONE UNDER THE EYES OF GOD

The nature of discipline is not unchangeable, although its objective remains always the same—"uniformity in cooperating for the attainment of a common goal." (Ludendorff.) The methods of attaining it must vary with armament, tactics, education and social ideals.

When men fought in ranks, each feeling the touch of his neighbor, with the eyes of the captain on him, discipline consisted in holding ranks. Drill was the means to attain such discipline. Men were drilled to perform the evolutions of battle "without thought." They were drilled for years on end to march in line and to load and fire, in the hope that these actions would still be performed with perfect regularity when under fire. The line advancing like an irresistible machine, "a walking fortress," if it did not falter, was certain to chase the enemy from his position. The ancient discipline, or drill, was perfectly suited to the tactics of the day.

Ranks were three or four deep. Muskets could be fired but once every quarter of a minute to two minutes depending upon the firearm of the time. "Troops that have fired are undone," said Marshal Saxe, "if those opposed to them have reserved fire." Men who had fired and did not have time to reload were lost when the attackers fired their volley at close quarters and closed on them with bayonets under the cover of smoke. Movement had to continue into the face of the enemy volley, hence the importance of solid ranks. So that ranks should not waver, old soldiers were placed as file closers behind, to make the rear more terrifying than the front. From the French term for file closer, *serre gens*, comes our word sergeant.

The Prussian army of Frederick the Great developed the soldier automaton to the highest degree and his successes led to universal imitation of his methods. The American Civil War first showed the futility of drill maneuvers on the battlefields, but European military men, with their usual blindness to facts that conflicted with tradition, explained this away by characterizing it as a war of armed mobs. They thought the Americans lacked the courage to advance in close order. In Europe they still attempted to discipline men in formations adapted for the slow-firing muskets of the past, not realizing that rifles with a rate of fire of six or eight rounds a minute and the new tactics they entailed had made the old discipline useless.

In the Franco-Prussian War of 1870, the great Moltke attempted to keep his armies from massing on the battlefields, to no avail. His generals closed into enormous huddles in spite of orders. Soldiers were mowed down as they advanced in mass formations. They spread out instinctively, while officers belabored them to attempt to keep them massed. Von Schlieffen wrote with bitter sarcasm: "The simple men with narrow minds could not understand that they somehow served King and Country by letting themselves be killed in the second or third line. It surely could not harm Germany if, before being stricken with a soldier's death of honor on the field, they should strike down a few of the hereditary enemies. They did not want to die in vain and rushed forward to form a single line of skirmishers."

The initiative of the subordinate leaders multiplied the strength of the army. To the intelligent, hardy, and even sometimes somewhat reckless initiative of the German subordinate leaders the French had nothing to oppose, in the grand as in the minor operations, but a deliberate inactivity, always waiting for the impulse from above. No well organized army can afford to dispense with the

[1] Ganoe, *History of the United States Army*.

initiative of subordinate leaders, for it is the determining factor in war. So wrote Colonel G. F. R. Henderson of the Franco-Prussian War.

In the World War the greater number of French officers had gone ahead of existing regulations in treatment of their men. Their comprehension of the character and morale of their soldiers was the result of the citizen army and had prepared them for passing from the discipline of peace to that of war. Yet there were some failures that required understanding and patience to overcome.

Ludendorff realized early the need of independent action of small units and German training by 1917 contemplated reinstruction to encourage the initiative of noncommissioned officers. The great offensives of the spring of 1918 were based on infiltration methods by small units. German officers, however, were inclined to continue their traditional attitude toward the men. This resulted, in the latter half of 1918, in extensive agitation against officers, both in the army and at home. To this, partially at least, can be attributed the breakdown in morale when the military decision commenced to go against them. The officers were not close enough to the men to inspire them with their own tenacity.

The acute military students of Germany did not fail to draw true conclusions. In the German army today, all officer candidates serve a year and one half in the ranks, one year as a private and six months or more as a noncommissioned officer. Discipline is as meticulous as ever, but to it is joined a very real comradeship. The private who clicks his heels and snaps into an immobile salute to his captain, may be his host at dinner that evening. In no army in the world today does there exist a finer relationship between officer and man combined with outstanding discipline. The spirit of German regulations, which prescribes "Real comradeship is just as important between officers and men as between the men themselves" is followed.

The Americans had not learned when the war ended; their excessive and needless casualties resulted as much from undue massing on the battlefield as from ignorance of staff and commanders. We can take the evidence of General Charteris, a friendly Briton, who wrote: "A distinguished American staff officer who visited the battleground immediately after the fight brought back word that on this front the American dead lay in long orderly lines, a tribute to the high spirit and splendid courage with which they advanced to certain death." A sacrifice, rather than a tribute, to the god of drill on the battlefield. Anyone with an ear to the ground could discover the undercurrent of dissatisfaction during the last months of the AEF. What its volume and result might have been by spring, no one knows. The War ended before we, too, had to learn the lesson the French and Germans digested.

The old discipline of drill has been useless in battle for a hundred years. Overemphasis on it today is only another evidence of the force of tradition and custom in armies. Tactics requires independent action of the most modest units. Drill, which aims at suppression of individuality, unfits men for independent action. Ludendorff realized this and wrote after the war: "Young men, strong in their free development and rooted in the nation and state, will in most cases be more suitable for the tasks of military service than youths formerly drilled in mass and deprived of personality. These young men are more fitted to perform the necessary deeds independently than are members of drilled youth. If here and there they have more difficulty in mastering technical proficiency, it will not matter. Their spiritual strength will enable them in good time to achieve even better results."

The squad executes its mission on the battlefield alone under the eyes of God. Decentralization is the characteristic of battle today. It demands a corresponding discipline. Independent action of men and small detachments, which is the basis of tactical collaboration, is a technical necessity and can only be met by a form of intellectual discipline. It requires a force of character that no longer is the property only of the higher leaders. It must be cultivated in the modest grades. Unless morally controlled, execution escapes control. A discipline of honor, responsibility, duty, devotion, is the only discipline that meets tactical needs and will stand the strain of war.

Citizen or Serf?

At the same time that dispersion on the battlefield was making a new discipline mandatory to establish control, social changes in democratic countries were producing citizens who could be made to conform to the old discipline with difficulty. Tactics demanded a new and more difficult discipline and so did democracy. Military institutions displayed their well-proved vitality by resisting both tendencies. Today, if independence and education had not supplied young men with natural initiative and responsibility, the army would be forced to develop these qualities, just as they always have developed courage, pride, obedience and self-sacrifice. The tendency remains even today to destroy the foremost virtues of our soldiers by trying to mold them to a pattern of war and society that long since has disappeared.

No longer do noble officers command their peasant followers by divine right. Field Marshal Count Schwerin once declared that Fear and Love were the two instruments by which the soldier must be governed, and then added that unfortunately Fear had to perform the lion's share. Frederick the Great's soldiers were the lowest of his citizens. Large numbers (tall men, especially) had been kidnapped by his recruiting officers. To keep them from deserting, he prescribed in his instructions to his generals, that camps should not be made near woods, since woods made escape easy; that night marches should not be undertaken; on the march through woods, that mounted guards should patrol the flanks of the columns, and so on. Frederick's army was a jail on the march.

"All that can be done with a soldier," he wrote in his Military Testament, "is to give him esprit de corps, i.e. a higher opinion of his own regiment than of all the other troops in the country, and since his officers sometimes have to lead him into the greatest dangers (and he cannot be influenced by a sense of honor) he must be more afraid of his officers than of the dangers to which he is exposed." That was just the argument of Xerxes, Herodotus tells us, but the democracy on the march that was Greece in war, defeated the driven hordes of Persia.

Not many years after the great Frederick's death, the revolutionary mobs of France, fighting under the banner of "Liberty, Equality, Fraternity" defeated the drilled Austrian and German armies. Incredible, but true. True discipline had been developed in the place of formal discipline and patriotism took the place of the cudgel. The lesson was not lost on Germany. While the rest of the world continued to imitate Frederick the Great and Prussian discipline, Scharnhorst first, and then Prince William of Prussia in the 1840's and fifties, carried through reforms that encouraged a high degree of initiative in the officer ranks, at least. But in England the Duke of Wellington was deeply mortified when British soldiers were permitted to have reading rooms and educational instruction. "Such centers," he said, "will eventually only prove themselves to be foci of mutinies."

Discipline has not discarded all the remnants of these traditions. Not infrequently the citizen soldier of today is as well educated as his officers. He has an equal endowment of patriotism, an equal understanding of the cause for which he serves, an equal devotion to duty and country. He may be inferior to the officer only in military knowledge and he seeks to remedy this with an eagerness that needs no driving. And perhaps he has been accustomed to greater independence of thought and action than is permitted to professional army officers.

The citizen of today is not suited to the ancient discipline, and fortunately so, for the ancient discipline is not suited to war. He will resent it and hate it. He will accept it from patriotism, as the worst of the horrors of war. When he realizes its futility, his dislike will turn against the men who enforce it—his officers. Too frequently, he is not analytical enough to distinguish between the system and the helpless products of it.

The young American is disciplined, although not drilled. He has gone to school and arrived there promptly in time for classes five days a week, nine months a year, for eight, twelve, or sixteen years. He has been given study assignments to do at home and does them without a preceptor looking over his shoulder. He has learned leadership and coöperation in group games. He has driven a motor and has learned the discipline of traffic. He comes to the army with the elements of just the kind of discipline the army needs, that is, submission to necessary authority and independent action within its limits. He

"The great Moltke attempted to keep his armies from massing on the batilefield, to no avail. His generals closed into enormous huddles. Soldiers were mowed down as they advanced in mass formations."

obeys willingly and intelligently when he knows the need for obedience.

Obedience is the foundation of discipline, but obedience can no longer be blind. At one time it was literal and formal. It tends to be so in peace. In war, with superiors invisible, with conditions often different from those assumed when orders were issued, the combatant is the sole judge of how best to obey. His formidable duties will only be performed if his own initiative takes control. The back-seat driver cannot be heard in the roar of battle.

General Cordonnier relates in his book, *Obedience in Armies*, an example of literal (or passive, or instinctive) obedience. The advanced elements of the French 3d Division occupied a salient along the south bank of the Aisne in September, 1914. The retreat was still on. The roads were filled with convoys of fleeing peasants, women and children. A German battery in plain sight was firing on the helpless mass. It then shifted its fire and adjusted on the advanced elements of the 3d Division. A battalion of French 75's, occupying the heights to the northeast, continued to remain in surveillance to the north without replying to the German fire, although the German battery was within range. Its commander turned his field glasses on the German battery and limited himself to that. It was not in the sector assigned to him, so he did not take it under fire; he allowed it to massacre his comrades of the 51st Infantry. He was obeying orders without argument or reclamation. Such obedience may do for an army in peace but it is worthless in war. Obedience in war is a means of collaboration and is not an end in itself.

That evening, General Cordonnier was ordered by his corps commander, General Gerard, to withdraw his artillery along certain routes at a specified time and to assemble it at prescribed points. Mist drifted over the field in the dusk. The advanced elements along the Aisne were weak. There was danger of a German advance in the mist and growing darkness and this might cut off the withdrawal of the artillery if it were not pulled out immediately. But the orders had prescribed a later hour for the withdrawal. General Cordonnier ordered all eighty-four guns out at once by all available roads. As he had feared, one of the bridges over the Aisne had not been destroyed completely when it was blown up and the Germans came across on his flank and rear in force. Had he complied with his orders much of his artillery would have been captured.

"Cordonnier," barked General Gerard, the next morning, "when I give orders, I expect them to be executed. I fixed an itinerary, the assembly points for guns, you did something else; I do not permit that." Cordonnier had not obeyed orders literally and in consequence had saved the division artillery and part of the corps artillery from capture. General Gerard, later in the day, recognized the virtue of General Cordonnier's disobedience and praised him for it.

An incident a week later showed that the corps commander was gaining a new conception of obedience. The retreat had been halted. Joffre was starting his counter-offensive. The 3d Division was holding the enemy a half-day's march north of the Marne. Bridgeheads had been prepared north of the Marne so that an offensive return could be launched from there. But Joffre's orders were to hold in place at all costs.

A general staff officer came with a message from the corps commander ordering the 3d Division to withdraw to the Marne. The order explained the dangerous situation of both flanks of the division. Cordonnier thought he could hold and continue to hold. The longer he thought about withdrawing, the madder he got. He started to complain violently to the staff officer, damned General Gerard and all the wooden heads at corps command post. Captain Schweisgut, the staff officer, looked pleased and said: "Give me back the order and act as if you never had received it." General Cordonnier expressed his astonishment. General Gerard had instructed Captain Schweisgut: "I am afraid that Cordonnier will insist on resisting beyond the capacity of his troops. Give him this order which will show him the situation as it is. If after the authorization for withdrawal has been given, after he has been informed of the dangers he runs, he kicks about it, take the order back and bring it to me." General Cordonnier kicked, held, and the next day started in pursuit of the retreating Germans.

This astounding evolution in the corps commander's ideas of obedience took place in only a week of war. But how far he had traveled from the conceptions of obedience and orders in peace! It involved complete recognition of the right of the man on the ground to obey according to the situation with which he was confronted.

As armies have become larger and fronts solid, a curious reversal in the echelons in which independence must be granted has taken place. Formerly, the generals properly were allowed a great degree of independence of action. Now the actions of divisions, corps and armies take place slowly, over days and weeks; the radio, telephone and motor transportation between higher headquarters keeps the superior staffs informed of the larger situation. Orders to large units are based on accurate and timely information. But in squads, platoons and companies, although their action may take place within a mile or two from their superiors, information and orders cannot be sent or received; they have to act independently. The corporal, the sergeant and the lieutenant have to be given greater freedom of action in their spheres than the general in his.

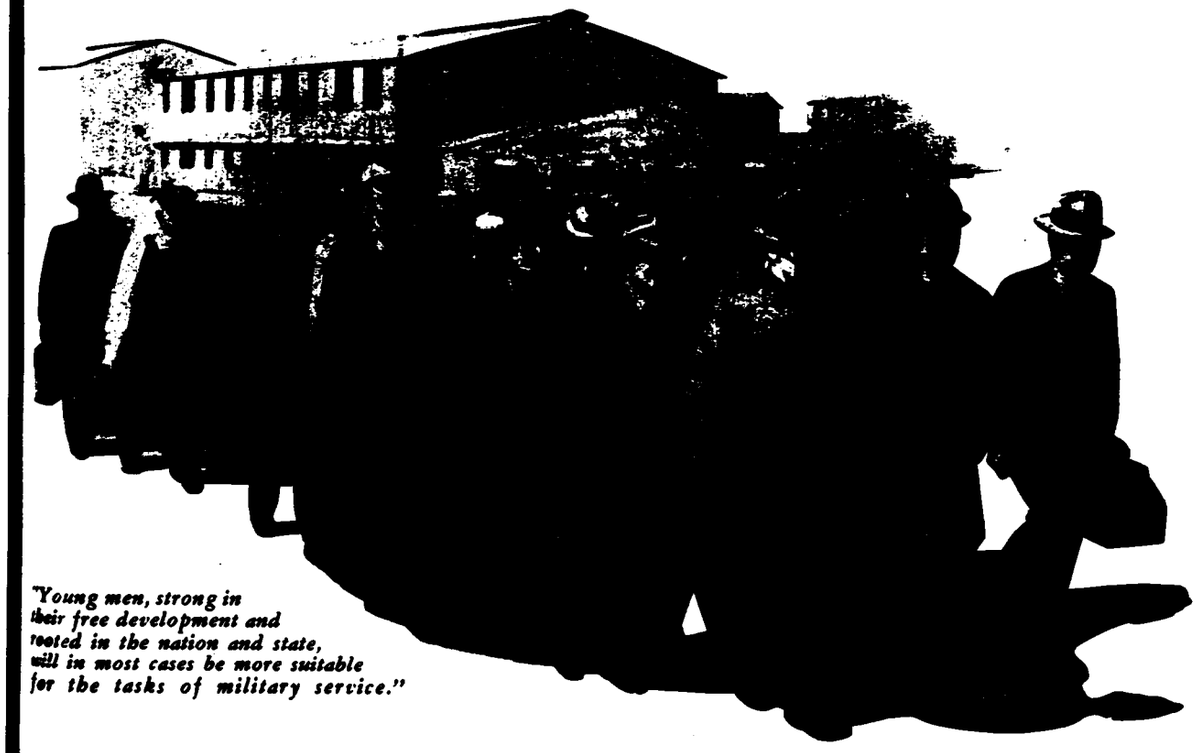
Initiative or Disobedience?

Initiative, like liberty, has limitations. It is essential that initiative does not become disobedience. Orders do not execute themselves nor debate their execution. True initiative consists in the adaptation of the order received to the circumstances of the moment at which it must be executed. In the German army modification of an order, that no longer fits the conditions that existed when it was issued, is a duty and is not considered as disobedience. Is that lack of discipline?

A division was ordered to attack at 4:00 A.M. In its assault the previous day, it had gone far beyond its objective and had lost its artillery. The artillery could not get up and support the attack until 10:00 A.M. The chief of staff, on the ground, countermanded the order and directed the attack to take place at 10:00 A.M. when it could be supported. He knew that an attack without artillery support could have but one result: no ground gained, a bloody check, and futile dead and wounded. But the chief of staff's order was countermanded by the division commander. He feared to explain his difficulties to the corps commander; he had been trained that orders should be obeyed; "theirs but to do and die." The attack was launched at 4:00 A.M., somewhat disorganized by the change in orders and without artillery support. Not only was it stopped with the loss of several thousand men, but the enemy counterattacked and regained all the ground they had lost the previous day. The division had to be withdrawn and its replacement lost five thousand men retaking the ground lost.

That was discipline. In battle, orders often are given that are unexecutable when received. Should they be obeyed? Should men be killed uselessly simply to support a military tradition of obedience? There is a way out without disobedience and lack of discipline. The French army had to discover it.

At Joffre's initial consultation with his army commanders, called August 3, 1914, for discussion of the



"Young men, strong in their free development and rooted in the nation and state, will in most cases be more suitable for the tasks of military service."

French plan of attack, the high commanders anxiously waited for decisive words which were to be pronounced. They heard only banalities. Finally General Dubail asked a question: What should be done in case of such or such an eventuality? Joffre replied: "This plan is your plan, it is not mine." Meaning—you have your orders, execute them. On a later occasion, General Franchet d'Esperey, who knew conditions on the ground, objected to certain orders and feared that they could not be obeyed. Joffre replied that it was d'Esperey's business to issue the orders and the soldiers' to obey them.

Before the Nivelle offensive in April, 1917, the entire army, except the General himself, knew there was little chance of success. They knew of the insufficiency of artillery support and that the plan to form reserves from assaulting units on the field of battle, for exploitation, was only a dream. Nivelle would listen to no objection to his plans, either from his staff or from his army commanders. His great offensive was a bloody and futile disaster and led to mutiny in the French army. This was discipline. Nivelle issued orders and they were obeyed. Result: mutiny—indiscipline complete.

Pétain's first order when he succeeded Nivelle in command of the French armies in May, 1917, was the following:

NOTE RELATIVE TO THE ATTITUDE OF COMMANDERS

Our officers for three years have given the most heroic proofs of courage and nevertheless they hesitate to inform their superiors of the difficulties that confront them from fear of being taxed as of timorous spirit. It is the duty of commanders, by their attitude, to resist this tendency. The superior should give his subordinate a friendly welcome and show his desire to aid him to triumph over the difficulties which stop him, ask for useful information, and even provoke it. The kindly attitude of the commander conforms to the most noble traditions of the French Army. It does not exclude firmness. The professional confidant of the officer is his superior. The superior should justify this confidence which repotes on reciprocal esteem and common devotion to the country.

Here was precisely the opposite of the previous attitude: "You have your orders, obey them." Petain's attitude is practicable with officers. To what extent can it be carried into the ranks? Should every soldier be encouraged to come to his officer and complain of the difficulties he finds in carrying out the order he has received? Obviously not. The solution lies in provoking the reaction of the soldier.

Napoleon kept perfect account of the state of mind of his men, in spite of appearances to the contrary. After the half-victory and fearful butchery of Eylau, when he passed among his troops, in the middle of cries: "Live the Emperor," many soldiers were heard to call: "Long live peace," or "Give us bread and peace." At such times Napoleon rebuked his men, but in actuality he took account of their humor. At other times he walked among their bivouacs at night, sat down with a group and shared their bread and cheese, and learned their state of mind. He could not admit that he was influenced by such considerations, for that would have injured his authority. But he sought these evidences and took them into account, correcting both the morale and getting at the source.

General Debeney relates that in March, 1918, he had received the mission to form the First Army and close the gap the German offensive had driven between the French and British. There were days of desperate fighting. During the night of March 27th, he visited the 12th Division in a village they had just retaken. With the regimental commander he circulated among the groups of men and stopped by a strong light used to care for the wounded, so as to show himself clearly. He was quickly surrounded by a considerable circle. He explained the situation, told the men they would have to hold for two days before reinforcements would arrive. As he spoke he examined their faces and found again the determination of Verdun. He was sure they would hold.

During the second battle of Guise, at the end of October, 1918, the preparation for the attack on the Sambre canal did not go well. The troops complained of incessant bombardment with gas shell. The Army Commander knew that the action of German artillery had diminished greatly, so he went to the front lines and quickly saw that the troops had no confidence in the success of the attack because the preparatory measures seemed incomplete to them. They were right. A phrase of his instructions had been ambiguous and had been incorrectly interpreted. He rectified the fault and "the enthusiasm of these brave men was restored immediately."

The soldier becomes a first-rate tactician in war. He knows when artillery support is lacking, when he should have aerial support, how much tanks help. The same man,

"Its commander turned his field glasses on the German battery and limited himself to that. It was not in the sector assigned to him, so he did not take it under fire; he allowed it to massacre his comrades."

who without complaint will stay with his machine gun until he is killed to protect the withdrawal of the main force, knowing it to be necessary, will be mutinous if required to risk his life in a poorly planned and unsupported operation. As Liddell Hart remarked so justly: "The mutinies of 1917 were to show that the incapacity of generals and their waste of human lives are the most potent factors in disturbing the spirit of discipline."

August 8, 1918, was declared the "black day of the history of the German Army in this war" by Ludendorff, because of the breakdown of discipline. On that day "whole bodies of our men surrendered to single troopers or isolated squadrons. I became convinced that we were now without that safe foundation for the plans of General Headquarters, on which I had hitherto been able to build." Unfulfilled promises had destroyed the confidence of the German Army. At that time their inferiority of numbers was not greater than allied inferiority had been in March and May. With discipline, they could have continued the war for a long period. Without it, the German armies melted twice as fast as could be accounted for by casualties.

COMMISSAR OR COMMANDER?

The commissar system of the Russian Army is an original disciplinary development of recent times. Initially, commissars were installed as co-commanders in the Red Army during the Revolution because the proletariat had no trained military commanders and were forced to depend upon Czarist officers whose loyalty they distrusted. The lack of education of the Russian soldier made political and educational training necessary to give him enthusiasm to fight. This duty devolved upon the commissar. Hence he became an educational and morale officer, independent of the commander, as well as a reporter on the loyalty of the military chief.

The disadvantage of the commissar system lies in divided authority. Discipline and moral leadership, the most important function of command, was taken from the commander's control. The commissar has a separate chain of command, independent of the military hierarchy. The commander must please the commissar as well as his own chief. Divided authority makes coöperation difficult and divided loyalty on the part of the men leads to disunion.

The system was adopted by the Spanish Government army in the Civil War. It must be given credit for maintenance of a morale that survived two and one half years of unparalleled hardship and almost uninterrupted defeat. But it must be charged with the destruction of initiative and authority of Government commanders and with the resulting military incompetence. From the western point of view, it would be more suitable to make the commissar the commander and supply him with a competent military staff.

"At other times he (Napoleon) walked among their bivouacs at night, sat down with a group and shared their bread and cheese, and learned their state of mind."

From the two armies supplied with commissars can be learned the tremendous importance of morale and patriotic training. In western armies it is largely neglected. In the German and Italian armies it is given in the premilitary training. Soldiers, in the democracies, are assumed to come to the army with patriotism and enthusiasm for the cause. Their initial endowment is insufficient. They need further education. To support the discipline of war, they must be given an overmastering faith in their cause that will survive all the hardships and disintegrating influences of modern battle and hostile propaganda. A minor staff officer, called the "morale officer," who supervises athletics and the like, is merely an avoidance of the problem. The maintenance of the discipline of morale is as important as the planning of military operations. It requires the primary attention of the commander. Patriotic and morale training must be organized with as much attention as is devoted to food and munitions. It is the basis of the will to fight.

The Parade of the Wooden Soldiers

"Disciplinary drill" seems to have been left far behind. But it is difficult to find an experienced officer who does not believe in the disciplinary value of drill. Originally devised for battle, it has been retained in armies for elementary disciplinary training. It appears to be the best means yet devised of developing group unity and the expectancy of obedience in the early stages of training. In armies where drill has been made an end in itself, it has defeated its purpose. Too much of it develops either resentment or boredom, or an automatism that destroys initiative.

In the German Army there is little drill after the recruit stage of training. Drill is exceedingly simple. The parade step—the mis-called goose step—of the German Army is a true disciplinary drill. Its patent inappropriateness to battle has prevented giving disciplinary drill in Germany the over-emphasis that has characterized training in the British and American armies. In Germany, the nation that Americans like to think of as regimented and drilled out of all semblance of initiative, the "mechanical heads," as Scharnhorst called them, did not triumph. They did in our democratic army.

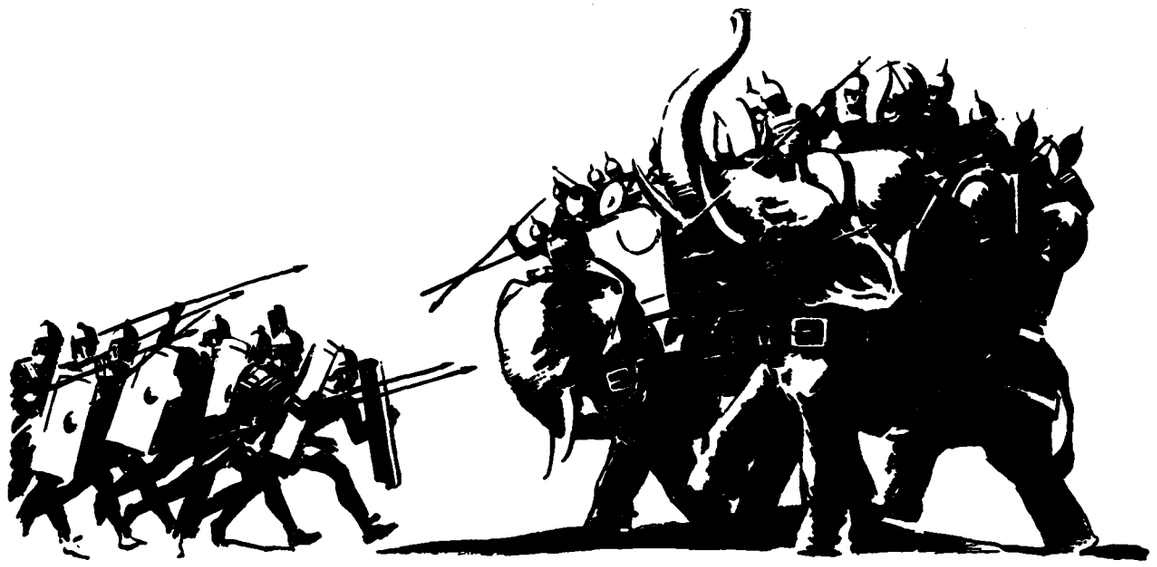
Perhaps a new day has arrived with the recent adoption of simplified drill. Many will miss the clean-cut artificial evolutions of drill. The stubbornness of the "mechanical heads" may yet destroy a reform one hundred years overdue.

* * *

Literal obedience, like formal drill, has no application to discipline in war. It is necessary to cultivate the habit of reasoning about orders received. The tradition that an order shall not be discussed or argued until after it has been obeyed is as absurd in war as battalion parade on the battlefield.

The foundations of discipline are the sentiment of duty that must be fulfilled, cost what it may; the will to sacrifice; the possibility of fulfilling the duty required; and a competent hierarchy of leadership.

"The only lasting discipline is that which comes from free and voluntary acceptance of the obligations of those who have part in collective action." (General McGlachlin.) Discipline is the means of bringing the moral forces into play; to the strength of each is added the force of all. "After inspiration, that which is most beautiful is devotion; after the poet, comes the soldier." It is of voluntary submission, abnegation and sacrifice that discipline is composed and it is these that make it truly the glory of the soldier and the principal force of armies.



CANNAE: The Perfect Battle

By Chaplain Edward Barkley Wilcox

Officers Reserve Corps

When a study of the battle of Cannae is contemplated two questions address themselves to the student, both of which deal with the value of such a project. The first is this: In view of the present-day development of the art of warfare, with airplanes, long-range guns and chemical defense, of what conceivable value can the study of so ancient a battle be? The second question runs thus: If this be the "perfect battle," then surely has not enough been written about it by those who are experts in the field? Such doubts constitute fair questions and must be reasonably answered.

As to the first, Napoleon supplies the answer in his so-called 77th Maxim: "Gustavus Adolphus, Turenne, and Frederick, as well as Alexander, Hannibal, and Caesar, have all followed the same principles." And in addition to this it is very much to the point to remember that the Schlieffen Plan drew its inspiration from Cannae. To the young officer of today Napoleon speaks again, saying in his 78th Maxim, "Read and reread the campaigns of Alexander, Hannibal, Caesar, Gustavus, Turenne, Eugene, and Frederick; model yourself upon them; this is the only way to become a great captain and to discover the secrets of the art of war."

Regarding the second question, it may be a matter of surprise to many to learn that comparatively little has been written on this subject. In English the only complete and thorough work dealing with this battle and its background is Colonel T. A. Dodge's *Hannibal*, a book of the first rank which reveals great learning and a detailed knowledge; everyone who makes so bold as to write upon Hannibal and Cannae must acknowledge their debt to this author. Indifferent articles have appeared at rare intervals but these are incomplete and leave much to be desired. German students—military and otherwise—stand first in productivity in this field. A consultation of the card catalogue in both the Library of Congress and the library of the War College will be sufficient to convince one of the scarcity of writings in this specific field.

Another reason is adduced: a certain black and white atmosphere attaches to the study of former famous actions. Black lines on white paper indicate the course of certain streams, the location of hills and woods, and objects artificial as well as natural. The contending forces are represented by little squares and oblongs, dotted lines and arrows indicating the direction of their movements. To all of this there attaches the dry and lifeless bookishness of half-forgotten annals of the past. One desires a more colorful picture of this epic event and wants to know how the Roman maniples maneuvered, how the Numidians rode, what the Africans looked like, and how the Gauls used their longswords. The purpose of this article is to revive in our imagination the full, colorful, throbbing life of a day that once held the stage of human history with as much living reality as does our today. The dim outlines of the past are here filled in with a minuteness of description which aims to identify the struggles of long ago with their counterpart of the twentieth century, so that the American doughboy will recognize his own martial brother in the legionnaire of ancient Rome or the hoplite of old Macedonia.

SOURCES

The main sources of information for this period are derived chiefly from Polybius and Livy. Polybius, a Greek historian, who was one of the thousand hostages of the Achaean League, lived in Italy from 168 B.C. until his death, at eighty-two years of age, in 120 B.C. Livy, a Roman historian, flourished in the Augustan era and stood high in the favor of the Emperor. Both of these men are authoritative and rise head and shoulders above the generality of historians of their day. Polybius is the earlier and the closer to the events recorded; he is dependable, logical and little given to belief in miracles and superstition which marred and distorted the ordinary pages of ancient historical record. Livy, the Roman, wrote in a style highly approved by the literary critics and was at

Map 1: The Mediterranean World

the same time a good, creditable historian; it is not unnatural, however, that much of what he writes is tinctured by Roman prejudice. All subsequent records of the Second Punic War are based, for the greater part, upon these two; whatever is additional is of comparatively little worth and need not be mentioned here. It must be remembered that with the destruction of Carthage in 146 B.C. all historical records of that state were lost and our knowledge comes to us, almost in its entirety, through Roman sources.

THE BACKGROUND

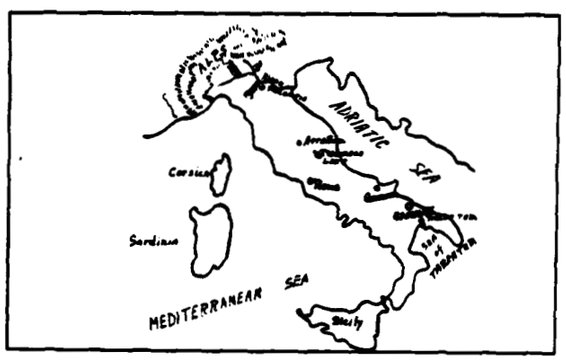
The conclusion of the First Punic War in 241 B.C. saw Carthage defeated and humiliated, and crippled by the loss of her control of the western Mediterranean. She was primarily a commercial and an agricultural city whose citizens had no time to devote personally to the defense of their country, for out of an army of 70,000 only 2,500 were Carthaginians. Her empire, was, therefore, extended by armies supported by Carthaginian gold which bought and paid for her defense without shedding the blood of her citizens. The armies which maintained the imperium of Carthage were drawn chiefly from those nations with which she had commerce. Her realm (see Map No. 1) extended from Cyrenaica on the east to the Pillars of Hercules on the west, and from the sands of the Sahara on the south to the interior of Spain on the north.

The opening of the Second Punic War in 218 B.C. saw Rome in control of the Italian Peninsula (see Map No. 2) from the Sea of Tarentum to the sources of the Po. Roman genius for organization had effectually extended her Empire over the fears, as well as the land, of the nations of Italy, a fact which Hannibal found to be sadly true. The one exception to this rule was that of the nations of Cisalpine Gaul, who, fickle and inconstant by nature, ever awaited some plausible excuse for raising the standard of revolt against Rome. Whereas the Empire of Carthage was built upon commerce, that of Rome was founded upon the wisdom of the Roman Senate and the power of the Roman legions, the latter, indeed, being a psychological advantage of immeasurable proportions.

When, shortly after the close of the First Punic War, Hamilcar Barca was leaving Carthage for Spain, he was offering up those sacrifices calculated to propitiate the gods. His nine-year-old son, Hannibal, approached his father and requested to be taken to Spain with him; without a word his father took him and, placing his hand upon the sacrificial altar, bade him swear undying hatred toward Rome. Hereafter Hannibal's whole life was devoted to the one idea of studying and laboring to destroy Rome. When, some years later, after the death of his father and the assassination of his uncle, Hasdrubal, he took command of the army in Spain, his entire time was taken up enquiring into the state and condition of Italy; the attitude of its peoples towards Rome; the fertility of its soil; the chances of an invading army living off the land; the possibilities of Gallic aid, and all elements entering into a complete knowledge of his enemy and his enemy's land. Thus, with this ambition and labor, did Hannibal comprise within himself a majority of the functions of the G-2 of ancient Carthage.

THE CARTHAGINIAN ARMY

Organization: The psychology and the composition of the army of Carthage differed fundamentally from those of Rome. The army with which Hannibal opposed the Romans at Cannae was composed of men drawn from a great number of nations, none of whom were fighting with the motive of patriotism but all of whom were stimulated by the love of Punic gold. Apart from the Sacred Band, composed of citizens of Carthage, the army's mainstay was the African or Liby-Phenician troops, who served both as heavy infantry and cavalry; they were a mixture of native and colonial stock. Next, in order of strength and dependability, were the veteran troops of Spain and Gaul, they, too, serving in the same capacities as their African colleagues. Then comes that body, famous by reason of its incessant activity, as well as by their peculiar method of fighting, the Numidian cavalry. The rest of the army was composed of troops drawn from all the tribes lying between Egypt and the Outer Ocean. Ordinarily, the discipline of the Punic army left much to be desired; a great deal of this was due to the racial variety of the troops and to their individual training; nor did they have the common element and advantage of a unifying Latin speech. The remarkably good discipline of these



Map 2: Italy

troops under Hannibal witnesses to the presence of great personality. The Carthaginian troops were practically all veterans and this enormous advantage speaks for itself to the military mind. As we now examine the tactical aspects of this army let us remember that, due to the destruction of Carthaginian records, our knowledge is insufficient and therefore unsatisfactory. It is not known with certainty what tactical system was used by the Carthaginians but all writers on the subject agree that it must have been some form of the phalanx, most likely a descendant of the Macedonian phalanx of Philip and Alexander. A reasonable inference in this direction may be drawn from the fact that one of the chief leaders in the First Punic War, and the one who defeated Regulus before Carthage, was Xanthippus the Spartan. His training, discipline, and leadership of the Punic army must have had a lasting effect.

The smallest tactical unit of the phalanx was the tetrarchia which was composed of sixty-four men arranged in four files and thus being sixteen deep. Four tetrarchia formed a syntagma which was made up of 256 men arranged in sixteen files, sixteen men deep. Either of these arrangements could be maneuvered as a tactical unit. Sixteen of these syntagmas formed the small phalanx and was composed of 4,096 men. These tactical formations apply strictly to the heavy-armed troops or those known as hoplites. There developed in time a less heavily armed type of soldier, called peltasts, who took position in front of the hoplites before the main shock of battle came; these numbered 2,048 and since the length of their front was the same as that of the hoplites their depth must have been eight men. There may have been, also, a body of the lightest armed troops called psiloi, whose number would have been one-quarter that of the hoplites or 1,024. This class was most likely used for light skirmishing.

The cavalry unit was an ile, composed of sixty-four men arranged in sixteen files and thus being four deep. The total cavalry strength of the small phalanx was 1,024, thus making sixteen squadrons. Eight squadrons were placed on the left wing of the phalanx and eight on the right.

Such are the chief features of the Macedonian phalanx. How much its organization had changed within the century that followed the death of Alexander is not known, but it must have been comparatively little except for the shortening of the sarissa. The sarissa was a lance twenty-one feet in length, so balanced in its structure that the hoplite grasped it six feet from the butt end; this weapon had a marked effect upon the tactical organization of the phalanx because the solidity, and consequently the immobility, of the phalangial formation made effectual the use of this peculiar lance. The purpose of the phalanx was to present an unbreakable front which with one shock would break to pieces the enemy's formation or which, in defensive attitude, was impregnable; its superiority prevailed for almost two centuries. After an enemy formation was broken up, the cavalry would then come into play thus offsetting the immobility of the phalanx. The phalanx was effective only on level ground which was well cleared of all obstacles and this constituted a serious drawback. However, the magnificent discipline of the phalanx under Philip and Alexander overcame this difficulty, but it must be conceded that they had a mastery in its use equalled by none. However, apart from the unusual leadership of these two men, it must be kept in mind that the psychology of the phalanx was *defensive*.

Special attention must be called to the cavalry without which the phalanx would be in an impossible situation. In the Macedonian phalanx described above it will be noted that the ratio of foot to horse is seven to one; Alexander, who had the very fine Persian cavalry to deal with, usually maintained a ratio of four to one. Hannibal perceived the real importance of cavalry, which the Romans never did, and maintained this arm at a high ratio. When he completed, with a much reduced army, the crossing of the Alps his ratio of foot to horse was three to one. At Cannae it was four to one. It may not be inappropriately mentioned here that this high ratio was one of the reasons for the high level of the combat intelligence system in the Punic army.

Arms: In the absence of better evidence it is assumed that the arms of the Carthaginian troops were derived from Greek models. In order to see these arms in the natural context of their use, they will here be described by examining the equipment of the various classes of troops.

The Sacred Band, which was the corps d'elite of the Punic army, constituted a part of the heavy infantry. They are pictured as wearing a steel cuirass, a Boeotian helmet and greaves on both legs. Their shields were large and circular, somewhat more than three feet in diameter. Their arms were probably a short sword and a lance or pike. When not in combat they wore a red tunic and always had on sandals. The cavalry of Carthage was also drawn from the wealthy classes of that city and each member was distinguished by wearing a golden ring for each campaign in which he had served. These were clad in mail and wore helmet and greaves.

The rest of the heavy infantry was armed in the same manner as the Sacred Band, but their arms were not so rich in material or design. The Liby-Phenician or African troops fought mainly as heavy foot and horse, but after the battle of Lake Trasimene, Hannibal equipped them with the arms taken from the fallen Romans.

What we know of the heavy Spanish infantry and horse pictures them as wearing white woolen tunics, edged with red, and armed with the famous Spanish short sword (gladius ibericus) and a buckler made of wood and covered with bull's hide. Invariably, the cavalry carried two men on a horse, one dismounting to fight, the other continuing on horseback. This essential mixing of foot and horse seems to have proven a good device for Caesar's right wing at Pharsalia.

The Gauls appear to have presented a most colorful picture. Their hair was dyed red and worn either in a

knot on top of their heads or in a flowing manner over the shoulders. The ordinary soldier wore a full beard, while his officers affected only a mustache. Their helmets, of comparatively recent adoption, were crested with horns or feathers. Their vanity was exhibited in the numerous bracelets, torques or necklaces, and rings which they wore. In battle they fought stripped to the waist. Their characteristic weapon was the Gallic longsword which they manipulated by making long, sweeping blows, cutting wide swaths in the enemy's ranks. Until Hannibal had their swords made in Carthaginian factories, the metal was very poor and quickly dulled. Also, they carried lances with fire-hardened points, pikes with curved blades, and clubs and slings. Whatever the Gauls lacked in arms they made up for in their reckless courage and bravery.

The Liby-Phenicians shaved their heads and left only a small fringe of a beard, and adorned their natural appearance with liberal tattooing. They wore red hoods and white woolen skirts, belted at the waist and hanging to the knees. A cloak or a goatskin covered their shoulders and their legs were bare. Their weapons included a long lance, bows and arrows, sometimes a long sword, and bucklers covered with elephant's or bull's hide; also, flails and harpoons were peculiar to the arms of this corps. On their lances they used a device which the Romans called the "amentum" and the Greeks termed the "ankule." This was a twisted thong fixed near the balance or center of gravity of the missile weapon through which the soldier put one or two fingers as he poised the javelin for casting. The object of this cord was to impart more driving power and momentum to the weapon after it had actually left the palm of the hand; such a device is said to have doubled the distance that a lance could be thrown.

The light footman carried a small round shield of wood covered with hide and had as his weapons lances and javelins.

The term Numidian included a score of tribes scattered along that north African strip of territory that lay between the desert and the Mediterranean. The troops of these bodies had as their only defense a leopard or a tiger skin which they draped over their left arm to serve as a shield. Apart from their mounts they were worthless, but on them they had a definite value. They were armed with a lance, with several darts and with a sword. They were admirably adapted to partisan warfare and possessed great powers of endurance. They would charge the enemy with great elan, emitting terrible cries and yells, and on meeting resistance would wheel around, not to retreat but to attack again, and by this method they would attempt not only to inflict what injury they could but would endeavor to unsettle the enemy's morale. These tactics enabled Hannibal to use the Numidians to perfection in a holding attack upon the Roman left wing at Cannae.

Important among the soldiers of antiquity were the slingers. The Hebrews, especially the left-handed slingers of the tribe of Benjamin, enjoyed great reputation in this particular art. Slingers were considered as being much more effective than archers and were often used as a covering force to screen troop movements in the presence of the enemy, as was the case preceding Cannae. Hannibal had a force of 2,000 slingers known as Balacreans or sometimes Balearics; it is said that these men from the Balearic Isles derived their very name from their ability to sling stones, that is, from the Greek "ballein," meaning to cast or to throw. Xenephon is said to have been dissatisfied with his conduct of the Retreat of the Ten Thousand until he organized a band of slingers to protect his rear. The sling was made either entirely of leather or else made of cords with the leather at the end to hold the missile. When sufficient momentum had been gained by whirling it around the head, one of the strings was let go and the stone hurled at its target. A slinger usually carried two slings, one for lighter stones and one for heavier. Slingers wore no armor and carried their stones in a fold of their tunics in front of the breast whence they might be easily and quickly extracted.

THE ROMAN ARMY

Its Organization: Roman armies were composed of citizens to whose sense of shame there could be no greater tragedy than to be deprived of the privilege of bearing arms in the defense of their country. The Roman legion was completely and thoroughly Roman and the allied legions had an interest in the well-being of Latium and were trained in Roman methods and discipline. The Roman legion of the third century B.C. was known as the manipular legion which had, in the process of time and circumstance, developed from the old Dorian Phalanx. Space does not permit the tracing of the steps of its evolution but the legion here described is the one which the Romans used for two hundred years following the close of the Samnite Wars late in the fourth century B.C.

The original tactical unit of the Roman army was the century which, as its name implies, was composed of 100 men. This number later varied and at the time of Cannae was sixty men to a century. The century was composed of six files, ten men deep; this was joined to another century of like formation and the two, taken together, formed the tactical unit of the legion and was called the maniple. The maniple, then, had a front of twelve men each of whom headed a file ten deep. There were maniples composed of three classes of soldiers, known as the *hastati*, the *principes* and the *triarii*. The hastati, who closed with the enemy first, were twenty-five to thirty years of age; the principes who held the position in the rear of the hastati, were thirty to forty years of age; and the triarii, who as a sort of reserve, were veterans of forty to forty-five years of age. This last class composed a maniple on sixty men only. The three maniples taken together constituted a cohort and to each cohort was assigned a body of 120 light-armed troops called *velites*, who were young men ranging from seventeen to twenty-five years of age. Thus the cohort, which was the larger tactical unit was composed of 420 men. Ten cohorts made

a legion, that is, the infantry of the legion, and totalled 4,200 in number. Sometimes the strength of the legion varied, going as high in times of unusual danger as 6,000. The cavalry unit was called a *turma* and was composed of thirty men, arranged in ten files, three deep. Ten turmae composed the cavalry wing, or *ala*, of the legion. Thus, the total strength of the legion normally amounted to 4,500 men. Now, more often than not, the ancient writers in referring to a legion mean *one* Roman legion *plus one* allied legion, that is a legion from one of the Italian states whose relations to Rome were regulated by treaty. The allied legion had a numerical strength equal to that of the Roman legion with the one exception that its horse consisted of 600 instead of 300. Thus, the legion understood in this larger sense meant a body of 9,300 men. Two such legions operating together formed a consular army.

The maniples were arranged in "quincuncialis" or checkerwise fashion and between them there was an interval supposed to be approximately sixty feet in width. The historical records do not tell us enough about these intervals and they can be spoken of only with reservations. While the intervals gave the legion the mobility which characterized it, they still were a source of weakness, for the more courageous enemies of the Romans infiltrated here and endangered the functioning of the maniples. The Romans being well-disciplined could face either to the right or to the left to meet an enemy who had penetrated the interval, but nevertheless this was still a source of danger.

The legion was essentially *offensive*. It did not wait for the attack as did the phalanx but always took the offensive immediately. Whereas the phalangite could hold his opponent off at some twenty feet distance, the Roman, after casting his spears (pila), made haste to come to close combat and use his effective *gladius* or sword. It is interesting to note that as long as the Roman army was composed of free and voluntary citizens, the intervals remained; but when the army became mercenary and professional, the intervals were abandoned and the ten cohorts closed up in a manner reminiscent of the old phalanx. The old Roman citizen soldier could be counted on to exhibit great courage and for love of home and country would risk any danger. When the great, burly Gauls first saw the Roman soldiers they laughed aloud at their diminutive stature; but when they came to close quarters, the laughing stopped. When the legionnaire had dulled the edge of the Gallic longsword, he closed under his opponent's guard and dispatched him with a thrust of the short sword. The average Roman soldier was between five feet and five feet four inches tall; if they had the choice of a man over or under that height they would always choose the shorter man, for they considered him far the better soldier.

The cavalry was the chief source of Roman defeats. In this arm they were notoriously weak, chiefly because Romans had some inherent antipathy to mounted service. The Roman legion had a ratio of fourteen foot to one horse; if, however, the term be used to include the allied legion, then the ratio was nine to one. At Cannae, the Roman ratio of foot to horse was ten to one, whereas the Carthaginians' was four to one, a comparison which is extremely significant. At Zama (202 B.C.) the Romans showed that they had profited to a degree by the lessons which Hannibal had taught them in Italy in the value of the cavalry, but despite this their apathy to serving on horseback never wore off. By Caesar's time there was no Roman cavalry, this service being performed by allied troops, famous among whom were the Batavians who saved the day at Pharsalia.

Battle Order: An engagement was opened by the sounding of the cornu and the tuba together. This was followed by the battle cry, which of itself was frequently an indication of victory or defeat, depending upon the heartiness or the weakness of it. At a second signal the troops advanced at a quick step. Sometimes there would be a third signal for the double-quick which would be accompanied by loud shouts and the clashing of spears on shields, as well as by a blowing of all trumpets and horns. The velites then engaged in light skirmishing. At the advance of the hastati, the velites would fall back, by way of the intervals and take up a position in the rear, while the heavy armed first line would engage the enemy seriously. At eight or ten paces they would hurl their pila and then close with the gladius. Should this first line of troops tire or be overcome, then the second line or the principes would advance and continue the work of the battle. The triarii or the third line, composed of the most experienced veterans, would kneel on one knee, with their shields in front of them warding off missiles. The cavalry would usually engage the enemy cavalry at the commencement of the battle, though this was not always the case. At the Metaurus (207 B.C.), Hasdrubal seems to have had no cavalry at all. The cavalry, if victorious, engaged in the pursuit of the enemy.

Arms: The hastati or first line troops were completely and heavily armed. They wore helmet, cuirass, and greaves and carried a shield, sword and two pila. The helmet, derived from the Boeotian helm, was close fitting, covered the back of the neck, sometimes was equipped with a nasal and carried a crest. The crest which ran transversely to the Greek style, consisted of a circle of feathers, with three upright feathers, either black or red, rising to the height of about one foot. Two or three types of cuirass were worn at this period. The simplest was the pectorale or heart protector, consisting of a square piece of metal large enough to protect the thorax hung over the chest and counterbalanced by a similar plate hung down the back in a parallel position the two connected by two thongs. The other two kinds worn were called by their Latin name, *"lorica"* which is equivalent to our word cuirass. The laminated lorica being composed of lames or plates of steel was often worn by officers in Imperial times. This cuirass consisted of 7 strips of steel which, sewn to a tight fitting leathern jacket, encircled the body, opening down the front and hinged in back. Four or more lames passed over the shoulders and supported the weight

of the cuirass, being pivoted at either end and working freely; directly in front and attached to the lowest lame, were three or four dependent lames or lambrequins. The segmented lorica consisted of a leathern jacket upon which were sewn small pieces of metal and which had the appearance of a coat of mail.

The shield of the hastati either square or oblong, curved in cylindrical fashion on about a nine inch radius. The shields of Imperial times seem to have been longer than in the late third century; they had borrowed this shield from the Samnites and called it the "scutum." It is reproduced on Trajan's Column. The thickness at the rim was a palm's breadth and both upper and lower rims were protected by an iron edge. The shield was made of two planks of wood glued together, the outer surface being covered first with canvas and then with calfskin. In the middle was an umbo or iron boss, effective in warding blows as well as in pushing against the foe.

The Roman sword was the famous *gladius* or short-sword borrowed from the Spaniards; this sword is said to have killed more humans than any other type. It was a straight blade 22 inches long, 4 inches wide and double-edged; the width was uniform and the point acute. The psychology of this sword was that of bravery; it required the closest sort of combat, whereas the twenty-one foot spear of the hoplite kept his adversary at a respectable distance. It was a cut and thrust weapon, the thrust being considered the more effective of the two methods. Vegetius, in his De Re Militari, says that the Romans owed their victories to the point rather than to the cut, for, he says, "When cutting, the right arm and the flank are exposed, whereas during the thrust the body is guarded, and the adversary is wounded before he perceives it." Richard Burton, following Vegetius, says, in his "The Book of the Sword," that "Even now it is remarked in hospitals that punctured wounds in the thorax or abdomen generally kill, while the severest incisions often heal. General Lamoriciere, a scientific soldier, recommended for cavalry a cylindrical blade, necessarily without edge, and to be used only for the thrust; practical considerations, however, prevented its adoption." The hastati also carried two pila or spears used as missile weapons. The stout ones were either round or square and were a palm's breadth in diameter. The fine ones, carried in addition to the stout one, were about four feet in length, each one being fitted with a barbed head; this barb was sometimes used to pull away an opponent's shield.

The principes and the triarii were armed in this same manner excepting that the triarii carried long spears or hastae which they used in the fashion of the pike.

The velites were light armed troops. They wore no cuirass or corslet but simply a tunic made of leather and scalloped at the bottom; some are supposed to have worn tunic of quilted linen. Their helmet was a plain casque with cheek pieces but no crest; this they covered with a wolf's skin or the like which served not only as a protection but also as a mark of distinction. The helmet was lined with leather or sponge. Their shield was that type called the parma which had, in earlier days, been adapted from the Etruscans; it was three feet in diameter, made of wood and covered with leather. The velite usually carried a javelin four feet long, the iron tip of which measured nine inches; this tip was hammered out to such a fine edge that it necessarily bent on first impact and it would therefore be useless for the enemy to return it, its effectiveness having been destroyed. If, at times, the velite carried darts they were about thirty inches long and about the thickness of the finger.

The Roman cavalry of this period was poorly armed, a defect which was not remedied until near the close of this war in 202 B.C., and at the time of Cannae they were greatly inferior to the Spanish and African horse. What little they had in the way of armor was poor. Polybius tells us that their shields could stand but very few rains; the water would cause the bull's hide which covered them to curl up and crack, leaving the uncovered wood exposed to the elements. These shields were either round or oval or hexagonal. Their lances were tipped at both ends so that if one end became bent or broken the other end would be usable. That they learned valuable lessons from Hannibal's cavalry was indicated by their equipment at the close of the Second Punic War which consisted of helmets, greaves, darts, twelve-foot lances and curved swords.

Miscellany: A brief comparison of rank in the Roman army with our own system will not be inappropriate at this point. The Consuls, elected yearly by the Roman people, were the army commanders. If both consuls were with the army at the same time, as was the case at Cannae, they would command on alternate days. Unless granted special permission by the Senate, the army commander must serve on foot. He was distinguished by a purple mantle and was accompanied by anywhere from two to twelve lictors, as the occasion warranted. Next in command were the Legates, whom the Senate appointed, and whose rank compares with that of our generals of divisions. The War Tribunes ranked with our brigadiers or colonels, but their duties and the rotation of command caused them frequently to perform the work of lieutenant colonels and majors. The Centurions who were the heart and strength of the army, approximated our captains; there were two to a maniple, a senior and a junior. The lieutenants of today were then represented by sub-centurions who commanded half a century each. The Signifers or color-bearers were men of unusual bravery and physical excellence who ranked as do our sergeants. The Decurions or corporals commanded files of ten men each and made up the front ranks of the maniples.

The General Staff, if such it may be called, consisted of quaestors or legates who served as paymasters, quartermasters, commissaries and ordnance officers. The aide-de-camps were volunteers known as contibernales. The mensores and censores were a special type who oversaw the making and the breaking of camp. Ante-mensores and ante-censores were the topographical engineers. Augurs

and priests, who always accompanied the commanders, were constantly consulted for omens.

Flags were originally used to call troops together. The standard, as such, seems, according to some authorities, to have originally been a simple affair, consisting of no more than a bundle of straw on the end of a stick; later a hand was carved and mounted on the end of a pole, hence the name maniple, which, as one author suggests, might have meant a handful in the sense of a squad. The manipular standard had 5 discs with emblems and this was surmounted by a hand in a ring. The "colors" of the legion were an eagle of either gold or silver mounted on a staff with the number of the organization affixed to it. There were two standard-bearers or vexillarii in each maniple.

Signals were given by trumpets, each of which had a range of notes and overtones peculiar to its construction. The Cornu, a round, curving affair and the Tuba, a long, straight instrument, were sounded together for the attack. Another type was the crescent-shaped Bucina. The cavalry had a horn all its own called the Lituus, which was long and straight excepting at the lower end where it bent at a ninety degree angle. The Cornu also sounded the watches or the vigiliae.

A Comparison of the Legion with the Phalanx: In the XVIII Book of his *Histories,* Polybius compares the legion with the phalanx. This is a question which has never been satisfactorily settled for, as Colonel Dodge remarks, the best legion never met the best phalanx under the best commanders. The Pyrhhic Wars proved nothing: at Heraclea and Ascolum a superior general defeated an inferior general, and the use of elephants for the first time against the Romans upset all possibility of a reasonable comparison. At Cynocephalae, Philip V of Macedon did wrong to use the phalanx on broken ground, but had his illustrious namesake been present the phalanx would have prevailed despite the irregularity of the terrain.

In the first place, the phalanx could function smoothly and effectively only on level ground cleared of all obstacles, while the legion maneuvered with equal ease on either broken or level terrain. Second, five sarissas are projecting in front of each phalangite; each phalangite occupies a three-foot frontage; so the legionnaire, who requires six-front frontage to wield his weapons, has facing him ten sarissas; the legion's disadvantage here is painfully obvious. But the phalanx's advantage is here offset by the fact of the far greater mobility of the legion. Yet where the phalanx lost in mobility it compensated for the loss by having a greatly superior cavalry. The superiority of the legion, which unfortunately was thrown to the winds by Varro at Cannae, is strengthened by the fact that it kept a reserve, that is, the triarii and the velites, whereas the phalanx employed its full force at once. Finally, when the phalanx advances after the first shock or is driven back, its characteristic formation (wherein lies its strength, virtue and genius), that is, its solidity and impenetrability, is broken; when broken, it is immediately dissolved by the cavalry and the short sword. The difficulty of arriving at a satisfactory conclusion in a comparison of these two tactical formations may be recognized when we remember that Arrian, although commanding a legion, asserted the superiority of the phalanx.

From Saguntum to Cannae: (218-216 B.C.) After reducing the city of Saguntum (See Map No. 1) in Spain which act in itself was a declaration of war, Hannibal marched northeastward subduing all tribes that lay in his path. He set out with 90,000 foot and 12,000 horse. When he began his ascent of the Alps, his army numbered 60,000 troops. When, fourteen days later, he had completed his crossing of those mountains, he was left with 20,000 foot and 6,000 horse. South of the Po he met Publius Scipio at the Ticinus (See Map No. 2) and there administered a sharp defeat to the Roman cavalry; this lesson of cavalry superiority was not lost on the Roman who immediately removed to higher ground. His colleague, Sempronius, next engaged Hannibal at the Trebia where a second defeat was suffered by the Romans. After the Ides of March, 217 B.C., Flaminius, more of a politician than a general, took control; his army was crushed and almost massacred in a narrow defile which skirted the eastern shore of the Trasimene Lake.

Rome now appointed a dictator, Fabius Maximus, whose policy of never coming into an engagement with his enemy has given his name to that type of tactics. His reasoning was sound and his leadership wise, but the ancient "On to Richmond" psychology took strong hold on the Roman people and at the conclusion of his term as dictator, Fabius was not reappointed. Hannibal, having exhausted the country round about Geronium, where he had spent the winter of 217-216 B.C., moved suddenly to Cannae where he seized one of Rome's largest grain supplies in Italy. Two days later, the Roman army began to move and shortly came in touch with the enemy near this little village.

Let us now consider the immediate factors of the situation, that is, the temperaments of the commanders, the morale of the army, the features of the terrain and the season of the year.

The Commanders: Varro, commanding the Roman forces the day of the battle, was a plebeian of the demagogic type. He had risen in the estimation of the populace chiefly by attacking the patricians and widening the already existing chasm between those classes. In all of his inflammatory speeches he accused the nobles of bringing the Carthaginians into Italy; he charged, also, that Fabius had prolonged the war to the great detriment of the Roman people. He promised, moreover, that should he, Varro, meet Hannibal he would immediately bring the war to a conclusion by defeating that redoubtable general. Varro's military training and experience were a minimum and his reputation as a soldier was gained chiefly in the Forum: this same type afflicted our Federal armies seventy-five years ago. In a word, Varro was ignorant, tactless, and unrestrained. Hannibal banked upon the latter quality to

bring the Romans into battle, a thing which he had sought for over a year.

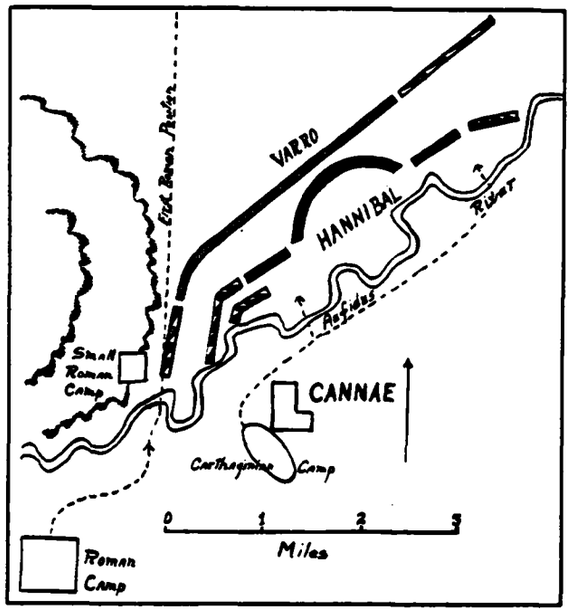
To speak of Hannibal is to describe perfection in the military art and its application. When speaking above of the motivation of the Second Punic War, Hannbal's disposition to learn every possible factor entering into a situation was referred to. In matters of reconnaissance he was especially careful, performing a great amount of this for himself. Livy, in describing the manner in which Hannibal passed around the Romans at Arretium, says of him that he "then employed the utmost diligence in inquiring into the dispositions and designs of the consul, the nature of the several parts of the country, the roads, the source from which provisions might be procured and every other circumstance requisite to be known." Hannibal was close-mouthed; he rarely consulted; he gave orders for things to be done immediately; no one knew his thoughts, all of which is reminiscent of Stonewall Jackson. The Romans were well acquainted with the discipline of war but to the art of war they were strangers. Their first great tutor in this art was Hannibal. To them a battle was a stand-up fight in which the better man would win, but strategy lay without their ken. No man surpassed the Carthaginian general in this respect. In directing his brother Mago to take 2,000 men for the ambuscade near the Trebia, he said to him, "You will have to deal with an enemy who is blind to the strategems of war." And, finally, no fact can better reveal what a master and commander of men Hannibal was than that for sixteen years he kept together, in enemy territory, without reinforcements from home, an army composed of a variety of nations, whose ideas, customs and speech differed, and maintained this army undefeated either by mutiny or by the enemy until his recall to defend Carthage in 202 B.C.

Morale of the Armies: At the time of Cannae the Carthaginian troops were in the best of spirits; their commander had led them in three major victories; they were veterans and were welded together into a close-knit, effective fighting machine. The prospect of much booty lay before them and they entered into battle with cheerful spirits. The Romans, on the other hand, entertained some doubts. Although they were not altogether raw levies, still the training in skirmishing which Fabius had given them was not equal to the training and experience of their opponents. They had the confidence of numbers, being almost two to one over their enemies. They were not mercenaries but were rather fighting for home and country; they were animated by true patriotism and by the courage of despair. And so they entered the battle determined rather than confident.

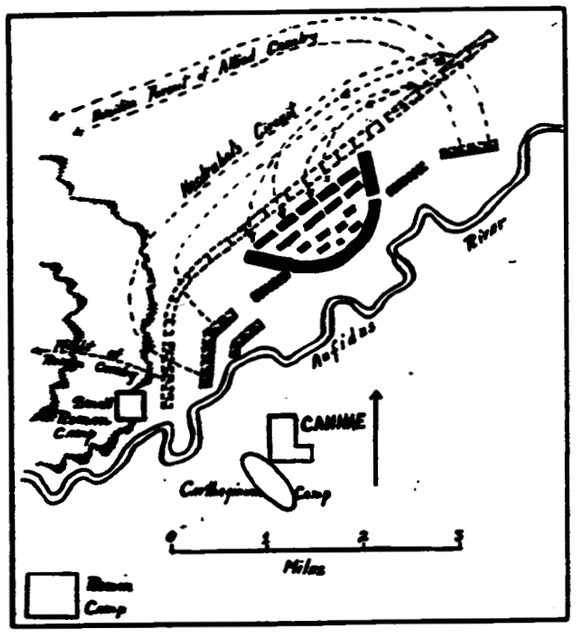
The Terrain (see Map No. 3): The village of Cannae lay in the southern part of the Apulian Plain, a wide, prairie-like expanse bounded on the north and the west by mountains, on the south by a rolling terrain and on the east by the sea. Through this plain flows the Aufidus River, the only stream to cut through the Apennines; its course is from southwest to northeast and is characterized by sinuous windings. The plain rises gently from the sea to the mountains west of Cannae. The even character of this terrain lent itself admirably to phalangial tactics and to the free maneuvering of cavalry. Hannibal could have chosen no better place for the scene of the "perfect battle" than this smooth, bare plain of Cannae. To the southwest may be seen the peak called Vultro and to the north the mountains of Samnium.

The battle of Cannae took place in midsummer. Some authors set the exact date, Von Schlieffen, for example, taking August 2nd, but in view of our slender knowledge it is sufficient for our purposes to be more general. The season is important for more than one reason. At this time of year the Audus is low and fordable, it would not hem an army in and yet it would provide a delaying obstacle in case of a rear attack. The sun, which at this season of the year rises in the northeast, shone in the eyes of neither army, as both Livy and Polybius tell us; hence, without going into the intricate discussion as to which side of the river the battle was fought on, we simply conclude, with other evidence justifying us, that the action could not have occurred on the southeast bank. This is strengthened by the fact that a southeast wind blows at this time of the year, which the Greeks call Eurus, the Romans Volturnus, and the inhabitants of southern Italy today call Scirocco; this wind, striking the backs of the Carthaginians, blew into the eyes of the Romans a great volume of dust which it had rolled up in its course over the wide plain, thus causing them both discomfort and disadvantage. These specific references to sun and wind lead us to believe that the action was fought on the northwest bank of the Aufidus.

The Battle (see Maps Nos. 3 and 4): To protect their foragers, the Romans had established a smaller camp on



Map 3: First Phase, Battle of Cannae



Map 4: Final Phase, Battle of Cannae

the north side of the Aufidus. Against this camp Hannibal sent his Numidians, hoping thereby to aggravate the Romans to the point of action. The stratagem succeeded and the rash Varro threw out a large number of troops to punish the enemy. The Numidians, with losses, were driven back but it aided Hannibal's plan. He had read aright his adversary's temperament and knew that now, with an appetite whetted by a measure of victory, Varro could not be restrained from joining battle. But on the day following, the command, by the principle of alternation, lay with Aemilius Paulus and hence there was no battle, for Aemilius was a disciple of Fabius and his good judgment warned him not to engage the Carthaginians on the plain where their superior cavalry would work the Romans a great disadvantage. However, the day after this, Varro, being in command, led the Roman legions across the river at sunrise and took up a strong position with his back to the hills on the west of the plain. The position was a good one, well chosen in view of the greater mobility of the Roman army.

Upon perceiving the movements of the Romans, Hannibal immediately set his forces in motion and, with a covering force of 2,000 Balearean slingers and some light infantry, crossed the Aufidus taking up a position not parallel to the Romans but at an angle, with his back to the river. He secured his flanks by resting both cavalry wings, at a slight angle, on the bank of the river, both bodies maintained the continuity of the line of battle but the Spanish and Gallic horse deflecting their left wing to the southeast and the Numidians their right wing to the south. When Varro saw this he abandoned his well-chosen position and, pivoting on his right wing, moved his line in a southeasterly direction until it paralleled the Carthaginian line of battle. By this movement, he lost the protection of the hills and exposed himself to a superior cavalry.

The Carthaginian forces numbered 50,000 men. Of these Hannibal left 8,000 for the protection of his camp and put the remaining 42,000 into the line. The Roman army numbered 87,200. 14,000 of these were set aside to guard the camps, 11,000 for the main camp and 3,000 for the smaller camp. This left Varro 73,200 for his line. The Roman advantage numerically, therefore, was almost two to one.

Varro, realizing his superiority in numbers, made the fatal error of changing the formation in which the Romans had been accustomed to fight. Whatever its advantages may have been, it left the troops, nevertheless, in an uncomfortable and awkward position. Just how he did this we are not told, Polybius simply stating that "the maniples were nearer each other, or the intervals were decreased more than usual, and the maniples showed more depth than front." Also, Varro departed from the custom of making the Roman legions the center and the allied legions the wings, and placed the Romans on the left and the allies on the right. Then, following the almost universal custom of those times, he divided his cavalry into two bodies and placed them on his flanks: the Roman cavalry, 2,400 men in number, forming the extreme of the right wing and the allied cavalry, 4,800 in number, being placed on the extreme left opposite the Numidians. Aemilius Paulus commanded the right wing, Varro the left wing, and the proconsuls, Atilius and Servilius, commanded the center.

It is not unlikely that Hannibal, in making his dispositions for the battle, remembered both Marathon and Leuctra. His problem, like the constant one that confronted Frederick the Great, was to effectually reduce the numerical superiority of his opponent. To a great extent, the ignorance of Varro had solved a portion of this problem for him, shortening the Roman front and increasing its depth, thus voiding in part Roman advantage in numbers. He employed the lesson of Marathon by making his center weak, by being sure that the enemy would make a special effort to crush it, and by reserving his finest troops, the Africans, to wheel inward on the exposed flanks of the advancing Roman center. He used Leuctra to advantage by making his left cavalry wing preponderantly strong, thus assuring himself of crushing one wing of the enemy. Accordingly his dispositions were as follows: in the center he placed the Spanish and Gallic infantry, ten men in depth; his African foot he divided into two equal forces and stationed them on either side of the center. The total infantry strength of this formation was 32,000 men. Then on his left, Hannibal placed his finest cavalry, the heavy Spanish and Gallic horse; this was formed in two lines, two-thirds being in the front rank and one-third being in the rear, the cavalry strength of this left wing being 8,000. On his right wing he stationed the Numidian cavalry, a force of 2,000 men.

To be sure that the Romans would reënact the rôle of the Persians at Marathon, Hannibal, in addition to making the center of his line obviously weak, used a most original device. Either before the beginning of the battle or during the skirmishing of the light troops, he advanced the Spanish and Gallic foot in such a manner as to form a crescent, the outer rim of which came close to the Roman center and the flanks of which kept their contact with the Africans on either side. The line of the crescent was ten deep, while the African flanks were sixteen deep. The novelty of this formation had a twofold purpose: first, it concentrated Roman efforts on the center, and second, it maintained the Africans as a reserve. The cleverness of the first purpose had more than one aspect: not only would it cause a concerted effort against the Carthaginian center but the possibility was that as the whole front of the crescent was attacked and it retreated it would throw the Roman troops into such close contact with each other that they would not be able to wield their arms freely. This possibility became an actuality.

Hannibal and his brother, Mago, commanded the Carthaginian center. Hasdrubal commanded the cavalry on the left wing and Hanno commanded the right wing.

When the cornu and the tuba had sounded and the battle cry had rent the air, the light troops advanced and engaged in skirmishing. On the left, Hasdrubal commanding the heavy Spanish and Gallic horse, made a fierce attack on the Roman cavalry. The majority, according to custom, dismounted and fought on foot. The Romans, in order not to be borne down by the sheer weight of the enemy's horses, also dismounted; when the fact of the Roman cavalry fighting on foot was announced to Hannibal, he remarked to the staff officer who had brought him the news, "This pleases me better than if they had been delivered to me bound hand and foot." The uneven fight between 8,000 veteran cavalrymen and 2,400 mediocre horsemen could not last long. The Romans fought bravely but were soon put to flight, heading for the western hills for safety.

Meanwhile, the Roman left wing was in a quandary. The allied cavalry, composing this end of the line, did not know what to do in view of their opponents' tactics, for the Numidians would appear to make an attack but would then wheel off and ride around their rear. While the Numidians were thus engaging the attention of the allied cavalry, Hasdrubal, who had wisely refrained from pursuing the Roman cavalry, made a wide circuit in the rear of the Roman army. Upon the approach of this powerful body, the allied horse broke and fled. At this point, Hasdrubal exhibited a fine sense of coöperation with his commanding officer: he did not pursue the demoralized cavalry of the Roman army but left that to the Numidians whose skill in pursuit was among the most valuable of their assets. He then described a sort of half-circuit back to the rear of the Roman center and threw his force against this line.

While Hasdrubal had been making these two attacks, affairs in the center of the lines had been working out to perfection. When the light skirmishers had withdrawn, the hastati advanced and the serious work of the engagement began. Little by little, the Romans forced their opponents back. If sheer weight of some thirty-six men or more, especially trained for close combat, did not force back the thin line of ten men, then confidence in numbers would have given the Romans the necessary motivation. Moreover, here again the short sword of the Roman legionnaire showed itself superior in the thrust movement to the Gallic longsword in its sweeping cut. The convex crescent was becoming a straight line: the Roman requirement of five to six feet for effective use of weapons was reduced to three feet and then to eighteen inches; jammed together they could scarcely wield their weapons, but back the enemy went and the Romans felt, at this point, that they had won the day. And perhaps they might have been the victors, had not two things happened. Their commander, Varro, seeing the Carthaginian center being slowly but surely forced back decided to clinch what he thought was his victory by sending in the triarii and velites, who until this moment had constituted a reserve. So with this movement the Roman reserve was gone and no troops were left to provide against future contingencies. The straight line now became concave. The addition of the triarii and the velites to the combat gave no opportunity to widen the space between soldiers and resulted in a poor and ineffectual use of arms. Then happened the second event that snatched victory from the Roman eagles.

At this moment, when the hastati and the principes were exhausted and the triarii and velite reserve were fast tiring, Hannibal gave the order for his fresh, unused African troops to wheel inward on the flanks of the Roman center. Here Marathon was repeated and Tannenberg was forecast, but neither of these victories was perfect, for they were outflanking on two sides whereas Cannae was on three sides.

At the same time that the African wings wheeled inward on the disorganized Roman center, Hastrubbal appeared on the Roman rear flank thus closing off all hope of retreat or escape. Thus, with this third element, Cannae became the perfect battle, a battle of annihilation. The Romans fought with the utmost bravery and acquitted themselves with honor. Their lines grew shorter. They faced outward to meet the attacks of the enemy, but the pincers closed in on them pitilessly and they were crushed. The maniples fought independently and were cut off and destroyed piecemeal. Some groups managed to cut their way out. When the Carthaginians were themselves exhausted with the massacre, they took the remaining 3,000 Romans prisoners. The spirit of the old Roman Republic revealed itself in an incident that occurred near the close of the battle. The Consul, Aemilius Paulus, who had advised against the battle and who had come in to assist the center when the right wing had been broken, remained on horseback until the loss of blood from his wounds had weakened him too much. He then sat himself down upon a rock while men were

flying by him attempting to escape. One of these men, mounted, a military tribune named Cornelius Lentulus, recognized the consul. Dismounting, he offered his horse to Aemilius and exhorted him to escape, saying that he would now be the one man who could save Rome. Aemilius refused and sent the tribune on his way. Then, gathering up what strength he could, he plunged into the battle in the face of the enemy and died upon the field of honor. So great was Hannibal's opinion of this consul that he searched among the slain for his body that he might bury it with honors.

Thus ended the battle of Cannae. A great variety exists in the reports of casualties but a conservative analysis of both the figures and the writers who give them would set the Carthaginian losses at 8,000, the majority of these being Gauls. The Roman losses are estimated at 40,000 foot and 4,000 horse.

The causes of victory and defeat may be briefly recapitulated. The mistakes of Varro were these: first, he left a good position where he had the hills as a protection and came into the plain where his enemy could fight much better. Second, he changed the customary formation and put his men into an order that was both new and awkward. Third, he could have crushed the crescent without expending his reserve. Fourth, he left the field of battle and escaped before there was a certainty of Rome's defeat. Hannibal's epic generalship revealed itself chiefly in the original device of the crescent which had a twofold purpose, one being to lure the Romans in and the other being to maintain his Africans as a reserve. Hannibal had the opportunity of choosing his ground by reason of the precipitate nature of Varro; hence he selected a place where the phalangial formation could operate advantageously and where the cavalry could maneuver freely. The perfect liaison between Hannibal and his cavalry commander enabled him to entirely surround his opponent. The dictum of Clausewitz that a force inferior in number should not attempt concentric action against a numerically superior force may be offset in this case in view of the fact that Varro gave Hannibal the advantage by adopting a new and unwieldy formation on the eve of battle.

The value of Cannae is attested by the importance which great commanders of the past have attached to it. Napoleon's words were quoted above. The principles of Cannae were adopted by the German General Staff as basis for their World War plans. In the preface to the 1925 edition of the English translation of Schlieffen's *Cannae*, Baron von Freytag-Loringhaven, General of Infantry, retired, said:

". . . the Field Marshal . . . always endeavored . . . to keep alive in the General Staff and thus in the army at large, the idea of a war of annihilation. . . . Hence in his writings he often attributes his own ideas to the leaders of the past—among them Moltke—when he wishes to prove that to achieve a decisive victory of annihilation, *outflanking*—preferably from two or three sides—must be resorted to as Hannibal did at Cannae. Modern battles Count Schlieffen characterizes even more than earlier battles as a 'struggle' for the 'flanks.' . . . Except for Tannenberg, a real Cannae did not occur in the World War. That one did not occur in the West at the beginning of the war is the fault, in the first instance, of the Supreme Command. Indeed, it was the Schlieffen Plan on which our operations were based, yet in their actual execution it was departed from. His constant exhortation to make the right flank as strong as possible was not heeded."

Whether or not Schlieffen's attribution of Cannae's example to subsequent commanders be subjective, as Freytag-Loringhaven intimates, the fact remains that the demonstrated principles of Cannae have secured victory for those who have skillfully applied them. The powerful reinforcement of one wing with the purpose of rolling up the enemy's flank did not originate with Hannibal. Epaminondas used this device with the greatest effect at Leuctra (371 B.C.) when he massed his hoplites to a depth of fifty men on his left wing and crushed the Spartan phalanx under Cleombrotus. The same principle was applied in the famous "Oblique Tactics" of Frederick the Great against the Austrians at Leuthen (December 5, 1757), where he advanced against the enemy in echelon from the right, each battalion striking an oblique blow at the enemy's flank as it came into action; Frederick himself in his *Military Writings* describes the principle thus: "You refuse one wing to the enemy and strengthen the one that is to attack. With the attacking wing you do your utmost against one wing of the enemy which you take in the flank. An army of 100,000 men taken in the flank may be beaten by 30,000 in a very short time." The Germans lost the Battle of the Marne by their failure to apply this principle, von Moltke weakening the German right under von Kluck by depriving it of 400,000 men and delivering the blow at Charmes and Epinal where it failed. The strategy implied in the crescent of Hannibal that is, of luring the enemy in at the center so as to take him in the flanks, was utilized at Tannenberg in 1914 when Hindenberg's center retreated towards Allenstein and Samsonof was caught in the pincers of the reinforced German left and right wings. Although many examples of the Cannae principles might be adduced, as Schlieffen has done in his book, the above will suffice to give some idea of their value.

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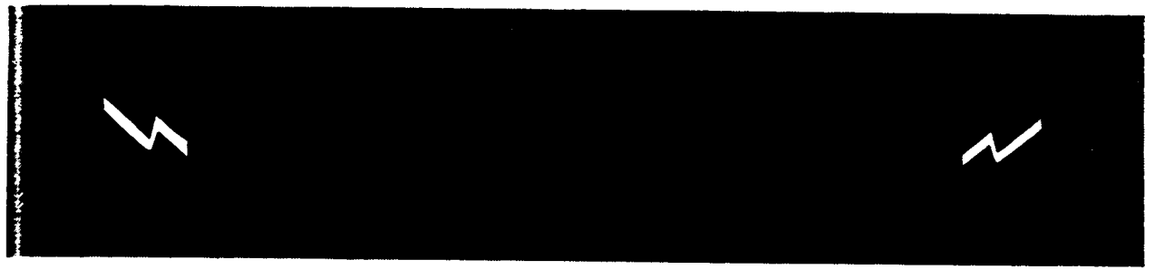
NOT TO KNOW *what has been transacted in former times is to be always a child. If no use is made of the labors of past ages, the world must remain always in the infancy of knowledge.*—CICERO.



CONCLUSION

While we were in Camp Genecourt waiting to go home I got into trouble with the lieutenant colonel. The colonel was seldom with us now. He was up in Paris having a good time. We had to go down to the dock at Bassens and put in a day stevedoring. Well, the night before, I had gone in to Bordeaux to dine at the Capeau Rouge, and here I ran into a lieutenant colonel that owed me a hundred and fifty dollars I had been trying to get out of him for months. He seemed flush and neighborly and I thought: "If I stay with this bird and get him tight he may loosen up. I've got to get this hundred and fifty before we go home because once I get aboard that transport I'll never see him again."

Alas, he needed no help from me toward accumulating a beautiful bun. He got boresome and his gang suddenly left him and I took him in tow to find his automobile and drive him home. But the M. P.'s garnered in all United States Army automobiles after ten o'clock and there we were at midnight in darkest Bordeaux in a pouring rain and my tow very wishful to lie down in the gutter and sleep. I had to get us both under cover, which eventually I succeeded in doing. I then frisked his pants and lo, he only had a few francs left, otherwise I would have collected.

Now it was a regimental order that officers of our regiment should not sleep out of billets and through no fault of my own I had disobeyed that order. I felt justified in disobeying it in order to save an officer from disgracing the uniform and maybe catching pneumonia and dying before he could pay me that hundred and fifty dollars. (As a matter af fact he never paid it.) Well, sans breakfast, I arrived at the dock at Bassens in a taxi just as my regiment appeared to start muling a lot of dunnage and the lieutenant colonel tied in to me and I offered no defense. I was weary and had had no sleep, which brought on a headache and I wished I could go home and lie down. About three o'clock the lieutenant colonel turned over command of the regiment to me and about four o'clock I turned the command over to a junior captain and thumbed a motorcar ride back to Camp Genecourt. As the column was marching back the lieutenant colonel came by in the colonel's car and said: "Where is Captain Kyne?"

Nobody knew, so when he got to Genecourt he looked into my cubicle and found me doing bunk fatigue, roused me out and gave me the devil for abandoning my post. I suggested I had as much right to turn over the command to my junior as he had and where was the harm, anyhow. He then said I was contumacious and just for that he sentenced me to a week's confinement to quarters to teach me discipline and humility.

I howled with laughter and asked him since when had he accumulated authority to sentence an officer and a gentleman to confinement sans conviction by a general court-martial. He blinked at that and had a suspicion he had exposed his military ignoranee, but he still insisted that I hive up for a week in my quarters. So I told him to betake himself to Gehenna and assured him I was going out that night and get tight.

I did—and came in about 2:00 a.m., quite noisy and the lieutenant colonel, who, evidently, had been looking up his rights in the Blue Book, asked me mildly to simmer down and not disturb everybody. So I jeered him and cussed him out a little and only piped down when I found on my pillow a cablegram from the editor of the *Red Book*, whose heart I had almost broken while writing my novel, "The Valley Of The Giants," in Camp Kearny. He had left that employ and was now editor-in-chief of all the Hearst magazines, and he begged me not to commit myself to any literary obligations until I had seen him because he was in position to offer me the top of the world.

I yelled aloud: "Nothing doing. I'll never write for William Randolph Hearst. I do not like him or his policies. I think he's pro-German. I'll not write for him."

"Has he asked you?" came the mild voice of the lieutenant colonel over the partition.

"His editor has cabled me," I replied.

"Well, then, don't write for him," my superior officer urged. "Be a good fellow and go to sleep."

"Since you speak to me kindly now I'll do that," I replied and fell asleep. And I was never bothered any more about confinement to quarters, which proves that even lieutenant colonels can, when they ditch their irritation, be good fellows, too.

Just before we left for home there occurred in our regiment the most abysmal piece of wild jackassery of all. A general order came down from Chaumont informing us that enlisted men of the regiment who were natives of European countries might, conceivably, wish to be discharged in France so they could make a trip home very cheaply; later, if they desired to return to the United States they could come at government expense on a government transport by showing the proper credentials. The order went on to state that such men "may be discharged upon making application to the proper authority."

As soon as I read this order I told my command about it at retreat and within ten minutes fourteen Italians and

Bohunks had applied for discharge. So we made up the discharges and final statements and I had the lieutenant colonel sign the discharges. I was about to issue them to the men when the lieutenant colonel came barging in and he was in a state of mind. He had commenced to doubt that we had proper authority to discharge the men. The verbiage of the G.H.Q. order confused him. It read: "Men may be discharged" but it didn't say "men shall be discharged" or "men must be discharged." There was a certain firmness of tone lacking in the phrase, so I was ordered not to issue the discharges until he had taken the awful thought up with the commanding general of Base Section Six. So he did, and that individual permitted himself to be sold the idea that all was not as it should be with that G.H.Q. order, so he wired to have it clarified.

I protested to my superior that he was building himself a mare's nest; that as one reasonably well versed in the use of the English language I could assure him that the order meant that it was not compulsory for such men to apply for discharge; they could apply for discharge if they blamed well felt like it. I, of course, felt assured that with General John J. Pershing's authority to proceed I might as well not wait until the general in Bordeaux received the bawling out I felt his stupidity would bring down upon him, so I called my lads in, gave them their discharges and final statements and warned them to beat it to Bordeaux, cash their finals immediately at the paymaster's office there and get out of town.

Within the hour the general in Bordeaux, after mulling the matter over, telephoned out to stop all discharges and to round up those men who had already been discharged, take their discharges away from them and await further orders. So the lieutenant colonel had a provost guard haunt the paymaster's office and as each buck showed up they nabbed him before he could cash his finals and dragged the wretch back to Camp Genecourt and robbed him of his honorable discharge and final statements. The fact that the provost guard did not catch any of my men meant, to the lieutenant colonel, that I had obeyed his orders. Failure to capture the first sergeant of Supply Company took on the aspect of a mystery which I could have explained. He was a dear friend of mine in civil life and a member of my clubs, so as soon as he had his discharge he dropped in on me, wilfully declined to salute me, and hailed me as Pete. He said he was going down on the Riviera to visit his sister. "Clear out," I told him and gave him the reason. On my advice he walked several miles up the railroad beyond Bassens, flagged the train to Paris and cashed his finals there.

The saddest case of all, however, was that of the colonel's striker, whom I shall call Jukes. Jukes was a Cockney and had been a batman in a Highland regiment, so naturally, he was smart and dug himself up the job of striker for our colonel. He had not yet left Genecourt when the lieutenant colonel caught up with him and demanded that he surrender his documents. Jukes had a few drinks aboard and laughed that one off. But the lieutenant colonel was insistent so Jukes cussed him out after the fashion of a free man who for long has had a lot of cussing bottled up inside him. Whereupon the guard fell upon Jukes and bore him to the ground, despite the mighty battle he put up, and robbed him of his documents and then threw him in the can, where he languished, forgotten, until we moved down to Bassens to go home and poor Jukes, believe it or not, was carried along with us and denied his right to discharge in France in order that he might make the mere hop, skip and jump across the channel to Perfidious Albion. Englishman that he was I almost felt sorry for him. So if Jukes ever saw his native land again he had to work his way back or pay his own way steerage. Of course very promptly G.H.Q. told the commanding general of the Bordeaux area to get off his foot and the ban on giving out discharges was lifted. The lieutenant colonel came over to my orderly room and told me himself and I laughed and told him I had not been damned fool enough to obey his silly dictum and had never intended to.

We put the men through the mill and finally, one night, we marched down to the dock at Bassens, booked to board the naval transport *Matsonia* and go home. We arrived at 8:00 p.m. and hung around in the cold until 2:00 a.m., before going aboard. However, as usual, I was lucky. I met a captain of engineers, a friend of mine in civil life whom I hadn't seen for ten years. He fell into my arms, announced that he owed me fifty dollars (I had forgotten it long before), paid it and took me up into his dock office and we had hot Grog Americaine and conversation around a box stove until it was time to load the troops.

At this juncture one of my bucks appeared in great distress. It seems this boy was at that tender age when any kind of dog can claim his love and he had found a little French cur, rather good-looking and very smart. This dog he had named Cognac (pronounced coneyack) and now some superior officer had informed him that Coneyac must be left behind. Some stupid health regulation of the Bureau of Animal Industry required that Coneyac must be provided with a health certificate, which is practically impossible to secure at 2:00 a.m. of a windy, rainy morning on a dock in France.

Well, myself when young did eagerly accumulate mongrel pups and bring them home to the great distress of my mother, so my heart went out to this boy. I told him to see the bandmaster, present my compliments to the latter and say to him that I desired the bass drum should not be carried aboard in the case; that my soldier desired the case to conceal Coneyac and would then carry case and Coneyac aboard. It developed, however, that this was not possible, the bass drum case having already gone aboard with a battalion of the 143rd Field Artillery, who had concealed in it a small French boy, their mascot. So Coneyac went aboard in the tuba case and when we reached San Francisco Coneyac, at the end of a string, marched in front of the first platoon while the little French boy, in a cut-down khaki uniform, marched beside me. Two days after we got to sea the kid hauled him out

"He had not yet left Genecourt when the lieutenant colonel caught up with him and demanded that he surrender his documents. Jukes had a few drinks aboard and laughed that one off."

of the mailroom. His father, a sous-lieutenant, had been killed at Verdun and his mother had passed away in 1911. Since 1914, when his father joined the colors, he had been a wandering waif, existing God knows how. I had no little boy and he had no father and we both considered it would be fine business if we took care of each other. So I had decided to take over the Frog and give him a break in life. Besides, it was Christmas morning and I thought I owed myself a present for all that I had suffered.

En route home we had a nice calm day for a change so I organized a boxing tournament and the Navy set up a ring on number 2 hatch. As I was hurrying around to this ring to get things going I ran into our regimental chaplain, the naval transport chaplain, the YMCA secretary and the Knights of Columbus secretary all tied up in a knot and engaged in a furious verbal brawl as to which one of them should have charge of the athletics on the boat. I listened to them all, in turn, advance their claims to this dubious honor and then said: "You can all lay off bossing the boxing tournament because that's my job." They gave me dirty looks.

Now, I had in my battery Chief Mechanic Madison, as shifty a welter-weight as ever drew on a glove. He was champion in his class of the 40th Division and might as easily have been champion of the A.E.F. He lacked the killer instinct, however, and preferred not to hurt his opponents; although he had a horrible sock he lothed cutting the other fellow up. So he craved decisions on points. Nor was he afraid to take a licking, either. He was just a nice sweet young fellow until I offered him five dollars in American money for a knockout. After that a charging rhino had nothing on Madison.

Well, the Navy had been giving the soldiers a horrible time but this trip the flower of California manhood thrashed every bluejacket that appeared on the fatal scene. Madison earned fifteen dollars by delivering three

knockouts in about half a round. Then the Navy trotted out a huge heavyweight and I had no heavyweight to meet him and announced the fact. I was interrupted by a jab in the ribs. Chief Mechanic Madison was speaking: "I'll knock the big stiff out for you, sir."

"But Madison," I whispered, "this man weighs two hundred and twenty and you only weigh a hundred and fifty-eight. He may be good—and you know as well as I do that no good little man ever knocked out a good big man."

"I'll tear him to pieces," Madison promised and added: "For ten bucks."

So I said that my Chief Mechanic Madison, although exhausted from three previous fights and only a welter at that, would, for the honor of the Army and ten dollars from me, knock out the heavyweight prize of the transport *Matsonia*, and let 'er go!

Madison did the job in a round and a half.

By the time we reached New York on January 3, 1919, my little French boy had turned over to me for safekeeping his worldly wealth—seven hundred and thirty-five francs, and was calling me fader. Of course the master of the transport reported the little stowaway to the immigration authorities when we docked and an inspector came looking for the kid and found him with me. So I said I was going to look after the brat and asked how one went about importing a little French boy. He told me and asked me to take the child down on the dock and presently he would join me and take the boy over to Ellis Island.

General Shanks met me and sternly demanded to be informed where I thought I was taking that stowaway. I told him I was going to take him to Ellis Island and secure for him legal admission into the country. He assured me that was not possible and to take the boy back aboard again. I assured General Shanks that I usually got what I went after and that I'd telephone the Secretary of Labor in Washington and have the law waived. This appeared to distress the general who ordered me to be silent and obey. Just then the immigration inspector came along, took the child by the hand and said: "Well, come along, captain, and we'll see what can be done."

The general, realizing he was licked, said nothing further, but I have always wondered what business it was of his, anyhow. I was much inclined to tell him so but finally decided I was too close to civil life to tangle with a general. At Ellis Island the immigration chief gave me a handshake and, after I had given him my word of honor that I would cherish the boy as I would my own son and send him to school until he was sixteen years old and repatriate him if he should develop into a public charge, he waived the law and I went back to New York with my new son. The regiment had already gone on to Camp Merritt, so I went up to see the editor who had cabled me not to make any literary commitments until I had first consulted him. I did not call for the purpose of consulting him, but because he was my friend and I had treated him badly on that "Valley of The Giants" novel. However, he had a new job and I'd soon be out of the Army and he would take a chance on me for another novel and another and another and boy, sign on the dotted line. I declined. I said: "I want to be able to have my executor have carved on my tombstone: The boy had his faults but he never wrote for William Randolph Hearst."

Two days later I visited him again. He was to accompany me to a luncheon my book publishers were giving to me. I said: "Hurry or we'll be late and the guest of honor must not be late." He said: "Just one moment." He laid a document, in duplicate, before me and handed me a fountain pen. Pinned to the documents was a check for ten per cent of the total price of the first of two novels he was asking me to contract to write. "Sign on the dotted line," he ordered—and just to indicate how the direct command operates on one in the military service I humbly signed, for I had flu and I was tired and arguing wouldn't have done any good with that man anyhow.

Later he told Mr. Hearst about rounding me up and what I had said about Mr. Hearst and the epitaph I wanted on my tombstone. And Mr. Hearst thought that was funny and said: "Well, you tell Peter to consider how much more imposing a tombstone he can have, now that he has decided to write for me."

I had told Snooper the hotel at which I would put up, sans permission from superior authority, and had instructed him to telephone me in case it seemed necessary for me to get out to Camp Merritt. The third day he telephoned me, as I lay ill abed, that my son was in a hell of a way. It seems two Swedes, Gunderson and Osberg, had taken the kid out and fed him alien grub and a lot of chewing gum. My son had a cute habit of swallowing his gum after the taste had been used up and now he was tied up in knots. And there was no medical man in camp except Old Doc and Old Doc was fuming around the child and cussing me because now he thought he had at last, something on me. He said I was neglectful and heartless. I told Snooper to tell Old Doc that if he tried to treat my French son I'd kill him and instructed Snooper to give my son a dose of castor oil. It did the trick. Snooper had previously tried C.C. pills, but I always say that when you have a wad of chewing gum in your starboard gut put your faith in castor oil.

The next day Snooper again 'phoned to inform me that two staff officers from the New York area were looking for me. Snooper, the old fox, had sniffed them and they smelled like trouble to him. So he told me to lay low. I did, arriving back in camp just in time to go aboard the troop train that was to bear us back to California.

Nine years later I was seeing my old friend, Colonel Dan Hand, of the field artillery, off on a transport at San Francisco and he introduced me to Major General P. C. March, retired. It will be recalled that the general was Chief of Staff during the war. Instantly, the general demanded to know what had become of me after I landed at Camp Merritt; he said he had had staff officers looking for me to bring me down to Washington to do publicity for him for about six months. I laughed and reminded

"Two Swedes, Gunderson and Osberg, had taken the kid out and fed him alien grub and a lot of chewing gum, and now he was tied up in knots."

him that you can lead a mule to water but you can't make him drink, and that any time I wrote publicity for two hundred a month with an allowance for light, heat and quarters, when I could make what I could writing fiction, naturally any publicity I might turn out would not have been fit for human consumption. That was the narrowest escape I had in the Great War.

Well, we went rolling west, the first battalion in sixteen cars, and at Niagara we got a hot box and the station agent informed my major that it would take forty-five minutes to put in a new brass and get us rolling again. So the major ordered me to take the troops off the train and jog them up the road a mile. Niagara Falls was only three miles distant so I begged him to permit me to take the men up there, ill as I was. He refused.

So I took the troops sightseeing to Niagara Falls and the major was so angry he said he'd court-martial me. After he cooled down, however, I called him into my drawing room and gave him of a bottle of very rare old Scotch whiskey my editor had given me for my flu. So we settled for that, and after the third drink he confessed he was glad I had disobeyed him. Knowing him quite well I was certain of that before I dared disobey him!

The war women were gone as we wended our weary way back to San Francisco. Not a doughnut, not a cigarette, not a package of gum. The hysteria had subsided, thank God. However, out in Hutchinson, Kansas, a little band of the Sisterhood still hung grimly on. They had a kitchen set up in the Santa Fe waiting room and proudly provided hot coffee and home-made doughnuts to the westbound troops passing through. Early in the evening of the day we were to pass through Hutchinson the major received a wire informing him he could expect hot coffee and home-made doughnuts for his command at Hutchinson. Inasmuch as we were not due in Hutchinson until midnight, the major brutally retired and told me to sit up and placate the Sisterhood as best I could.

I got off in a terrific blizzard and fought my way into the station. A thin little woman with sharp alert features dashed up and grabbed me. "Where are your soldiers?" she piped.

"Dear lady, the soldiers are in bed. In the Army, even when traveling on troop trains, we never permit soldiers to sit up after ten o'clock. If we did they'd play poker and shoot craps and smoke cigarettes."

"But do you mean to tell me you're not going to let them have our coffee and doughnuts?"

"No, but I'm not going to boil them out of their warm nests into this blizzard for the sake of a cup of hot coffee and a couple of your excellent home-made doughnuts. They were rather well fed at supper. I have come to thank you for your hospitality and to suggest that if you will permit me to have the doughnuts loaded in the commissary car I will be happy to see to it personally that every soldier receives his allotment of cold doughnuts for breakfast."

Said this amazing little woman: "Mister, we don't give a damn whether they like our doughnuts or not. Don't you understand that we want the pleasure of watching them eat? We've been hanging over the stove all evening and we have to get our fun out of this. No, sir-ee. You can't have our doughnuts to take with you."

"Well, give me a cup of coffee and a couple of your hot doughnuts then," I begged. "Get a thrill out of watching me eat."

She replied: "No, you're cruel."

So I said: "Oh, for God's sake, get out of the doughnut business. If the truth was known all you women are a grade A nuisance anyhow. If it isn't doughnuts it's hymns and hand-knitted socks. The war is over. Go home."

I helped myself to four doughnuts when she wasn't looking and left. As I recall it they were pretty soggy doughnuts at that, and my soldiers had been accustomed to a far superior brand. Still, it's a pretty low-grade doughnut that I will not eat.

When we crossed the Colorado River and were back in California again the battalion let out a yell that echoed far across the desert.

At Bakersfield, California, we sat around all day killing time. The entire regiment lay over there until late at night so we could detrain at the Oakland Mole at 8:00 o'clock the following morning, for we had to conform to

a schedule to fit the homecoming arrangements of the citizens of San Francisco. Until that morning I had never had the slightest idea of the number of people I knew. They shook hands with me by the hundreds, and total strangers, hearing my friends and acquaintances name me, came up and extended the welcoming paw, too. My hand was sore and slightly swollen before we got away and started our triumphal march up Market Street, in column of platoons.

Right here I wish to go on record as stating that if there is anything calculated to make a modest or sensible man feel like a fool, it is to go away to a war with a spectacular regiment, never get into action and then come home months ahead of the poor devils that did get into action and be received with much banzai by the home town folks. A holiday had been declared in honor of our homecoming, the street was roped off, flags waved and all San Francisco was there to welcome us, even if we hadn't fired a shot to make the world safe for democracy.

And then arrived, in an ambulance from Letterman General Hospital at the Presidio, a fiend in human guise —a young medical officer, with over two thousand flu masks and an order from one General McClernand for the regiment to wear them on its triumphal march up Market Street.

The cup of hemlock the Greeks handed old Socrates would have been pink circus lemonade compared with this draught they handed my colonel. What! March up Market Street looking like a lot of stick-up men. B'gosh, he wouldn't do it. "Suit yourself," said the medico. "I've given you the written order and you've receipted for it, so all I have to do now is stick around and see whether you obey it or not. I'd advise obedience. General McClernand is a stickler for it."

So we masked ourselves and marched up Market Street to the cheers of the multitude. At the City Hall we stood around two hours while the mayor orated, while our colonel made fitting reply, while other supreme jackasses sounded off for the sake of the votes that might be in it. Finally, when we got under way, I was too ill and tired to continue, so I slipped out of ranks, ducked into an automobile salesroom and emerged five minutes later with a little Dodge sedan, in which I rode proudly at the head of my battery while the colonel bravely hiked it to the Presidio.

The day after we arrived at the Presidio the junior officers were discharged. All my lieutenants immediately left, with the exception of loyal old Snooper, who sat in and worked three days and nights for love and loyalty helping the first sergeant and me with the voluminous paper work incident to demobilizing the outfit. And when the job was done he went away without saying good-bye. I was glad, because I wasn't any more up to it than Snooper. And, as a matter of fact, he didn't belong to me and hadn't for two months, and thereby hangs a little tale I almost forgot to mention.

It will be recalled that when Snooper, at the colonel's insistence, consented to step from first sergeant to second lieutenant, his consent had been predicated upon the colonel's solemn promise to that while he, the colonel, remained in command of the regiment, Snooper should never be taken from me.

In France my brother battery commanders were not long discovering that the only real second lieutenant in the outfit was Snooper. They didn't know, of course, that he was a Blue Bird and had learned his soldiering in the Fifth Cavalry. One battery commander, who was the adjutant's pal, coveted Snooper, so the adjutant issued an order, which the colonel signed, transferring Snooper from me to the latter's battery.

When the order reached Snooper he came to me and said very quietly: "Captain, unless you can have this order rescinded I shall telegraph my resignation as a second lieutenant to G.H.Q., and as soon as it is granted I will reënlist as a private in your battery."

My first sergeant, who had great admiration and affection for Snooper thereupon rolled his cold eyes at me and said: "I, of course, should immediately resign as first sergeant so Mr. Snooper could have the diamond back."

I leaped into my little Bavard car and descended upon the colonel. I shoved that order under his nose and reminded him that once he had given me his word of honor, as an officer and a gentleman, that this would never happen while he was in command. He admitted it and got very red and said he'd kill the order.

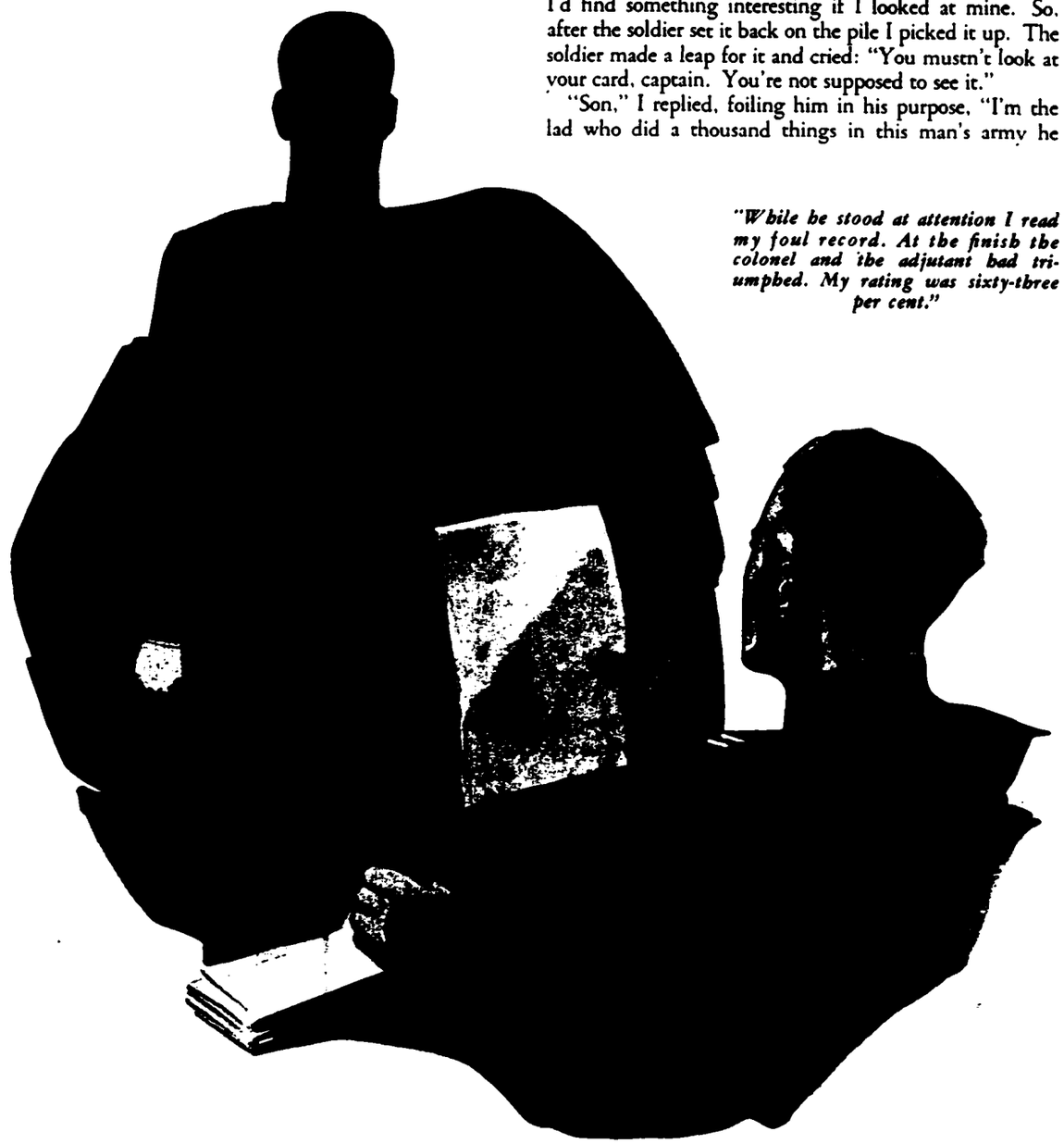
Two weeks later the order was re-issued and again I called upon the colonel and said: "Sir, it would interest me very much to know your idea of what constitutes a promise made on your honor as an officer and a gentleman. Personally, I do not think very highly of it and neither does Mr. Snooper, who is going to wire his resignation to G.H.Q., and when it is granted he will reënlist *in my battery* as a private. Of course I'll make him first sergeant, again, but in the meantime this issue lies between you and me. How about it?"

He was distressed but stood his ground. He told me I must release him from that promise—exigencies of war, etc. I told him his excuse was not valid and merely based on his old ruinous habit of playing social and political favorites. So this angered him and he insisted that the order must stand and, as usual, ordered me out of his presence.

When I got back to my village and informed Snooper of the situation he just started for the post office to send his telegraphic resignation, but I called him back and said: "I'll write your telegram, Snooper, and when it reaches G.H.Q., it will not do the colonel any good. Meantime, however, I have an idea. Just do not obey the damned order and we'll see what happens."

Nothing ever happened and Snooper did duty with Battery A to the day of his demobilization three months later and we had a quiet little laugh when regimental headquarters, still preserving the fiction that Snooper had obeyed the order, formally demobilized him as a second lieutenant of E Battery!

I had planned to give my battery a banquet downtown and blow in something like eighteen hundred dollars left in the battery fund after I had had a picture of the battery taken and given each man a print, but the commanding general would not let the men out of the Presidio because of the risk of influenza if they mixed with the civilian population. They would have been civilians themselves twelve hours after the banquet and before the flu germs could incubate but General McClernand was beyond argument. And I still think his order was shrewdly designed to save our battery funds for the government.



"While he stood at attention I read my foul record. At the finish the colonel and the adjutant had triumphed. My rating was sixty-three per cent."

Five days after my battery had been demobilized they let me go. I went to an office to receive the order for my discharge and before giving it to me the soldier clerk shuffled a number of cards in order to find the order attached. I saw that these cards were a sort of military record, signed by the colonel and the adjutant and decided I'd find something interesting if I looked at mine. So, after the soldier set it back on the pile I picked it up. The soldier made a leap for it and cried: "You mustn't look at your card, captain. You're not supposed to see it."

"Son," I replied, foiling him in his purpose, "I'm the lad who did a thousand things in this man's army he wasn't supposed to do. I have lived eighteen months as a military outlaw and I'll quit as one. Do not make an issue of this. I'm still in the Army, I'm still a captain and you are a private. Attention!"

While he stood at attention I read my foul record. At

the finish the colonel and the adjutant had triumphed. My rating was sixty-three per cent, as I recall it! I commenced to chuckle at the thought that these two considered they had sufficient military perspicacity to rate anybody, or that this final poke, which I did not deserve, could possibly hurt me. I handed the card back to the trembling soldier and he handed me my discharge and a red chevron and I went out to my car and climbed in and went home without saying good-bye to anybody.

I lived in Berkeley. At the filling station where I used to trade I stopped for gas and to tell the attendant that if he ran into my old chauffeur, Jules, to tell Jules I was back and to report for duty unless he had a better job. But Jules, poor boy, had contracted pneumonia with influenza and had been buried that morning. I was feeling a little sad at being a civilian again and the news of Jules' death still further operated to depress me.

I arrived home about sunset and went to the sideboard and shook myself up the first old-fashioned Bourbon whiskey cocktail I'd had since leaving for the war. I walked to the window and looked out across the bay to the Presidio and silently drank to the ghost of the outfit that had been so dear to me. Then I went upstairs and changed to civilian clothing; I came down and dined with my family and when his plate was empty the French kid said to my wife: "Bung da bung!"

"What is the child saying?" she demanded. "Who ever heard of such an outlandish language?"

"It is perfectly intelligible to me, my dear," I replied. "The Frog speaks no English and I speak very little French and that badly, so we have invented a language. Just now he said: 'Ring the bell.' He wants another helping."

In the morning I donned dressing gown and slippers and with mon petit crapeau went for a walk in my garden. We were going to have an early spring and the Japanese flowering fruits were out in all their soft loveliness; I noticed that slugs were eating some of the plants and made a mental note to buy a duck to eat the slugs. . . . The Frog had me by the hand saying in our own private language: "Father, will you buy for me some white rabbits? And a bicycle? And a rod for the fishing? And a gun? And a puppy?" I had just answered yes when I heard tinkling noises up in my garage, so I went up and there stood ex-Private Marchand! He gazed upon me solemnly and I noted that, albeit out of the army five days he was still in uniform, so why ask questions? I knew the story.

"So you will not be demobilized, eh?" I said. "Well, my old chauffeur is dead, so the job's yours. I pay better than most for the kind of service I know you can render. You're broke, of course."

"Yes, sir."

"Had your breakfast?"

"No, sir."

"Go down in the kitchen and get it. There's a servants' room in back. Not a bad billet."

"I thank the captain."

I really didn't need Marchand, but something told me I had to have him, if only as a souvenir of my last adventure in soldiering. I could dream brave dreams in the tonneau while he took over the responsibility of evading traffic risks. He would look after my field dogs and my guns and fishing tackle and keep an eye on the Frog. When I informed madame that we had taken on Marchand she was agreeable, but stated that she could never possibly ride in the same car with him and his incredible army teeth. "Ah, yes," I told her, "I remember he only had a few snags when he enlisted, so I bought him a cheap set that make his mouth look like the keyboard of a cottage organ. Better take Marchand downtown and buy him a wardrobe and have your dentist make him a decent set of civilian teeth. And Marchand is not to wear a chauffeur's uniform. Just a blue or gray double-breasted suit with a cap of the same material to match, and no leather visor or puttees. Marchand wore a uniform once and so did I and we'll let it go at that."

Poor Marchand. Tuberculosis demobilized him in the end and I drove my own cars for a long time after he died. And the Frog turned out to be a problem child. A psychopatic superior the psychiatrists called him, a potential criminal, so when he was sixteen I gave up. I had given my word of honor that if he threatened to become a public charge I would repatriate him. He kept running away from home and I knew he had pulled off one little burglary and pinched a fifty dollar bill from me and the truth wasn't in him. So I had the lad repatriated and that wasn't easy, for, strangely, I had learned to love him with all his faults. And he had no virtues to speak of. In 1925, in a Foreign Legion plane on the Riffian frontier he came hurtling down out of the skies. I kept his Airedale dog for a long time but the Airedale, like his little lost master, was a runaway, too, so finally I offered no more rewards for him. When ex-Private John Baker picked him up over in Alameda and telephoned me, I gave him to Baker who was as glad to have him as I was to get rid of him, for he reminded me poignantly of the Frog and the Frog, who was dead, had called me fader!

One day I found in the garage a little box in which Marchand used to keep old nuts, bolts, washers, wire, tape, and socket wrenches, and in this litter of iron mongery I came across the old fifty-dollar set of army teeth I had bought Marchand. I buried them in the garden.

The years tip toe by and I have become famous, or perhaps merely widely advertised, and I have made and lost fortunes, and made them again and always the fame or the advertising or the notoriety has never given me a tithe of the thrill I knew when I had my face turned toward the paths of glory. I still think, as I thought the evening of the day I was demobilized and I stood in the window and looked across the bay of St. Francis to the long row of cantonments on the Presidio shore, that never, never any more will I have such a grand job and such grand jolly young rascals to do the job with me. There has not, nor will there ever be again, the old loyalty, the old obedience, the old order, the quiet restful discipline, the deep masculine affection. Never, never any more money lending, no more youngsters to comfort when somebody at home dies and they want to weep in the privacy of my quarters because they are soldiers and feel shame to weep in the presence of their comrades. No, never again any more ingenuous youth to guide in the paths of morality and manliness and sanitation, no more little men, no more spiteful men, no more dull, humorless men, no more neurotics, no more BIG men, no more grand men, no more leaders—and never again the holy thrill I knew when the flag came down and the band played The Anthem and I saluted for my outfit in that lovely touching little nightly renewal of The Faith, the unchanging pledge of the sort of loyalty possible only to those who have known the magic of the drums and to whom the sad plaintive voices of bugles mourning in the night must ever speak a various language.

But I have something left that time can not rob me of until, for me, time shall have ceased and I am alone with the ages.

I have a treasury of golden memories upon which I can draw drafts as the years crowd upon me and The Reaper walks among us and, one by one, cuts the Old Soldiers down.

THE END

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Change in Membership Dues Voted at Annual Meeting of United States Cavalry Association

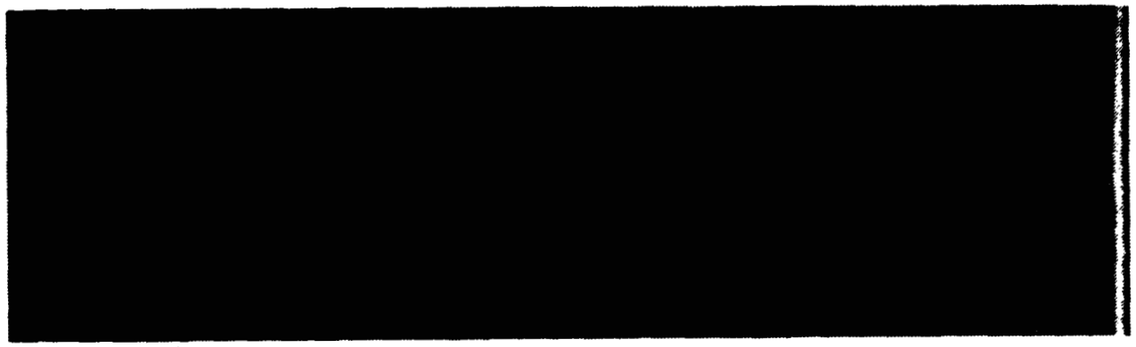
The Executive Council of the Cavalry Association on June 10, 1936, in order to encourage membership, authorized the reduction in annual dues to $2.50 per year when five or more individuals forwarded applications for membership or reimbursement of dues as a group.

The above authorization, as originally intended, has found more widespread application in the personnel of the National Guard and the Cavalry Reserve. It served the purpose for which it was intended, and the membership in the Association has been increased by a material figure. After almost three years of trial it has been found that once a membership was enrolled at the reduced rate of $2.50 per year the member has been rebilled at that figure for subsequent years even though his dues were returned individually rather than in a lump sum covering five or more members. Thus, we find that approximately 3/5 of all cavalrymen in the Army of the United States are receiving the JOURNAL at $2.50 per year, while the remaining 2/5 are billed at $3.00 per year. Manifestly there is little equity to all concerned in such a condition.

As far back as 1931 the records of the Association indicate that efforts were made to place dues in the Cavalry Association on the comparable basis of all other service associations. The Cavalry Association for the past several years has been the only one which has carried dues at less than $3.00 per annum. In fact, there are two services whose annual dues are $4.50 per year, and the majority of all others receive $4.00 per year from all subscriptions other than individual. It is believed that The CAVALRY JOURNAL is commensurate in size, contents and makeup with most of the other service journals. It would appear that if other arms and services evaluate their periodicals at $3.00 per year the same should hold for the Cavalry Association.

In accordance with the above reasoning this subject was brought up for discussion at the annual meeting held in Washington on January 16, 1939. Representatives of all three components of the army were emphatic in their indorsement and recommendation of placing dues in the Cavalry Association on the same basis as all other associations. In view of this concensus of opinion, the subject was placed before the meeting of the Executive Council, held immediately after the adjournment of the Annual Meeting. By unanimous vote it was directed that, effective January 17, 1939, dues in the Association and all subscriptions to The CAVALRY JOURNAL shall be confined strictly to the basis of $3.00 per year.

For those members whose annual dues became effective prior to January 17, 1939, and who have received statements for the ensuing year, dues for that period will remain at the same figure at which they were initially billed. However, new subscriptions and membership dues which will become due from that date forward will be billed at $3.00.



The motorization of trains and the increasing use of motor vehicles in the cavalry has brought up many problems. Little difficulty is experienced keeping vehicles moving on a hard surfaced road but it requires force and ingenuity to keep them moving cross country under unfavorable weather conditions. This discussion will be limited to movements cross country and over poor roads.

When time permits a movement over poor roads or cross country should be preceded by a thorough road reconnaissance. This reconnaissance will show where trouble is to be expected and expedients can be planned to overcome these difficulties.

The driver must be schooled to study the road ahead and to select the gear and speed best suited to the terrain and to the road surface.

Precautions are necessary. It is better to stop vehicles to put on chains before entering a muddy stretch of road than to push into this questionable stretch, become mired and block the road for other vehicles properly equipped to cross this bad terrain. Also roads often become worse as they are used, so road conditions should be watched and the necessary preventive measures taken.

Once a vehicle is stalled there are several lines of action which can be followed:

(1) It may be possible to improve traction by using rocks, tin cans, weeds or grass under the wheels and by digging a trench for the front wheels. If not badly mired the vehicle may then move on under its own power.

(2) The vehicle may be pulled out by another vehicle which has sufficient power and traction.

(3) A "deadman" may be improvised and used in conjunction with one of the following:

a. Block and tackle from light maintenance truck.

b. Spanish windlass made from rope, taken from light maintenance truck, and pipes or stout poles.

(4) An "A" frame can be built and used in conjunction with a towing vehicle having good traction and sufficient power to move the stalled vehicle.

Each military motor vehicle is equipped with towing hooks front and rear fastened to the vehicle frame. In addition each vehicle should be equipped with a towing cable or chain and a shovel. Wheeled vehicles should carry tire chains for all driving wheels.

Also the light maintenance truck of each horse regiment and the maintenance platoon of each mechanized regiment have the following equipment which will be very useful:

(1) Block and Tackle Set (Unit Equipment Set Number 4):

1 Block, double, steel, 1-inch, with becket and safety hook.
1 Block, single, steel, 1-inch, with becket and safety hook.
300 feet of 1-inch manila rope.

(2) From equipment of the Maintenance Platoon:

1 Sledge, 8-pound.
1 Axe, hand.
Saws.

Improvement of traction of the mired vehicle and towing need little explanation. The situation will quickly indicate what should be done.

Should a vehicle become mired or stalled a deadman may be used with a block and tackle. If a suitable tree or stump cannot conveniently be found a post may be sunk in the ground; or steel pins used from the troop picket line; or a heavy truck can be used at times by turning the truck sideways and hooking onto the truck frame.

Figures (3), (4), (5), (6), and (7) show the hook up and the passage of a four-wheel drive truck up a very steep, muddy grade. Traction was so poor that three scout cars were necessary to get the truck up the steep bank.

The towing chain is first fastened to the two hooks on the front of the stalled truck. The single block is then attached to the towing chain. The double block is fastened to a deadman with suitable rope or heavy chain (see Figure 2). The 300-foot length of 1-inch rope is then strung through the pulleys: one end is fastened to a coupling provided on the single block, the other end of the rope to the towing vehicle.

Care must be taken during the use of the block and tackle to see that the sharp steel edges of the blocks do not cut the rope as the load is applied to the tackle. Experience will soon indicate whether the stalled vehicle should assist the towing vehicle or whether the foot brake of the stalled vehicle should be used to offer a steady resistance to the block and tackle and towing vehicle. The drivers should be carefully instructed as to just what they should do as the job progresses.

The block and tackle can be used in many varying situations where a deadman is available or can be improvised.

*Instructor, Department of Weapons (Motors), The Cavalry School.

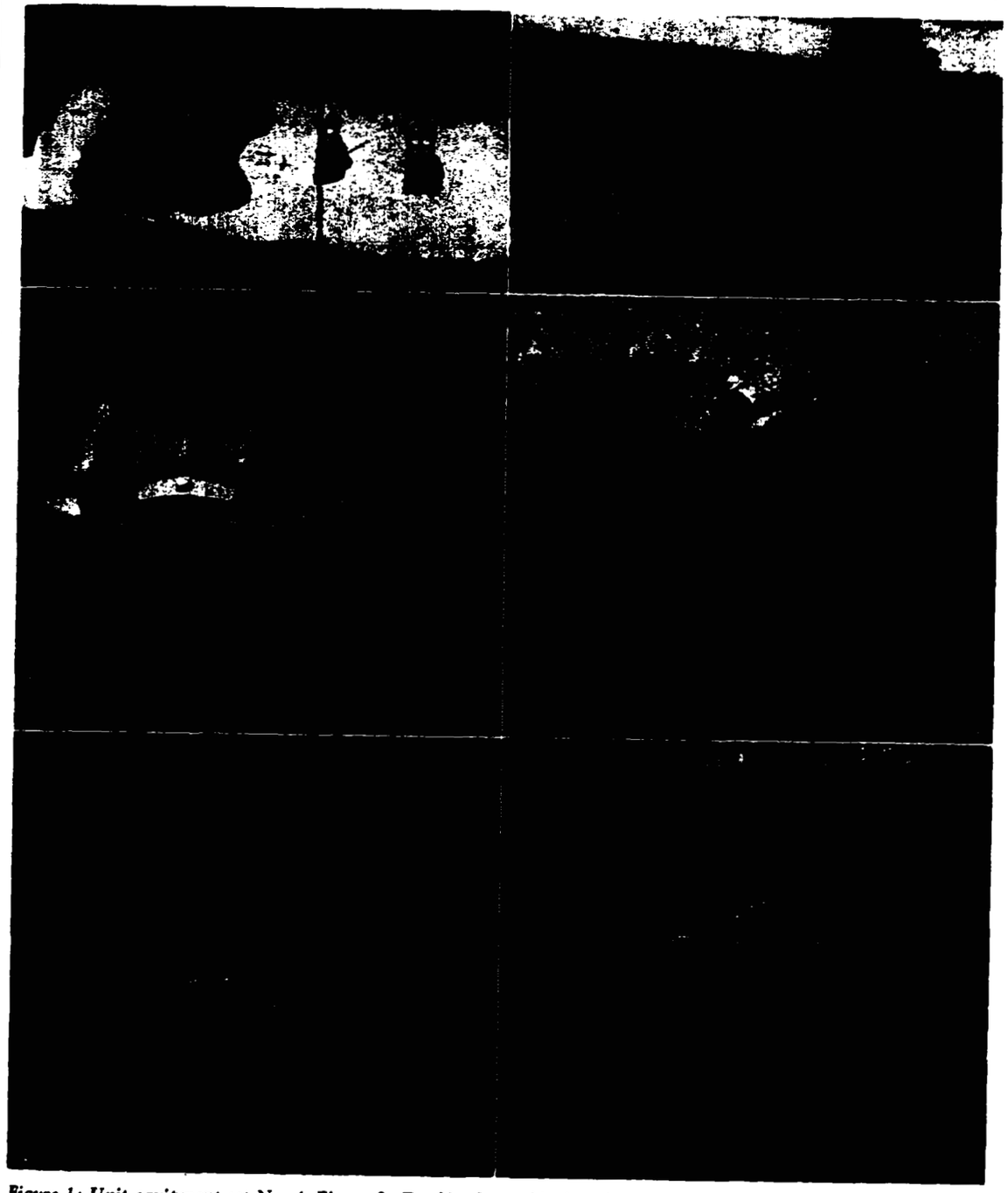


Figure 1: Unit equipment set No. 4. Figure 2: Double sheave block and tackle lashed to a tree with rope. Figure 3: Using block and tackle. Truck is at foot of steep muddy slope. Towing chain has been wrapped around hooks and single. Figure 5: Using block and tackle. Three Scout Cars were utackle. Note angle made by the truck with the horizontal. sheaf block has been attached. Figure 4: Using block and sed for towing because of the mud. Figure 6: Using block and tackle. Job nearly completed.

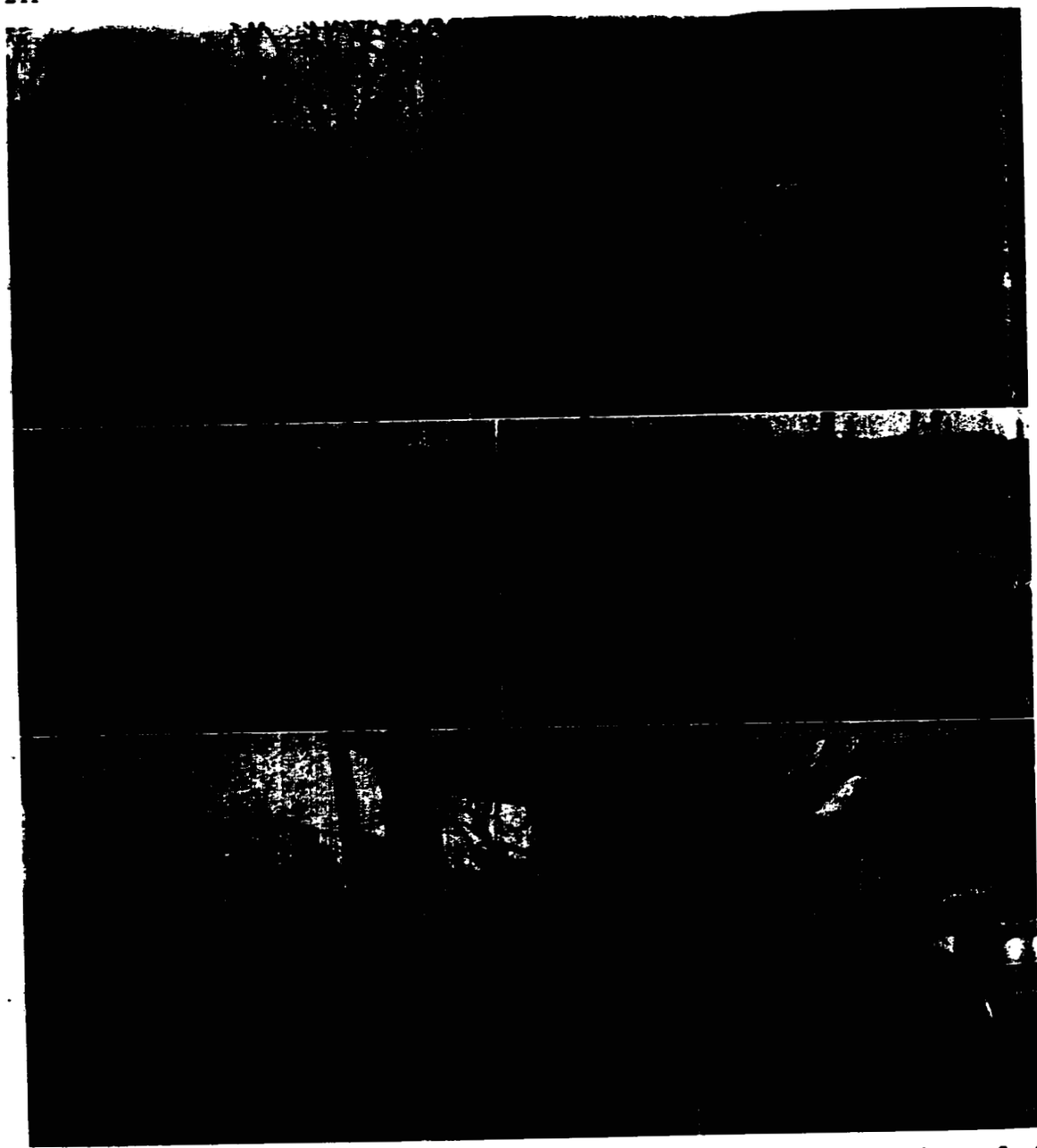


Figure 7: Using block and tackle. Job completed. Figure 8: Using Spanish windlass: Note attachment of rope to Scout Car. Figure 9: Using Spanish windlass: Crew winding windlass. Vertical pole anchored in hole to prevent slipping. Figure 10: Using Spanish windlass. Scout Car beginning to move forward out of sand. Figure 11: Using an "A" frame. Poles are being lashed together. Front end of truck must be lifted vertically about three feet. Figure 12: Using an "A" frame: Frame in position and towing rope attached.

Figure 13: Using an "A" frame: Front wheels have been raised and stalled vehicle can now assist towing vehicle. Figure 14: Using "A" frame: Vehicle now able to proceed. "A" frame was pulled along by towing rope ahead of stalled truck. This picture also shows construction of a modified "A" frame. The bottom member is not used. Instead the bases of the inclined members are placed in holes dug in the ground. This gives the necessary lateral support to the frame.

For example it can be used in getting through bad mudholes, up sharp, steep slopes or in towing vehicles across deep unbridged streams.

Figures (8), (9) and (10) show the use of a Spanish windlass and a deadman. This expedient is valuable when a lone vehicle stalls and rope but no towing vehicle is available.

The rope is first attached to the mired vehicle and is then looped around an upright piece of pipe or timber stripped of bark. The rope is then drawn taut and the free end attached to a tree trunk or some other suitable deadman. The rope is then looped around one end of a stout pole which together with the upright pole or piece of pipe form the windlass. This latter pole is then moved to the horizontal position with respect to the upright timber. Part of the scout car crew then wind up this windlass drawing the vehicle from the mudhole.

Care must be taken in using a windlass to see that the upright pole which serves as a fulcrum does not slip as tension increases on the rope. Sinking the upright into a hole at least one foot deep will generally prevent slipping and removes much of the danger element from the use of the windlass.

Had rope and a single sheaf block been available the lone stalled vehicle could have been pulled out by improvising a deadman, fastening the block to it and then using one of the driving wheels as a drum around which the rope can be wound. The engine operates this drum and great tractive power results. This expedient is easily used when the stalled vehicle has dual wheels.

At times a vehicle becomes stalled in negotiating a low vertical bank or by dropping into a deep ditch. An "A" frame can be improvised quickly to get the vehicle out of trouble.

An "A" frame consists of three stout poles about eight feet long lashed together with rope to form a triangle. The tow rope is fastened to the towing hooks or the frame of the stalled vehicle. It is then fastened to the apex of the "A" frame by a half-hitch or some similar knot and finally to the towing vehicle. The location of the "A" frame with the vertical when the tow rope is taut determines the vertical lift delivered from the "A" frame. The greater the lift required the more the "A" frame departs from the vertical.

The stalled vehicle generally helps the towing vehicle. Once the front wheels of the stalled vehicle are free of the ditch or embankment the driving wheels of the stalled vehicle assist the towing vehicle.

Disabled vehicles present special cases. Each case usually requires a different solution. The maintenance truck with its equipment together with a careful analysis of the damaged vehicle's location and disability will generally suggest a solution.

Rope and ingenuity are great helps in moving stalled vehicles from mudholes or over difficult terrain. Cavalry cannot be tied down by existing road nets. It is necessary for the motor vehicles which accompany our Horse Cavalry Regiments to keep up. Careful reconnaissance will prevent much delay and trouble with stalled vehicles. However, once a vehicle becomes stalled, equipment is available in the Maintenance truck to get the road cleared and the vehicle again in operation.

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Special Activities

More Anent This Shooting Business

By CAPTAIN P. M. MARTIN, *Captain, the Cavalry Rifle Team*

It will not be long now until the rifle ranges throughout the country will be centers of activity. What can we do to make this year's target season more interesting and more beneficial? Consider the following, it may be of assistance:

Is the object of the range practice to teach the best shots to shoot better, or to improve the poorest shooters? Why not do both? Recently a troop commander boasted to me that he didn't bother with the poorer shots, but had more experts than any other troop in the regiment, as a result of concentrating on his best shots. This is not for the best interest of the organization. Here is a plan which will overcome this tendency.

There is no better organization for the target range than the regular organization of the troop. Place responsibility where it belongs. Require each platoon to train and qualify its own men. Put a premium on this by rewarding the best platoon. Platoon leaders should require squad leaders to qualify their own men. If the second platoon has fewer corporals that make good rifle coaches, the platoon sergeants should pitch in and help them.

The preliminary instruction should be given carefully and thoroughly. The troop commander should personally supervise this instruction, first giving it to all non-commissioned officers. After this course has been completed the troop commander will know that his instructors are properly prepared to conduct the training of the men. The Basic Field Manual on this subject of Rifle Marksmanship is one of the best ever published, and should be followed closely.

The target season usually is long enough to permit three or four groups to be formed. The weakest shots are usually placed in the first group with the best shots. This assures the majority of the coaches being fired early. The poorest shots can be dropped back to the second group if they are not making proper progress, and again to the third group if deemed advisable.

There should not be too much emphasis on individual high scores, particularly at the expense of the well rounded instruction of the unit. Remember that it is easier to raise the low man's score ten points than it is the high man's score one point. If the poorest shots in your unit seem to be hopeless, don't worry over them, drop them back to another group and put them on the .22 caliber, not in the pits.

Just a word about this .22 caliber on the target range. What possible good can we get out of it at this time? As soon as a man shows signs of flinching, he should not be subjected to further punishment until the cause is removed. It is purely a question of relaxation. If he is sore, he becomes tense, and is a "set up" for a flinch. We have all been sore from too much shooting, and most of us know that at this time we flinch more frequently. To avoid losing time at this stage of the man's training, take your .22 caliber rifles to the target range and use them to continue the instruction of these cripples. It is economical, and hardens the men's muscles nearly as much as the .30 caliber does. In fact, if we used these .22 caliber weapons more in the winter training, we would ease our problems greatly on the range.

Pistol firing can be carried on in conjunction with the rifle firing. The best season I ever had on the known distance range was one in which we completed light machine gun, rifle and pistol dismounted, firing rifle and light machine gun in the morning and pistol in the evening.

Clever shooting is close concentration. The average soldier, particularly the younger ones, usually have not developed their powers of concentration to the point necessary for expert marksmanship. Their performance curve will be generally upward for two or three days, then flat for a few days, depending on the individual, and then downward for a short period. Learn to time this right, and a troop commander is able to get the greatest return for his expenditure of time. A failure to appreciate this oftentimes makes both shooter and troop commander the victims of poor timing. Don't overtax your shooters' powers of concentration.

Equipment for the range season is a very important factor in the success of this training. The ordnance inspection usually takes care of the greater part of the deficiencies in equipment. However, a troop commander who relies on this completely is placing some of his men at a disadvantage. Every sight, both front and rear, should be examined for looseness every day during target season. All rifles should be tested for proper stocking prior to firing. The rifles that gauge the closest may shoot the widest due to poor fitting of the stock. This is best determined by holding the rifle at the lower guard screw and gently tapping the muzzle on a firm object, if there is a uniform vibration a good fit is indicated. This will also disclose loose guard screws. The guard screws must be tight to give accurate results. The barrel should be resting lightly against the wood, at the muzzle. If the barrel rests against the metal band, when the barrel expands with heating it will change the shot group. Some may wonder why, after an Ordnance Officer has checked all these rifles, there should be any difficulty with them. The answer is, that the stocks, being made of wood, are subject to warping, some more than others. The grain of the stock has a great deal to do with this, that is one reason you find the old shots looking for straight grain on a stock, when selecting a rifle. A period of wet weather following a dry season will warp many of the rifle stocks.

Some troop commanders may feel that this is going a bit too far. I have heard them say, "What is the use of all this, you can't be that particular in battle?" Certainly not, but other things being equal, the leader that is the most particular about the care of his men and their equipment may be the winner on the battlefield. If our troop officers would devote more thought and time to these problems, there would be fewer failures on the target range and the season would be more interesting. Be a trouble shooter. When your men are not getting the desired results, there is usually a definite reason for it. This is a challenge to your intelligence and resourcefulness. Don't be content to let your organization suffer mediocre results, when a small amount of attention to detail will raise it to a plane of excellence. Oftentimes the best solution to our problems on the target range entails the least amount of work. For example, I have seen an officer personally check every sight setting of his organization with a micrometer, when half the rifles were in such poor condition, with loose sights, loose guard screws and poorly fitted stocks, that they couldn't get a fair score with any sight setting. Had this officer carefully inspected the equipment daily, and had the necessary corrections made, he could have thrown his micrometer away and obtained far better scores.

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An Efficient Rifle Troop

By MAJOR LEO B. CONNER, *Cavalry*

The new Tables of Organization (war strength) have effected a great improvement in the Cavalry Regiment. As now constituted the Regiment is more mobile, has a better tactical organization, has greater fire power, and is better fitted to perform Cavalry missions than ever before. The Colonel now has three slightly stronger squadrons, supported by efficient machine gun and mortar units, and protected from hostile mechanization by .50 caliber machine guns. His communications have been greatly improved, his trains motorized, his reconnaissance agencies augmented, and he has been furnished with a command car. Every element of his command has been improved with one exception; the basic combat organization, the Rifle Troop, has merely been reduced in size.

The Major now has a Squadron of nine rifle platoons and eighteen light machine guns, organized in three rifle troops, instead of eight rifle platoons and sixteen light machine guns, organized in two rifle troops. His command is flexible and easy to control unless he attempts to use the light machine guns to support the Squadron attack. The new Squadron is stronger than the old but it can never be stronger than the three Rifle Troops which compose its fighting strength.

The Rifle Troop is still a hybrid, consisting of three weak and inefficient Rifle Platoons and a Light Machine Gun Platoon equipped with an inferior weapon. The Rifle Troop is an organization intended for close combat, either mounted or dismounted. The Light Machine Gun Platoon, constituting one fourth of its combat strength, has no place in this type of action. The training of the Troop is complicated by different methods of drill and the necessity for proficiency with two weapons. If real proficiency is obtained with both weapons it is because the necessary time has been taken from training in tactics or horsemanship.

The Rifle Platoon is too small and its organization is poor. It can place only fifteen active rifles on the firing line. One officer, one sergeant, two messengers, and three corporals are used to control these fifteen rifles. One sergeant and six privates are back with the led horses. An overhead of fourteen men is used to place fifteen rifles in action. The Platoon is only fifty per cent effective in the fire fight.

The Rifle Platoon is frequently used as the advance party in the advance guard. Here it must detach one squad as a point. Another squad must be broken up to perform flank reconnaissance on a front of 1,200 yards. One squad only is left for combat.

The Rifle Squad itself is defective. It makes a good patrol but a half squad is too small a unit for patrolling if any messages are to be sent back. The fire power of the squad consists of five rifles. The drill of the squad does not conform to the general principles governing Cavalry drill.

The fact that the fire power of the forty-five active

rifles in the three Rifle Platoons is insufficient has long been recognized and an attempt has been made to increase it by adding a Light Machine Gun Platoon of six guns. The fire power of one of these guns is commonly assumed to be equivalent to that of five rifles. The addition of this Platoon has increased the fire power of the troop by two thirds.

So far so good. But there are a number of disadvantages.

The six guns of the Light Machine Gun Platoon, equivalent to thirty rifles in fire power, require one officer, twenty-eight enlisted men, and thirty-nine horses to make them effective in dismounted fire action. These men and horses have little value in the mounted attack or in the dismounted assault and cannot be used for patrols. The guns are inferior machine guns. They must be used as single shot weapons. While they have a greater effective range than the rifle, lack of suitable positions will generally prevent their employment at such ranges. The gun is dangerous to friendly troops when employing overhead fire even though barrels are changed after every six hundred rounds. When the guns are employed at the longer ranges they are separated from the platoons they support and control and coördination becomes difficult. If the Squadron Commander wishes to employ the guns of the Squadron in support of a mounted or dismounted attack he will find that he lacks the necessary staff for controlling and coördinating the fire of eighteen machine guns. If the guns are so posted as to fire at right angles to the direction of attack they require a rifle escort, thus reducing the strength of the main effort.

Generally it will be necessary to attach these guns to rifle platoons in order to make use of their fire power in the dismounted attack. In such a case the personnel necessary to operate them is useless when the assault stage is reached. In the mounted attack they will frequently follow the rifle platoons. When this is done the nine men who lead pack horses are defenceless. Those men who are not encumbered with pack horses may be of some value in the mounted fight but, as they are the non-commissioned officers and gunners, a few casualties will greatly reduce the efficiency of the organization.

It is apparent that I do not like the organization or the equipment of the Rifle Troop. I believe that it can be improved enormously; that its drill can be simplified; that its control may be made easier; that its overhead can be reduced; and that all of its combat personnel can be made available for any type of Cavalry mission without loss of mobility or fire power.

To begin with I recommend that the Rifle Squad be increased by four men, making its total strength twelve men. The squad, organized in three fours, would drill in accordance with the general principles governing all other Cavalry drill. It could place eight rifles on the firing line. It could be split into half squads, each of which would be big enough to function as a patrol. The full squad would make a strong patrol when strength is required and it would not be too big to be controlled by the squad leader in the mounted attack.

Each of the three Rifle Platoons should consist of the present headquarters and three of the enlarged squads. Each Platoon would then be able to put twenty-four rifles on the firing line with an overhead of seventeen men: a considerable gain in efficiency. All men participating in the fire fight would be available for the assault. When used as an advance party it would be able to perform all necessary flank reconnaissance and still have considerable combat strength. When used in the mounted attack it would be approximately one third stronger than at present and it would still be small enough to be controlled by one officer.

The Light Machine Gun Platoon should be abolished. The changes described above would add twenty-seven active rifles to the troop. The fire power of these twenty-seven rifles is practically equivalent to that of the Light Machine Gun Platoon with one important advantage. The fire of rifles can be better distributed than that of any other weapon. The fire of machine guns is concentrated.

Only one other change need be made. Troop Headquarters has two pack horses carrying rifle ammunition. A third should be added together with one horseholder to lead it and another horse for him to ride.

In all of the above discussion I have assumed that the fire power of the light machine was equal to that of five Springfield rifles. Even if the Springfield is retained the fire power of the troop would not suffer by the changes recommended. When we consider the new semi-automatic rifle we find that the comparative value of the light machine gun has been considerably decreased. We would probably be near the truth if we assume that the fire power of two of the new rifles is equivalent to that of three of the old. If so, the comparative value of the light machine gun has been reduced one third. The fire power of the Light Machine Gun Platoon is equivalent to that of twenty of the new rifles.

On this basis an interesting comparison of the fire power of three different troops, stated in terms of the Springfield rifle, can be made.

The present troop, armed with the Springfield rifle and the light machine gun, has a fire power of forty-five rifles and six light machine guns. The total fire power may be represented by seventy-five Springfields.

The present troop, when armed with the semi-automatic rifle and the light machine gun, will have a fire power equivalent to that of ninety-eight Springfields.

The proposed troop, equipped with semi-automatic rifles only, would have a fire power equivalent to that of one hundred and eight Springfields.

Need I say anything more about fire power?

It is true that there would be no weapon in the Troop or Squadron for mid-range fire support. This support should be furnished by the Regimental Machine Gun Troop which is equipped with a real machine gun.

The next question to be settled is this: How does the strength of the proposed troop compare with that of the present?

The following table answers the question in full:

	Present Organization	*Proposed Organization*	*Decrease*	*Increase*
Officers	5	4	1	
1st Sergeant	1	1		
Sergeants	11	9	2	
Corporals	12	9	3	
Privates, 1st Class and Privates	103	117		14
Total Enlisted Men	127	136		9
Horses	149	148	1	

One lieutenant must be eliminated; five non-commissioned officers absorbed; nine privates added; one horse disposed of; the light machine guns scrapped; and the Springfield rifles replaced by semi-automatics. No other changes are necessary.

The Rifle Troop, thus reorganized, would be much easier to control, much more efficient in reconnaissance, counter-reconnaissance, and security missions, and much stronger in battle. The Squadron would be a really powerful combat unit. The Regiment, consisting of three of these powerful Squadrons, supported by heavy machine guns, anti-tank weapons, mortars, and scout cars, and equipped with modern communications, and transportation, would be better fitted for all Cavalry missions than anything we know today.

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Reflections on Famous Rides

By CAPTAIN WAYNE O. KESTER, *V.C.*

The Chief of Cavalry states in the last Journal that horse cavalry has great strategic mobility when transported by train or motor and that *it can move under its own power by forced marches 150 miles in forty-eight hours or 100 miles in twenty-four hours.*

Accustomed as we are to the conservative marching of peace time maneuvering, General Herr reminds us of a fact frequently forgotten. A little delving into the past shows that such marching, though not easy for large units, was not unusual long before our modern equipment and methods were developed. In fact these marks have been far surpassed by Cavalrymen both in campaigns and in endurance contests.

Two years ago on March 6 and 7, 1937, the Eighth Cavalry under the guidance of Colonel Innis P. Swift gained considerable valuable first hand knowledge of horsemanship and equine endurance when eighteen officers of that regiment engaged in a 150-mile horse race.* It was believed by some that the ride would most certainly ruin many of the horses. Not only were none ruined but none were permanently injured and all are doing regular duty today. However, it is believed that in tests of endurance as in any strenuous equestrian event more horses are injured by the manner in which they are handled in the hours prior to and immediately following the contest than by the contest itself.

That no horse race ends at the finish line is an axiom well proven. At some time during this ride at least three horses reached a state of complete exhaustion. Five others were exhausted to a point where a weak trot was their fastest action. Every horse was carefully handled and given every indicated medical aid and treatment until entirely back to normal. This took a few days for some individuals. New swellings, sore spots, filled joints, and other disturbances were putting in their first appearance as much as three days after the contest.

From a check on the veterinary sick report for the past two years it would appear that none of these horses suffered for their experience. Their record is about the same as that of any eighteen animals of similar age and duty. About the usual per cent have been on sick report for minor conditions. Only three have been treated for serious ailments.

"Highlander" lost over two months' time shortly after the ride with a low splint. This splint was well developed several months before the ride but had caused no lameness. His rider was aware of this unsoundness but liked the horse very much and decided to use him. The splint caused no trouble until a few days following the ride and there is no record of it having caused any trouble since that attack.

"Rojo" suffered an attack of acute tendonitis in the right front leg seven weeks after the ride. It is possible that the 150 miles was a contributing factor but hardly probable. He was never extended, made slowest time in the race and always appeared in excellent condition. It is possible that his condition was aggravated by other causes. He is not a light horse for his bone and started out rather rapidly soon after the ride on what appeared might be an unusual jumping career. About a year later he developed sesamoiditis in the same leg. There is no record of his having suffered any permanent injury from either condition. He is still doing full duty.

"Big Boy" developed tenosynovitis in both front digital

*Reported in the Veterinary Bulletin, October, 1937, and CAVALRY JOURNAL for March and April, 1937.

sheaths and a splint on the right fore seven weeks following the ride. He also had been doing some jumping. A rather large, heavy boned horse, with little spring in his trot, he pounds the ground considerably. This fellow did the first 83 miles at the rate of 9.6 miles per hour. Later on he fell out and was transported in to Fort Bliss by truck. At the point where he fell out there were no rest bandages available consequently his legs had filled some when cold packed several hours later. The ride may or may not have been a contributing factor to his troubles but he as well as the others have continued to do regular duty.

All eighteen horses participated in the 1938 Provisional Cavalry Division Maneuvers which involved continual field exercises and a road march of 373 miles. Some have appeared in horse shows and that old campaigner "Sotol," now fourteen, emerged from the 1938 Annual Show as Reserve Champion Jumper of the 1st Cavalry Division after winning the Fault or Disobedience and Out and placing in other classes.

The 8th Cavalry ride while entirely different, compares very favorably with other well known rides. It was not a super-performance by professionals. It was just a good ride by young inexperienced contestants on untried troop horses. Every contestant unknowingly made many mistakes that would have been avoided by more experienced hands. However, the only way to really learn the art of conditioning troop mounts and conducting them on long marches is by so doing. Conclusions drawn from this contest were similar in many respects to those of endurance tests and famous rides of other years.

Colonel L. A. Merillat and Colonel D. M. Campbell record some interesting feats of equine endurance in "Veterinary Military History." An account is given of Captain A. E. Wood of the 4th Cavalry who, in September 1880, with eight men rode 140 miles in 31 hours in pursuit of a deserter at Fort Reno Indian Territory (whether or not he was apprehended is not stated).

Four men of Company H, 1st Cavalry the same year carried dispatches from Fort Harney to Fort Warner, 140 miles in 22 hours over a bad road. The horses were in good condition at the end of the ride after one day's rest made the return trip at 60 miles a day.

In 1879 several single couriers of General Wesley Merritt's command rode from Thornburg's rat hole to join the main column, 170 miles in less than 24 hours.

Colonel Richard I. Dodge tells of an express rider in Texas who carried mail from El Paso to Chihauhau, a distance of 300 miles with a weight of 200 pounds. Traveling by night 100 miles at a stretch and resting four days between trips he used the same pony continuously for six months.

Colonel Kearny with four companies of the First Dragoons in 1843 marched 2,000 miles in less than 100 days, horses foraging entirely on wild grass.

The 2,000 mile trek of the Eighth Cavalry from Texas to Dakota in 1888 in three months was far from slow time considering conditions.

The Seventh Cavalry on General Custer's last march covered 35 miles on June 23rd, 45 miles on the 24th before the afternoon halt to which a slow ten miles more was added that night over none too pleasant terrain. Then after a brief rest in the wee hours of the morning without unsaddling that memorable 23-mile advance on the battlefield was begun.

Colonel S. F. Dallam in the CAVALRY JOURNAL July, 1927 states that the 3rd Squadron of the 7th Cavalry in the Punitive Expedition of 1916 marched 200 miles the first five days with horses that were soft. Marching fourteen of the first sixteen days in the field they covered 436 difficult miles under trying conditions, winding up with a prolonged 55 mile day and night march which terminated in the engagement at Guerrero. The animals had subsisted on scant rations of mostly native hard corn and corn stalks. Considerable loss was suffered before supplies and replacements caught up with them.

The amazing endurance of Mongolian ponies was related by Lieutenant F. B. Butler, C. of E. (CAVALRY JOURNAL, July, 1926) on his return from duty there a few years ago. The ponies used stood less than 12 hands and usually weighed around 600 pounds. Pack ponies frequently carried as much as 200 pounds. It was customary for the Mongols to water only once a day. On some marches the ponies often went 36 hours without water.

He relates one instance of a Mongol messenger who after bringing his two ponies in ten miles from a spring made a 130 mile round trip riding and leading alternate mounts in 54 hours including night rests. Upon completion of his errand the ponies were returned the ten miles to the spring, really a 150 mile trip. The ponies had always subsisted on poor grazing and were allowed no other feed on the trip.

"Crabbet," that outstanding Arab gelding in his winning Eastern Endurance Ride carried 245 pounds 300 miles from Red Bank, N. J. to Washington, D. C. in five consecutive days. His best day was 61.8 miles in 8 hours 7 minutes. He stood 15:2, weighed 970 and incidentally was the only gelding to win any of eight Eastern rides.

"Peggy," that little wonder mare of the 3rd Cavalry won the 1924 and 1925 Eastern rides and placed 4th in the 1926 test. Her elapsed time for the 300 miles in 1924 was 45 hours 13 minutes. She was 11 years old, stood 15:2½, weighed 1000 pounds. She had a prior sick record worth noting. All four feet were contracted, front tendons thickened, front fetlocks enlarged, both hind ankles cocked yet she finished with the highest score for condition. She was one of the few entries gifted with a straight gait and true action and could walk five miles per hour.

"Pathfinder" was another great horse in the Eastern Endurance Rides. He placed in the money five different years during which time he was also an outstanding performer on the U. S. Olympic team in France.

Another good performance was that of "Dolamite" who covered 55.5 miles in 5 hours flat in the 1922 Night Ride at Fort Riley with Captain C. H. Gerhardt up.

Some interesting comments were forthcoming from various rides. Most of the good performers were horses of medium size. A horse that stood about 15:2, weighed about 1,000 pounds with sturdy conformation, great lung capacity, short back, powerful forearms and quarters, strong bone, sound and with natural ability to travel straight and squarely on all four legs and preferably of Thorobred extraction seemed to be the most desirable type for endurance.

Small horses, particularly the Arab, were the most economical in feed consumption for the number of pounds carried per mile. They remained in equally good condition with larger horses but were somewhat slower.

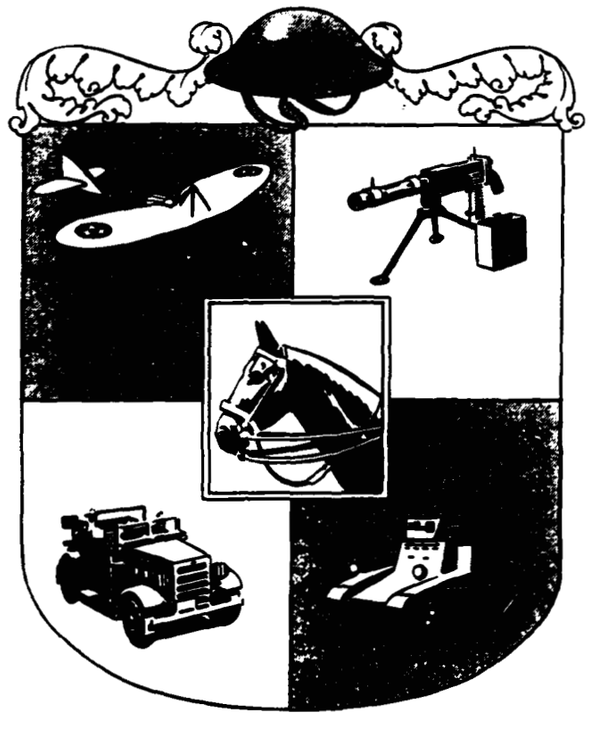
Large horses were not favored because it was felt that they had too much of their own weight to carry. It would be interesting to know if the same conclusions still hold true after the past 15 years of improved horse breeding.

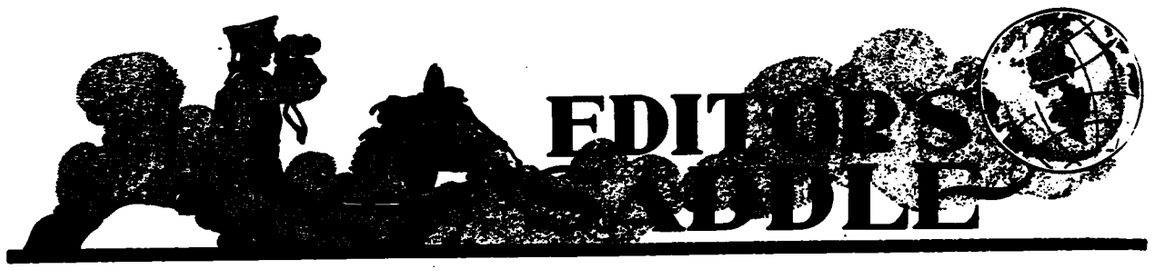
It was demonstrated that many horses which one might hesitate to send out on a forced march can when *properly cared for* travel 300 miles in five days with a load of 200 to 225 pounds or 100 to 150 miles in 24 hours and still be fit to carry on after a day's rest. "Peggy" in the Eastern Endurance Rides is an outstanding example. Several of the horses in the 8th Cavalry ride were average troop mounts, far from being the best in the Regiment, and some could have been in better condition, yet 150 miles in 24 hours on good footing would not have been too much for any of them.

In most contests there were horses that appeared to be very ordinary and not good selections for endurance tests. Many of them came through with quite satisfactory scores.

After the 1926 Colorado Ride, Captain H. N. Beeman, V. C. observed that it was indeed a wonderful lesson to know that in such a motly array of horses 86% of the starters could stand the grueling 300 mile test. Type, gait, breeding, and soundness was so varied that no other conclusions could be drawn.

The old maxim that an ordinary horse well conditioned will outlast a really good horse not in good condition and an inferior horse properly handled will frequently surpass a superior horse improperly handled has been proven in every contest.





Massed Cavalry

One is struck when reading discussions on cavalry from various angles, both American and foreign, with the emphasis given to the factor of reconnaissance in the employment of cavalry. This peculiarity is more common among lay writers and authors of other arms and services than is found in the observations of cavalrymen themselves. Likewise, the tendency to emphasize reconnaissance and the employment of cavalry in small units is particularly noticeable in many foreign publications. On the other hand, it may be significant that most comments originating in Poland and Russia, together with those of American cavalrymen, appear to dwell more upon the combat value of the arm, particularly in any discussion involving large elements of cavalry. The term "significant" is used premeditatively, as it is in these three countries that large open areas abound with limited communication facilities.

Many of the commentators who stress the employment of cavalry in small units are in reality visualizing only the use of mounted scouts or mounted infantry. Webster adequately explains cavalry in the following definition:

> Cavalry is that part of a military force which serves on horseback and, while it may be dismounted to fight in an emergency, is normally used so as to realize the advantages of the horse's mobility in maneuvering and impetus in charging—distinguished from mounted infantry which uses the horse almost wholly for rapid transportation.

Although the term "mounted on horseback" is used in the dictionary, it is realized that that term implies the use of the horse for purposes of combat. The modern combat car and scout car fulfill the conditions of the term. It has been the presence of massed cavalry on battlefields of the past, prepared to participate in the main battle, that has turned the tide of success on more than one occasion. The presence of massed cavalry on future battlefields will fulfill the same purpose.

* * *

Hemisphere Defense

A new and accepted American principle of national defense is incorporated in the term "hemisphere defense." Such a phrase manifestly includes terrain from Hudson Bay to the Tierra del Fuego. It is known to every individual of average interest in geographical affairs that the major portion of such terrain is more adaptable to the man on foot or horseback than to the motor vehicle. At once, one admits that the principal barriers to this domain rest in the Atlantic and Pacific oceans. However, when foreign penetration succeeds in establishing areas of dominance in this region, particularly in the south, it will not be through visible advance in force across these barriers. It will be accomplished by surreptitious penetration of individuals, arms and supplies for future assembly and concentration.

The June issue of *Adventure Magazine* contains a highly interesting and provocative narrative by Arid White entitled, "Attack on America." Although written in the realm of fiction, this first of four installments incorporates many thought-provoking facts under conditions visualized by that author. General control of such a situation might be accomplished by sea and air power, but to effect absolute control the need of ground forces would be imperative. In this vast area the potential effectiveness of cavalry as a part of that force is apparent.

* * *

Cavalry Unity

The past nine years have marked a progressive effectiveness in cavalry affairs. Cavalry packs have reached a high plane of dependable efficiency. The old escort wagon of the field train has surrendered to more effective automotive transportation through the proven trustworthiness of the truck. The cavalry mount annually becomes more streamlined and endurable through better blood. The effectiveness of improved horsemanship is evident. Modern automotive engineering has donated perhaps our greatest advance in the creation of mechanized cavalry.

During this period of growing pains there has been active interest in the merits of the new vs. the old. Experiments and maneuvers have been conducted to test the efficiency and effectiveness of one vs. the other, one with the other, each alone, etc. Now at the beginning of a new decade it would appear evident to all that each and every type of our new means of matériel and organization has settled into its own groove of proven reliability and purpose. Instead of odious comparisons one might suggest that the time has arrived for unity of interest and the spirit of interdependence from which in the near future a vastly improved team might emerge with all of the merits of the old strengthened and toned by the new.

Memberships

For the past several years a number of regiments in the National Guard and the Cavalry Reserve have found it expedient to make a drive for members in the Cavalry Association during active field training. Not only are association memberships renewed in these regiments but, through bulk collection of dues while in camp, the interests of the association have been augmented by eliminating the necessity and consequent cost of individual billing. It is hoped that a large number of regiments may feel disposed to solidify their interest and membership in the association during the coming summer by applying collections in camp to cover individual dues and forwarding same to the Secretary, as a bulk, payment for members of the organization concerned.

* * *

Honor Roll

The following organizations occupy a place on the Honor Roll by maintaining 100% membership in the Cavalry Association:

National Guard:

103rd Cavalry
104th Cavalry
112th Cavalry
113th Cavalry
114th Cavalry

Cavalry Reserves:

308th Cavalry (61% membership, highest in that component).

* * *

The Future of American Cavalry

It is with a sense of pride that The Cavalry Journal presents in this issue a discussion of the days ahead for American Cavalry by a nationally known military writer, Major George Fielding Eliot. Major Eliot brings to light factors in American defense policy which warrant not only the attention of cavalrymen but of the army as a whole, including particularly those who may be charged with the preparation of planning and the execution of those plans.

☆ ☆ ☆

The United States Cavalry Association

Organized November 9, 1885

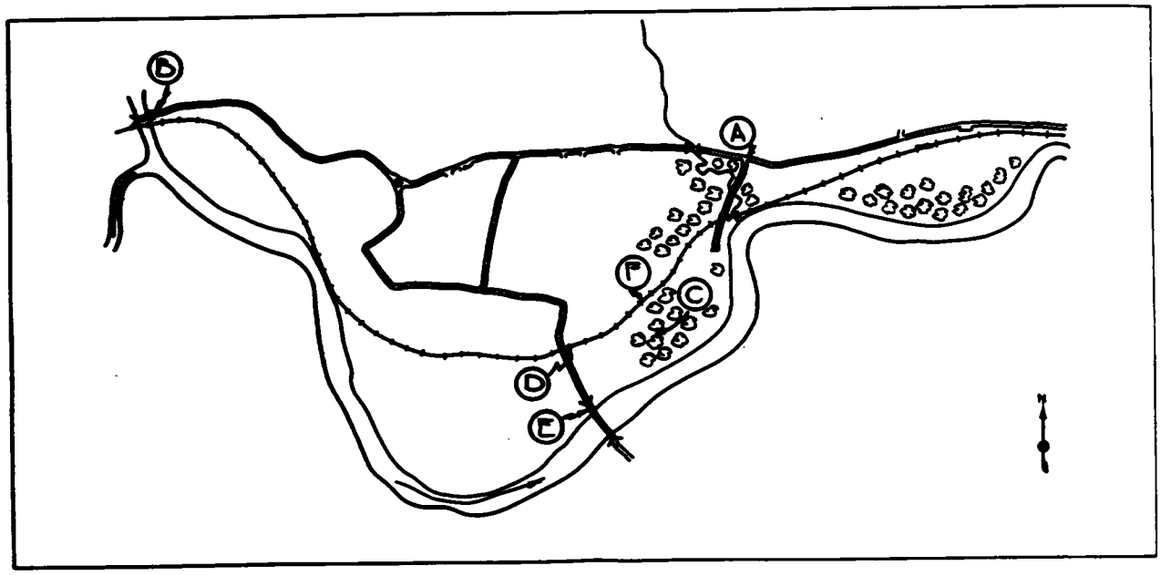
The aim and purpose of the Association shall be to disseminate knowledge of the military art and science, to promote the professional improvement of its members, and to preserve and foster the spirit, the traditions, and the solidarity of the Cavalry of the Army of the United States.—Article III of the Constitution.

The Cavalry Journal is published under the auspices of the Cavalry Association. It is not an official publication. Articles appearing in the Journal represent the personal views of the author and are published to stimulate interest in, provoke thought on, and provide a free forum for the decorous discussion of cavalry affairs. In no wise do contributions appearing in the Journal reflect official thought or indorsement.

Subscription rate: $3.00 per year, payable in advance. Foreign postage, 50c additional.

Change of address: Prompt notification of change of address to the Editorial Office is requested.

NOTES from the Life of CAVALRY



What Would You Do?

(EDITOR'S NOTE: The following letter from Lieutenant "Napoleon" Slinkovitch is of no importance except for his postscript. This will probably be received with joy by many of our readers.)

"Dear Ed:

"Am attaching hereto a sketch and scenario of a little problem that happened in maneuvers yesterday. It brings out very forcibly the qualifications of quick thinking and prompt action so necessary in cavalry action. "Yours,

SLINKOVITCH.

"P.S.: You will feel badly to know that this is my last literary opus. I got a letter yesterday from an automobile manufacturer stating that if I was a good enough salesman to sell my literary efforts to you, I could sell second-hand tractors in the swamps of Brazil. So I am taking up his offer. So long. "N. S."

The regiment was marching west in enemy territory and had halted at "A." At this point I received instructions to move my platoon (with a squad of light machine guns attached) via routes south of the railroad to the vicinity of the bridge at "E" and protect the south (left) flank of the regiment until the tail of the column had cleared the bridge at "B," where I was to rejoin.

I moved the platoon south along the road from "A," crossed under the railroad (which I observed ran on an embankment as far as "D") and thence into the woods. I was preceded by a covering detachment of one-half a rifle squad. As the covering force arrived at the western edge of the woods at "C," it signaled "enemy in sight" and halted. I galloped up to them and observed two Red cavalrymen moving north at the railroad embankment at "D" and two more moving toward the woods where I was hidden. At the same time I observed about two squads of Red cavalry emerging from cover at the north end of the bridge at "E" and moving north.

The rest of my platoon had halted in column of twos about 25 yards to my rear and I was joined by my platoon sergeant. The two Red troopers coming toward me started to trot.

This was no terrain exercise or map problem to be turned in in fifteen minutes. It was a decision and the issuance of orders to be accomplished in a matter of seconds.

WHAT WOULD YOU DO?

(For solution, see page 255)

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Chief of Cavalry's Question

Is the quantity and quality of forage at your post satisfactory? If not, what changes should be made?

General Hawkins' Notes

A Royal Road to Learning

It has been said that there is no royal road to learning. One who wishes to keep up with an art, or science, or profession, cannot escape the necessity of serious reading for at least a few hours every month.

The more one reads and studies about his favorite subject the more interesting it becomes. And, having found that it is not drudgery to settle down to a little serious reading for a short hour, one gradually learns that serious thinking and a little quiet reflection becomes a pleasure that no light reading of novels and immaterial magazine stories can give in the same measure. The cudgelling of one's brains, so painful to the young man who has not acquired the habit of thoughtful reading and a little intensive thinking, becomes no longer necessary. Thought comes more easily with habit, and creative imagination begins to develop. Such a mind does not become bored because it always possesses the resource of interesting thought.

What was once a dry and tiring study becomes a genuine pleasure, especially if the subject is one about which information and ideas are necessary or desirable to the person concerned. Although, generally speaking, this is no royal road to learning, the road becomes royal to one who follows it faithfully.

It is with these thoughts that recently I have been reading over my copy of the book *Cavalry Combat*. Every professional soldier who is young enough to wish for information on the subject of the military art should want to know something about how cavalry is used and about the details of cavalry action. Many persons want someone to tell them, in order to spare themselves the pain of thoughtful reading.

But, as I have explained, the habit of thoughtful reading makes it a pleasure.

And so, for those who wish to cultivate this habit and, at the same time, learn something of the rôle of cavalry and how it carries out this rôle, nothing could afford an easier or better start than the reading of *Cavalry Combat*. This book should be fascinating to any one who has the mind and imagination of a good soldier. It should not be read through in one reading like a novel. It is rather a book of reference. But a book of reference is of no value unless it is read. This book should be picked up and a chapter read from time to time—then reread. The more one reads such a book the more interesting he finds it. Then he can always refer to it when thinking, reading or writing on cavalry subjects. It is not a dry text book on abstract subjects, but a thrilling account of cavalry in campaign and battle.

Thus, by reading such living accounts, the rôles of cavalry become gradually apparent to the reader. One does not have to memorize a cold, dry list of the rôles of cavalry. They become fixed in the mind by participating in one's mind in the actions told about in a narrative like *Cavalry Combat*.

This is not intended as an advertisement for the book *Cavalry Combat*. It is simply a statement that an officer has not learned the joy of living until he has become enthusiastic about the acquiring of professional knowledge. And, not only for the cavalry officer, but for every officer who wants to know something about every branch of the service, this book of narratives is an easy and delightful way to learn something about the Cavalry.

☆ ☆ ☆

What Would You Do?

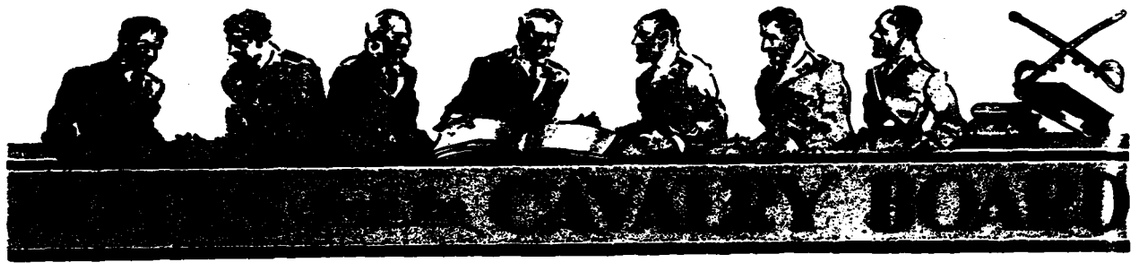
A Solution

"Sergeant A, 2d and 3d squads as foragers, column of squads at 100 yards distance, pistol attack.

"Light-machine-gun squad fire from northwest edge of these woods at railroad embankment at 'F' (pointing).

"I will follow with covering force and rest of 1st Squad to cut them off from the bridge.

"Any questions? Move out at once."



"The Cavalry Board invites any individual, whether or not a cavalryman, to submit for consideration constructive suggestions or ideas relating to new equipment, improvement of standard equipment, or to any problem or project under study by the Board. The Board will also welcome suggestions as to new problems that may properly be considered. Communications should be addressed to the Director, Cavalry Board, Fort Riley, Kansas."

During the past few months the Cavalry Board has completed the following studies or tests:

Audible Signal Device for Vehicles: Various types of horns, sirens, klaxons, and exhaust whistles have been tested to obtain a satisfactory audible signal device for vehicles for use as a warning signal and also as a means of communication. No single instrument was found that could serve both purposes. The most satisfactory is a combination of two, the horn for traffic signal and means of communication and the exhaust whistle as a long-range signal to warn against attack by aircraft, mechanization and similar signals.

Guidon Staff: The issue guidon staff is 7 feet in length and permits the guidon, when used mounted, to flap across the face of the guidon sergeant. Some units have been using the 9 ft. 6 in. staff which is intended for colors and standards. This latter staff is heavy, difficult to carry, and is disproportionate in appearance with the guidon. The Cavalry Board has recommended that the staff for guidons of mounted organizations be 8 feet in length.

Vehicular Compasses: All types of magnetic compasses which have been used with armored vehicles have been found to be so inaccurate as to prevent their use in military vehicles. It is believed the only compass which has promise of reliable accuracy is one employing the gyroscopic principle. Efforts are being made to obtain a gyrocompass for use in armored vehicles.

Stereoscope: A portable stereoscope was tested by the Cavalry Board, members of the Academic Division and by selected personnel of the 2d Cavalry. It was found very satisfactory for reading photographs up to 12 inches square. The stereoscope weighs only 5 pounds and for transporting is folded in a case 8" x 7" x 2". It was recommended for issue to headquarters of regiments and larger units.

Blank Firing Attachment for Machine Gun, Caliber .50 (HB) M2: The test of these devices has been completed and report submitted. Inasmuch as the normal method of fire with this weapon is single shot fire, it was recommended that only a feed way filler piece be employed for firing blank ammunition. This requires that the gun be loaded after each shot is fired by pulling the bolt handle to the rear manually. The filler piece causes the cartridge to enter the feed way in the proper position to be grasped by the extractor and also prevents b.ll cartridges being loaded into the chamber.

Tests or studies received by the Cavalry Board sir.ce the last issue of the JOURNAL and now under consideration include:

Legging Top Boots: In an attempt to furnish the mounted soldier with a satisfactory riding boot, the Quartermaster Corps has examined many sample boots submitted by manufacturers. Two of the most promising types have been selected for test and will soon be issued to Troop B, 2d Cavalry, in lieu of the present issue boot.

Cover Latch Group Assembly: The Cavalry Board is testing a new design of cover latch for Browning machine gun, caliber .30, furnished by the Ordnance Department. The new latch is designed to provide more positive locking than those now in use. It is hoped to eliminate stoppages resulting from accidental opening of the cover during firing.

Antiaircraft Machine Gun Marksmanship: The Cavalry Board is arranging to test an antiaircraft machine

gun course, which was recently prepared by the Department of Experiment, The Infantry School and The Infantry Board. It is planned to have the Machine Gun Troop, 2d Cavalry, fire the course as prescribed after preliminary instruction.

Small Bore Practice in Caliber .50 Machine Gun Training: In connection with caliber .50 machine gun training the board is investigating means of adapting sights and trigger arrangements to the light machine gun and the machine gun, caliber .22 for small bore practice. Also the practicability of operating these weapons on the caliber .50 mount. During the past two years the Department of Weapons and Matériel, Cavalry School, has been using these adaptations which were developed in the department, with excellent results.

Light Reconnaissance Vehicle: The Cavalry Board has completed the modification of a Marmon-Herrington (Ford) 4 wheel drive, ½-ton truck into a light unarmored reconnaissance vehicle with the characteristics mentioned in the previous issue of the CAVALRY JOURNAL. The car is now being used in the spring maneuvers of the Cavalry School. Pictures are inclosed herewith.

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Support from the Field

HEADQUARTERS, – — – CAVALRY

May 22, 1939.

MEMORANDUM: FOR ALL OFFICERS.

1. This regiment has always boasted of having 100% membership in the Cavalry Association, and up to include March, 1938, we had our 100%. However, since that date, at my own request, I have been informed by the Secretary of the Association that several officers of this regiment has been dropped from the rolls for non-payment of dues.

2. The status of the regiment to date is as follows:

   a. All officers are active members except as noted below:

CANCELLED

One 2d Lieutenant, cancelled 4-26-38, owing one year's dues.

One Captain, cancelled 12-7-38, at his own request, owing six months' dues.

One Captain, cancelled 7-25-38, owing one year's dues.

One 2d Lieutenant, cancelled 7-25-38, owing one year's dues.

One Warrant Officer, cancelled 1-24-39, at his own request, owing six months' dues.

3. It is my ardent wish that every officer in this regiment be an active paid-up member of the Cavalry Association, and those officers, who have been dropped for non-payment of dues, renew their subscriptions and pay their back dues, in order that the —— Cavalry may regain its 100% membership in the Association.

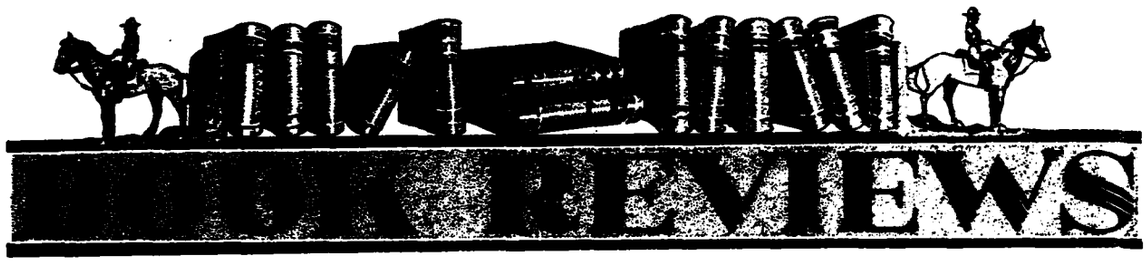
4. I cannot express too strongly how I feel regarding this matter. It is my belief, that every cavalryman should be an active member of the Cavalry Association and read the CAVALRY JOURNAL. This excellent bi-monthly periodical always contains much valuable instruction and enables cavalry officers to keep abreast of the times. This is especially important for officers of the Guard.

5. It is contemplated publishing in the near future, in the CAVALRY JOURNAL, a list of the regiments of Cavalry having 100% membership in the Association, and I certainly desire that this regiment be on that honor roll.

DISTRIBUTION: All Officers.

— — ————.

Colonel, – — – Cavalry, Commd'g.



MEIN KAMPF. By Adolph Hitler. The complete unabridged and unauthorized edition. Stackpole Sons. 669 pages. $3.00.

No book of modern times has played a more vital part in the current history of mankind than has *Mein Kampf*. Although written in 1923, it continues to serve as a compass to the aims and aspirations of Adolph Hitler and with him, the German people. Its importance and potential meaning in international affairs have been recently emphasized in the publication of three separate and distinct translations of the work in the English language. The third publication, which is discussed here, is believed to adhere more strictly to original text than any heretofore published. Although "Der Fuehrer" for thirteen years has successfully prevented the publication of an uncensored, unabridged edition of the original *Mein Kampf* outside of Germany, that censorship ends with this work, and as Dorothy Thompson says, "Hitler's blue print of world conquest" is at last available to all readers.

The very fact that Germany's new line of conquest in Europe has followed to the letter the principles of *Mein Kampf*, makes it imperative that every intelligent man or woman interested in international affairs read this work. The key to the future aims and aspirations of Adolph Hitler and his Nazi empire is contained herein.

Of the three copies of *Mein Kampf* published in this country it appears to this reviewer that the Stackpole edition is by far the smoothest reading and the most complete of any that have been produced. The translator seems not only to have given the real gist of the original text but has done so in smooth and readable English.

The contents and general purposes of *Mein Kampf* are too well known to amplify here. Due to the length and extreme variety of the subjects covered in the original volume it is not believed that any review can adequately cover the many important purposes of this work. To appreciate the character of Adolph Hitler and the fundamental structure of Nazism it is necessary for one to read the complete work.

* * *

INFANTRY IN BATTLE. Second Edition. Prepared by the Military History and Publications Section of The Infantry School. The INFANTRY JOURNAL. 422 pages. $3.00.

Although published as a second edition, this book is not merely a reprint but rather an extensive revision. Many of the sections have been completely re-written, much of the tactical doctrine re-stated, and improved maps substituted for those of the first edition.

Infantry in Battle is not intended as a great strategical study, but more importantly is intended as material for the combat officer. Every page abounds with actual operations and engagements in which tactical errors are analyzed and each type of action covered by a series of examples; each of which is followed by able and interesting discussions bringing out errors committed, reasons for success or failure, and evidence of violation of or adherence to sound military principles.

A glance through the pages of this book produces such material as the following excerpts.

"A good order must meet three minimum requirements. (1) It must cover the essentials; (2) it must be unmistakably clear to the subordinates who must carry it out; (3) it must be issued early enough to reach subordinates in time for them to execute it.

"It is not likely that infantry leaders will ever find an adequate substitute for the infantry patrol. . . . Usually it is a question of under-patrolling. In this connection the old saying is a good guide: When it is apparent from the situation that patrolling is unnecessary, send out patrols anyway."

One could go on *ad infinitum* in plucking such plums for military digestion from the pages of this book. To one who aspires to combat leadership of American soldiers this volume is unreservedly recommended.

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AMERICAN ARMIES AND BATTLEFIELDS IN EUROPE. Prepared by the American Battle Monuments Commission. Government Printing Office, 1938. 547 pages. 561 photographs. 120 maps. $2.75.

American Armies and Battlefields in Europe has been compiled and prepared by The Battle Monuments Commission as a dedication to the services and accomplishments of the American Armies in the World War. Although primarily intended as a guide to the American battlefields in Europe it can be said that in the presentation of this volume this motive becomes secondary in importance. Primarily, the volume furnishes an excellent condensed history of America's participation in the World War. It covers in very satisfactory style not only the diplomatic background which prompted our entry into the war but affords also a very succinct discussion of the broader military features. It contains as well a considerable amount of statistical information of value to any student of those times.

In reality, this book constitutes a review and elaboration of *Guide to the American Battlefields in Europe* which was published by the American Battle Monuments Commission in 1927, twenty thousand copies of which were printed and the entire supply exhausted within nine months after publication.

The book itself is a splendid example of the bookmaker's art. Ordinarily, one might expect a book of this nature to fall into the $10.00 to $15.00 price range.

From the point of view of the military student it is of outstanding value as research material in any library.

* * *

OUR MAGINOT LINE: The Defense of the Americas. By Livingston Hartley. Carrick and Evans. 315 pages. Maps. $2.75.

Mr. Hartley, a former official of the United States Department of State with service in South America, has produced a thought provoking study predicated upon a post-Munich world. In that world the totalitarian states, or have-not powers, are pictured as growing increasingly stronger; while the democracies are shown ever more on the defensive. In reaching out for those raw materials essential to our highly developed industrial civilization, the author depicts the spearhead of the totalitarian attack as falling upon the largest of these reserves—South America. Appreciable control in that area would have portentous influence upon the welfare of the United States.

Although our primary interests rest with the democracies of the world, America should conclude that its own Maginot Line incorporates the Western Hemisphere: that the main barriers lie in the two great oceans on each side of this area. The author discusses the threat of Japanese aggression via the islands of the South Pacific but emphasizes the fact that the main barrier should rest in the Atlantic. The threat of German penetration into our sphere of interest is such as to dictate a very close understanding with Great Britain. Our traditional bulwark incorporated in the British Navy is seriously threatened, according to the pages of this book. Fascist Spain, together with Italy, furnishes Germany with the geographical facilities necessary to expedite her expansion. The author feels that although the British fleet may not disappear, its potency is in danger of becoming nullified by superior geographical bases of operation. Mr. Hartley concludes, therefore, that the American people should foresee this oncoming danger and prepare to defend this new Maginot Line if we are to prevent serious inroads on our own preserves.

Although this book presents a rather gloomy outlook toward the future welfare of democracies in the world and possibility of foreign invasion in this hemisphere, it is possible that the author overlooks many fundamental features of the situation. There is a rather somber conclusion that as days of conflict approach all movements and preparations of the democracies would be handled in confused and vascillating style, while the operations of the dictatorships would automatically function with proverbial Prussian efficiency and steam-roller results. One must

ponder on the distorted reasoning which appears to have taken hold of popular fancy during the past few years in the assumption that a cold and heartless aggressor will be able to overrun all obstacles, while the meek sit with folded hands during the havoc and destruction of their possessions. It is another version of the same old story of air invasions obliterating the sky-scrapers of New York. the answer to which is, "What will the American naval. air and antiaircraft forces be doing the while?"

* * *

SECRET AND URGENT. By Fletcher Pratt. Bobbs Merrill, New York. 282 pages. Indexed. $3.75.

Reviewed by Lieutenant Colonel John J. Bohn, 9th Cavalry, Chief of the Department of General Instruction and Publications, The Cavalry School, Fort Riley, Kansas.

Fletcher Pratt's unique volume tells the story of Codes and Ciphers and their relation to the events of history. The author has an established reputation as a military historian. His hobby for many years has been the making and breaking of codes and ciphers. By a combination of these specialities, he has given us the only book in English on this subject to date.

Mr. Pratt definitely shows the necessity for the use of codes and ciphers for diplomatic, military and commercial purposes. Historical examples of failures to use practical codes and ciphers for important messages and the effects on history of such failures are convincingly presented. Also, the fact that modern means of communication are anything but secret and confidential is made distressingly clear. The great economy in time and cost made possible by modern codes for diplomatic, military and commercial purposes are also demonstrated.

This volume gives examples of many types of ciphers. together with the methods used in breaking them. As Mr. Pratt points out, the dictionary type of code meets the needs of high command, commercial and diplomatic usage. Such a code, however, is impractical for communication in the smaller units. A field cipher designed to cover requirements for tactical communications "must be simple enough to be readily understood by and quickly taught to inexperienced men; it must minimize error through ease of operation; it must not require the use of special apparatus, the capture of a piece of which would betray the secret of the cipher; it must be capable of holding its secret for as long as it took to execute an order written in it even if the enemy received the message at the same time as the person for whom it was destined."

The military man who reads this book will be deeply impressed with the modern need for a practical field cipher. The efforts of the greatest general and the decision of the best tactician are so easily nullified by lack of secrecy in communications.

The Army as a whole should study this book in order to achieve a sympathetic understanding of the problems presented by the necessity for secrecy in communications.

A HORSEMAN'S HANDBOOK ON PRACTICAL BREEDING. By Colonel John F. Wall, U.S.A. (Retired). Thoroughbred Bloodlines, Myrtle Beach, South Carolina, 1939. 308 pages. Illustrated.

Reviewed by Captain Clarence W. Bennett, 9th Cavalry, Instructor Department of Horsemanship, The Cavalry School, Fort Riley, Kansas.

"*A Horseman's Handbook on Practical Breeding* is intended as a digest of some opinions and practices of experienced breeders of horses, and is prompted by a desire to encourage and assist individuals who have little opportunity to observe practical breeding of horses, the handling, the care and the feeding of breeding stock." In the foregoing sentence, Colonel Wall justifies his publication. However, it needs no justification as this is a work which will appeal to horsemen everywhere.

The book opens with a brief history of the horse in general and continues with the breeds of the horse today, the light breeds. Next, he devotes a chapter to the heavy or draft horse. All of this introduction is written in an extremely interesting fashion. Having given after this a brief history of the horse situation in the United States, he devotes the remainder of the book to practical breeding.

Colonel Wall does not attempt to use only his own experience and knowledge of breeding as a basis, although this is quite extensive, but brings in extracts from the writings of the most famous horsemen and breeders in the United States. Every example and quotation which he uses has been chosen most appropriately from the very best authorities.

The horseman or student of horsemanship will find everything which he wishes to know about actual mating and raising foals included in the book. The chapters devoted to "The Acquisition of a Horse Farm" and "Buildings" will prove especially interesting to every one in the Army who has dreamed of raising horses after retirement.

Colonel Wall's long association with the United States Remount Service is very much in evidence in the knowledge displayed concerning feeding, forage and the conformation requisites of good stallions and brood mares. Any veterinarian will be glad to endorse the opinions expressed by the author concerning veterinary care of mares and foals.

The book has been very well edited and the type is of a good size for reading. It would have been better if the quotations had been in larger type. However, the book is one which should prove a welcome addition to any horseman's or would-be horseman's library.

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BOMBS BURSTING IN AIR. By George Fielding Eliot. Reynal and Hitchcock, Inc. 165 pages. $1.75. (Released June 1, 1939.)

To those who found perplexity in the problems which produced a "Munich" this book by the author of *The Ramparts We Watch* will prove of inestimable value and interest. Major Eliot, perhaps the nation's top-notch military critic, has once more gone into the field of international politics and fundamental military policies in an able manner.

The theme of *Bombs Bursting in Air* is actually "the influence of air power on international relations." The present influence of air power in this field is covered in the most analytical fashion. The future effect and influence which may be demonstrated by air power is not so thoroughly discussed nor does the purpose of the book require that it be so covered. A mere glance at the table of contents will perhaps afford the best picture of the purpose of this book:

Part I: Air Power in Europe
1. Some Fundamentals of War
2. The Qualities of Air Power
3. The Elements of Air Superiority
4. The Geographical Factor and Continuity
5. The Great Gamble—Germany vs. Britain
6. International Blackmail
7. Europe Under the Shadow of Wings

Part II: America's Interest in Air Power
8. America and the Air Weapon
9. Can America be Attacked from the Air?
10. Air Power in American Defense Problems.
11. How Much Air Power Do We Need?

This book, though brief, amply covers the subject and is replete with ideas of basic interest. Under the chapter devoted to "Some Fundamentals of War" one encounters the statement that "The history of civilized mankind shows us but three revolutionary military inventions or discoveries: discipline, gunpowder, and the airplane."

Again, in the discussion of European affairs, the reader is intrigued with such portions as this:

Can Germany afford such a gamble, in which she throws on the gaming board all that her present rulers have gained, all the fruits of years of effort, in the hope of winning a military victory which even if won, may prove but fleeting and illusory in its benefits?

Not, one would say, unless there is no other way to achieve German ends. Not unless a desperate Germany, driven to bay, has no option but to fight or to surrender.

The masters of modern Germany are not fools.

Why should they take the risks of war, and undergo the strains which it will impose upon their none-too-assured economic and social structure, while they have a better and safer method of achieving their objectives?

That better and safer method they have discovered, and are at this moment using with great success. And of that method, their air power is the foundation and the source of strength.

The method may be very briefly described by a short and unpleasant word—"Blackmail."

Considering the current state of affairs throughout the world and the significant part which air power is playing in the present world situation, this latest book from the pen of George Fielding Eliot is mandatory reading for all military students.

ORGANIZATION ACTIVITIES

1st Cavalry—Fort Knox, Ky.

COLONEL HENRY W. BAIRD, *Commanding*

During the past two months, the regiment has been engaged in target practice. In spite of frequent interruptions, we are progressing and hope to complete the courses in the allotted time.

Fort Knox has been host to many distinguished visitors since our last report. Brigadier General McNair, commandant of the Command and General Staff School, arrived on March 15th when the regiment participated in a mounted review in his honor. On April 5th, Troop "A," Captain John K. Sells commanding, acted as escort for the Chief of Air Corps, Major General Arnold. General Arnold's visit was followed by that of Major General Van Voorhis, the Corps Area Commander, who made his annual administrative and tactical inspection of the command. It was a source of great pride to all members of the First Cavalry that our former regimental commander stated that he had never seen the command in better condition. On April 20th, the Honorable A. J. Mays, Chairman of the Military Affairs Committee, reviewed the brigade. Finally, the Chief of Cavalry arrived for an extended contact visit.

The First Cavalry, and our sister organization, participated in all phases of training activities for General Herr. He became a familiar figure to all members of the command. His visit was an inspiration to the regiment and all ranks are appreciative of a Chief who takes such keen interest in the welfare of the mechanized brigade.

A large delegation from the regiment witnessed the annual running of the Kentucky Derby. From the interest displayed in the thoroughbred, it is apparent that the mechanized cavalryman has not lost his interest in the horse.

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2d Cavalry—Fort Riley, Kansas

COLONEL H. D. CHAMBERLAIN, *Commanding*

On the 23d day of May, 1836, the President of the United States, who was none other than Andrew Jackson, signed an Act of Congress creating a mounted regiment known as the Second Dragoons. That Act is living today in the Second Cavalry at Fort Riley. From the very day of its organization, it has been a "fighters' regiment."

Its first service was through the swamps and trackless wilderness of Florida, together with other units. Fighting through the Everglades, losing nine times as many men from sickness as from bullets, it finally captured the entire tribe of Seminoles and moved what was left of them to the Indian Territory. After such a start in swamps and fevers, the Second Dragoons was a hardened organization and quite ready for the Mexican War in 1846. The opening engagement took place at Brownsville, Texas, where a reconnaissance force under Captain Thornton was surrounded, killed, wounded, or taken prisoners. The regiment burned for revenge and on May 9th, a week later, eighty men under Captain Charles May, charged through a storm of shot from seven Mexican batteries at Resaca de la Palma, silencing the guns, capturing them, and also the Mexican General.

From 1846 to 1861, the Second Dragoons helped win the West; marching poorly equipped through the limitless plains, over burning deserts in summer and through mountain passes choked with snow, they guarded the wagon routes as Young America marched westward. One march was from Monterey, Mexico, to Los Angeles, California. Another was from Fort Leavenworth to Salt Lake City.

In 1861, the Second Dragoons were called from their campfires in the West to take part in the struggle in the East. The Second Dragoons now became the Second Cavalry, and twenty-three of their former officers wore general's stars. General John Buford and General Merritt, two distinguished leaders in the Civil War, were former captains in the Second Cavalry. Some of the better known engagements of the war in which the Second Cavalry took part were Fort Donelson, Shiloh, Antietam, Fredericksburg, Gettysburg and Cold Harbor.

The year 1865 found the Second Cavalry once more in the West, protecting the surveyors of the Union Pacific in the Yellowstone, where 40° below zero was added to

the Indian difficulties. Finally, from 1884 to 1890, they were stationed in the Pacific Northwest and some of their number, under Lieutenant H. T. Allen, afterwards Major General, U. S. Army, made explorations in Alaska which added materially to our knowledge of that territory and securely established the Second Cavalry as explorers of trackless wastes, which indeed they have been during the conquest of a continent.

Since its organization, the regiment has taken part in four wars against civilized nations, and has seen half a century of service against hostile Indian tribes. It has traveled around the world from Equator to the Arctic Circle. It fought with McClellan on the Chickahominy, charged with Sheridan in the Shenandoah, landed with Shafter in Cuba, went to France to face the Central Powers of Europe, and remains one of the bright spearheads of democracy. Come to see the Second Cavalry at Fort Riley—second to none.

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3d Cavalry—Fort Myer, Virginia

COLONEL GEORGE S. PATTON, JR., *Commanding*

Following a most successful series of Exhibition Drills, the annual Pageant, "Hoofprints of 1939," produced for the benefit of the Post Recreation and Welfare agencies, on April 14, 15 and 16, was more successful than any before held. The limited seating capacity of the riding hall was taxed to the limit at all performances.

With the winter schools, horse shows and exhibition drills over, May and June will be devoted to spring training, range firing for all weapons and the preparation for summer camps. Rifle and 1,000 inch light machine gun firing will be conducted this year, as in the past, on the District of Columbia National Guard Rifle Range at Camp Simms, Anacostia, D. C., the Machine Gun Troop will fire the 1,000 inch course at Fort Myer. Mounted Pistol will be conducted at Fort Belvoir, Virginia, each troop marching down in turn and returning upon completion of the firing.

Lieutenant C. B. McClelland has the regimental rifle and pistol team under instruction, and entertains hopes of winning the inter-regimental matches in both weapons. Following the policy of the Chief of Cavalry to concentrate the regimental teams, where the regiments are split, at one post, the entire team is working at Fort Myer. First Sergeant Stanley A. Blazejevski, Corporal Francis E. Ghormley and Private Ernest C. Dimello having been ordered to join the regiment from the 1st Squadron at Fort Ethan Allen, Vermont.

In keeping with the best traditions of the regiment, the second squadron will turn out to escort the President of Nicaragua when he visits the National Capital on May 5, and again on June 10 they will turn out for the King and Queen of England, thereby adding to the regimental laurels as "Escort for Presidents and Kings."

Troop E, with a detachment of Machine Gun Troop, consisting of one caliber .30 machine gun squad, one caliber .50 machine gun squad and one 37-mm. gun squad attached, and the Scout Car platoon will take part in the Engineer School demonstration and field exercises, May 17 to 20. The demonstration will consist in part of the mechanics of a cavalry troop with automatic weapons attached, and the employment of scout cars in reconnaissance.

The Scout Car Platoon will take part, also, in the maneuvers of the New Jersey and Pennsylvania National Guard at Indiantown Gap, Pennsylvania from June 8 to July 1, returning to Fort Myer for the turnout for the King and Queen of England. It speaks highly for the efficiency of the platoon that each year they are specially requested by the authorities of both these states.

Captains Basil G. Thayer and P. M. Morton, Cavalry, will report for temporary duty in connection with the Cavalry ROTC camp, which opens at Fort Belvoir, Virginia on June 17th. At the same time some twenty-five recent ROTC graduates will be camped at Fort Myer for their first tour of active duty as second lieutenants of Cavalry-Reserve.

The following officers, now on duty with the regiment, are under orders to report to new stations:

Captain T. J. H. Trapnell to the Philippines.

Captain L. G. Smith to the Command and General Staff School.

The following officers have been assigned to the regiment and will join upon completion of their present tours:

Majors John A. Hettinger and Edwin M. Sumner.

First Lieutenants Paul D. Harkins, James K. Polk and David Wagstaff, Jr.

Captain Lawrence R. Dewey reported for duty on April 1, 1939.

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5th Cavalry—Fort Clark, Texas

COLONEL CUTHBERT P. STEARNS, *Commanding*

Throughout the month of March the Regiment carried out routine spring training to culminate in the tactical inspection of the Corps Area and Division Commanders about the first week of April. An outpost problem and entraining exercises kept the troops off the Post for about three days during the month.

The Division Commander, Brigadier General Kenyon A. Joyce arrived at Fort Clark in the afternoon of April 7th, a reception in his honor was held at 9:30 that night. On the morning of the 8th, the Regiment and Brigade Headquarters Troop passed in review for the Division Commander on the drill field. Following the review, General Joyce, accompanied by the Eighth Corps Area Commander, Major General Brees, inspected the tactical training of the troops, the barracks and the stables. The full day was culminated by a dance at the Officers' mess.

On April 12th, the Regiment started north on a week's practice march to Rock Springs and return by a different route. The march was made under an assumed tactical situation which demanded on the 17th and 18th, a forced

march of 56 miles in twenty-four hours involving a night march. On the 19th the Regiment had a delaying exercise with the 6oth Coast Artillery, which was moving on Fort Bliss. A Tea Dance was held in the afternoon for the Officers of the visiting Regiment.

Army Day was celebrated on the 27th of April. Civilians from the neighboring towns of Del Rio, Brackettville, Eagle Pass and Uvalde were cordially invited to visit the Post on that day. The two hundred odd who accepted saw a review, and a section of Scout cars, a Machine Gun platoon, and a Rifle platoon demonstrate a method of attack in the morning. Before lunch in the troop messes, those visitors who desired were permitted to fire the service rifle and the heavy machine gun. Prior to the Horse Show held at 2:00 P.M., all types of equipment and arms were put on display.

Boxing bouts held once a month in the evening have, for the past few months afforded the personnel of the post fine entertainment. The cards were excellent. There have been bouts in all recognized classes between the enlisted men and between several fighters from San Antonio in the lightweight class. The fights have so gained in popularity recently that on April 26th the Post Arena had a capacity crowd.

The Inter-Troop Baseball League got under way on April 1st; at this date, May 4th, Troop "E" tops the standing. The Regimental Team will not start its schedule until the completion of the above competition.

The Regiment was host from May 2nd to May 13th to the Rifle teams from Fort Brown, Fort Ringgold, and Fort Bliss which came to Fort Clark for the Cavalry Division Rifle and Pistol Team tryouts.

Since the last issue Captain Murray B. Crandall has left this Post for new station at Fort Riley, and Major Albert F. Vaughn has arrived as Post Chaplain.

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6th Cavalry—Fort Oglethorpe, Georgia

COLONEL GEORGE DILLMAN, *Commanding*

The regiment concentrated its training in preparation for combat firing at Fort McClellan, Alabama, during the period April 28-May 4, 1939. Anti-aircraft firing was held on the 1,000" range at Fort Oglethorpe with very satisfactory results. Each squadron of the 6th Cavalry and the Machine Gun Troop spent one week at Catoosa Target Range, during which time musketry problems were held by each troop.

The Machine Gun Troop completed its machine gun firing on the 1,000" range, qualifying 23 experts. Private Herman A. Arthur, Machine Gun Troop, 6th Cavalry, made a score of 197 out of a 200 possible score.

On April 22d the regiment left Fort Oglethorpe en route to Fort Benning Georgia, to participate in the 8th Brigade Maneuvers, stopping off at Fort McClellan, Alabama, to complete its anti-aircraft and combat firing. This firing was held during the period April 28-May 4, 1939. On May 5th the regiment left Fort McClellan, Alabama, marching via Chullafinne (Roanoke, LaFayette, Opelika, Phenix City to Fort Benning, going into camp at Ochillee, on the Fort Benning Reservation. The regiment arrived at Ochillee on May 11, 1939.

During the period May 15-20, the 6th Cavalry will participate in the 8th Brigade Maneuvers at Fort Benning, leaving Fort Benning on May 20 en route to Fort Oglethorpe, Georgia.

On Army Day the Regiment observed "Open House" and invited our civilian friends and members of the Regular Army Reserve from Chattanooga and vicinity to visit the Post, examine the exhibits, and go through the barracks, messes, and stables. On the parade ground was a display of all cavalry weapons, the scout cars, and radios. Guides were provided to escort visitors. In the afternoon, the ceremonies of formal guard mounting and a mounted squadron parade were well attended.

The Regiment observed Organization Day, May 4th, at Fort McClellan, Alabama. The Regiment was formed in line of masses, dismounted, and all men who had joined since last Organization Day filed past and saluted the standards. A congratulatory telegram from the Chief of Cavalry was read, and also one from a number of former members of the Regiment now serving in Panama. A brief history of the Regiment was then read by 2nd Lieutenant Thomas L. McCrary, the last officer to join the Regiment. The ceremony was then terminated by an address by Colonel George Dillman, the Commanding Officer.

Orders have been received assigning the following officers to the Regiment this summer: Major Herbert L. Earnest, Captains William O. Heacock, Elmer V. Stanbury and Charles E. Morrison, and Lieutenants Thomas F. Taylor and Brendan McK. Greeley.

The hunting season closed officially on April 8, 1939, with the annual Point to Point race. There were 13 fences and four miles of extremely interesting and varied "Going" (Pasture, woodland, wasteland, some plow and altogether not more than ¾ mile level ground) in our new territory in the Catfish Section. From the spectators' point on top of Jenkins' Hill, the major portion of the course as well as start and finish and 8 fences could be observed. There was a large crowd present including members of the garrison, visitors and farmers and landowners and their families. The first race, "The Master's Cup" (donated by the Master) was won by Lieutenant Holderness on *Wooly Lamb*. The black mare came in powerfully strong and still ambitious to go. Second was Lieutenant Hoy on *Star*, third, Major Burnett on *Baby Pat*, and fourth, Captain Berry on *Graves*. There were eighteen entries for this race.

The second race, "The Soldier's Hunt Cup" (donated by Captain Thornburg) was won with ease by Corporal Brush, Troop A, on *Long Shot*. Second was Corporal Ferguson, Troop F, on *Sam W*. Third, Sergeant Massengale, Troop E, on *Cleo*, and Fourth, Sergeant Cotton, Troop F, on *Goldie*.

7th Cavalry—Fort Bliss, Texas

COLONEL WILLIAM W. WEST, *Commanding*

Polo in the regiment is progressing in the manner outlined by Lieutenant Colonel Pearson, member, the post polo representative. The objective for the spring and early summer is to develop as many new players and young horses as possible. The polo squad in the regiment consists of ten players. These players have been split into two evenly matched teams and designated as the 7th Cavalry Whites and 7th Cavalry Yellows. Each team has been playing two games a week with the other post teams since April 1st. The quality of polo is improving from week to week and by the 1st of June we will have two well balanced teams. Lieutenant Wilson captained the Fort Bliss polo team in the three-game series against the visiting Mexican Army polo team during the first part of May.

In a well publicized soft ball game on April 23d the 7th Cavalry officers under the masterly pitching of Lieutenant Boyle swamped the challenging 8th Cavalry officers' team by approximately 28 to 5.

The training of remounts in the regiment is conducted on the principle that there is a man in the regiment whose capabilities and temperament can be matched to suit those of any remount that we might receive. It is the responsibility of the officer in charge of remount training to find a good home for each horse. A large majority of the officers and non-commissioned officers of the regiment are now mounted on better than average horses which they have personally selected and trained. In the last informal horse show, *Ugly*, a remount trained by Sergeant Hutson, Troop "A," won a first place and another remount trained by Sergeant Ford, Machine Gun Troop, won a fourth place in the green jumpers class. A car load of remounts was received on April 15, 1939, and these horses are just starting their training under a carefully selected list of riders. First Sergeant Shrout has selected one of these to school for the best trained remount class in the next Cavalry Division Horse Show.

A regimental dinner dance was held at Waterfull Gardens in Zarogosa, Mexico, on May 12th, honoring the officers and their families, who are scheduled to leave the regiment soon. About eighty attended and a very enjoyable party came to an end only with the closing of the bridge at midnight.

The entire regiment took part in the Army Day parade in El Paso on April 6th, and, in spite of a disagreeable day, with mixed sand storms and snow flurries, we made a creditable showing.

A regimental horse show was held on Saturday, February 18, 1939, in the 7th Cavalry Jumping Arena. There were four classes run off and they were designed principally to develop green horses and inexperienced riders. This show, while very informal in character, was excellent preparation for the more formal Post Shows, which were to follow.

A Post Horse Show was held on April 19th. In preparation for this all horses and riders were turned out to work four afternoons a week under the Regimental Horse Show Representative. These riders worked faithfully and hard, under very unfavorable weather conditions. As a result, in Class I, for Green Jumpers, the Regiment took 1st, 3rd and 4th places. In Class II, for Novice Riders, it took, 1st, 2nd and 3rd places. In Class III, a seat and hands class for Non-Commissioned Officers, it won 1st Place. In Class IV for Open Jumpers, the regiment got a fourth place only on the jump-off, after having nine horses go clean the first time around. This show, the first of a series to be held during the year, was competed in by all units stationed at Fort Bliss.

The Horse Show squad is at present working consistently at least four afternoons a week, developing horses and riders for other Post Shows to be held periodically throughout the year. The first of which will be held on May 19th next.

A Post Horst Show Team, selected from the 7th and 8th Cavalry, left for the Fort Sill-Leavenworth-Riley circuit on May 5th, with Captain Bixel, 7th Cavalry in charge.

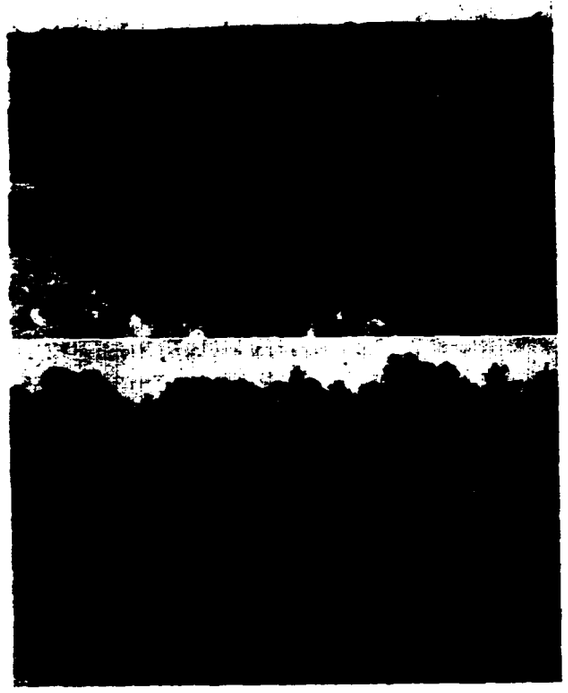
Captain Finnegan and a squad of nine enlisted men left on April 28th to participate in the Cavalry Rifle and Pistol Tryouts at Fort Clark. Quite a bit of mechanical trouble necessitating changes in arms held us to the middle bracket in the Caliber .22 competitions but careful planning to eliminate all this in the service ammunition tryouts at Fort Clark should see us in position to supply excellent competition. The team has been rearranged considerably, several old members dropped and one or two new members added. Caliber .22 firing was alternated with dry shooting as preliminary work to targeting in and competitive squad firing. All arms have been thoroughly checked by the Ordnance Department to include front and rear sights and trigger pulls. If careful planning and cheerful endeavor can assist in any way the Garry Owens will be found fighting the leaders in the service tryouts and doing their part in the next National Matches at Camp Perry.

Regimental training during April included combat and known distance firing at the Fort Bliss Target Range (Dona Ana, New Mexico) on the 10th and 28th. The type of problem was squadron in the attack. On April 7th the regimental field exercise took the form of a march under an assumed tactical situation. A regimental review and inspection was conducted on the 22nd. A special schedule was followed for the training of a number of reserve officers on active duty with the regiment from April 2 to 15, culminating in a controlled point-to-point ride.

On May 8 and 9 combat firing by squadrons was again conducted at Dona Ana. A regimental review was held on May 6. On May 16, the regiment will depart on a twelve-day practice march to Scott-Able Canyon, in the Sacramento Mountains, and return.

Retirements since last notes: Master Sergeant George E. Lewis and Master Sergeant Frank T. Candler.

Losses since last notes: Lieutenant Colonel Harding Polk to Chicago.



Top—Easy watering. Bottom—Swimming practice.

8th Cavalry—Fort Bliss, Texas

COLONEL INNIS P. SWIFT, *Commanding*

On March 6th the regiment was inspected by the Inspector General, 8th Corps Area, and received commendation.

On March 16-18 the Division Commander conducted a field exercise very similar to that conducted during the recent Third Army maneuvers. The regiment as part of the 2d Cavalry Brigade left Fort Bliss under the provisions of a confidential Alert Plan and marched to Fort Bliss Target Range, fighting a meeting engagement en route. The bivouac at Fort Bliss Target Range was outposted during the night 16-17 March. The brigade advanced to Fillmore Pass early 17 March, met strong resistance, attacked and caused hostile withdrawal by a maneuvering force composed of the entire 8th Cavalry. Hostile reinforcements caused the brigade to assume the defensive on Fillmore Pass until dark 17 March when a night withdrawal to the east of Mount Franklin, in the vicinity of Hitts Ranch, was executed. The exercise terminated at daylight, 18 March, when the brigade marched to Fort Bliss.

The Division Commander conducted the tactical inspection of the regiment on March 28th. Organizations designated by the Division Commander conducted close and extended order drill, equitation, jumping, combat firing by rifle and heavy machine gun platoons, road blocks and actual demolition of these blocks. The regiment again received a commendation on its state of training.

On April 1 the regiment participated in a division review held in honor of a group of Mexican visitors.

During the period April 2-15 Lt. Trujillo, Lt. Klingenberg, Lt. Miller, Lt. Warren, and Lt. Davis, Cavalry Reserve, trained with the regiment.

On Army Day, April 6, the garrison of Fort Bliss paraded in El Paso. The command experienced one of those weather phenomenon peculiar to the Southwest. The day started warm and sunny but by the time the troops reached El Paso a norther blew in and the return trip to Fort Bliss was made in a high wind, rain, sleet, and snow.

The annual practice march was conducted from 2 May to 13 May. The regiment went to Caballo Dam, New Mexico, under a tactical situation requiring the protection of the dam. Bivouacs were made at Fort Bliss Target Range, Las Cruces, Radium Springs and Rincon. The U. S. Bureau of Reclamation, which built and maintains Caballo Dam was very generous and coöperative in allowing the regiment to use various buildings on the dam site which added greatly to the pleasure and convenience of the men and officers. The return to Fort Bliss started on May 9 and concluded on May 12-13 with a 60-mile march from Las Cruces to Fort Bliss in 24 hours, the last five hours during darkness.

The regiment took advantage of the opportunity to water and swim horses at bivouacs along the Rio Grande at Radium Springs and Rincon. (Four pictures attached to be used if practicable.)

Captain C. H. Valentine, Lieut. Bruce Palmer, and Lieut. Brooks Wilson, of this regiment were selected with Lieut. Harry Wilson and Lieut. H. M. Estes of the 7th Cavalry to represent Fort Bliss in a series of international polo games with the Mexican Army Polo Team Marte, the ranking polo team of Mexico. Three games were played April 30, May 4, and May 7. The Mexican team won two of the three games. The play was characterized by bold, clean riding and accurate stick work, and the series was conceded to be the best brand of polo seen in this section of the country in many years.

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13th Cavalry—Fort Knox, Kentucky

COLONEL CHARLES L. SCOTT, *Commanding*

The annual inspection of the regiment by the Corps Area Commander was completed on April 12th. The men and "mounts" of the regiment were, as usual, turned out in true cavalry style.

On May 1, the 13th Cavalry celebrated its 38th birthday. The Regiment was assembled and was fortunate to have among its guests, the Chief of Cavalry. After short addresses by Major General John K. Herr, Brigadier General Adna R. Chaffee and Colonel Charles L. Scott, the Regimental Sergeant-Major, Master Sergeant Patrick McGill, briefly described the highlights of the Regimental History. Sergeant McGill is particularly qualified for this assignment as his entire service has been with the 13th Cavalry. A baseball game between the officers and noncommissioned officers of the first three grades followed the ceremony. Result: Noncoms 11; Officers 10. The scorekeeper was unable to furnish the other box score details such as hits, errors, putouts, etc. At the conclusion of the ball game, Dutch lunches were enjoyed in all troop messes.

During his visit to the regiment, the Chief of Cavalry inspected all vehicles in the regiment including the original and modified mortar mounts. He further had the opportunity of observing troop problems of the Machine Gun Troop, the Reconnaissance Troop, and the Combat Car Troops. His visit was concluded with a field exercise in which all units of the 7th Cavalry Brigade participated.

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26th Cavalry (P. S.)—Fort Stotsenburg, P. I.

COLONEL CLARENCE A. DOUGHERTY, *Commanding*

Members of the 26th Cavalry (PS) gave a good account of themselves by winning eight 1st places, five 2d places, four 3d places, and six 4th places out of fifteen classes in the Philippine Department Horse Show in Manila, February 18th and 19th. The old "stand-bys" *Colonel*, Capt. Ridge up; *Friday*, Miss Sally Wilson up, and Sergeant Tuana, with his string of horses were conspicuously successful.

The target practice is well under way. Machine Gun Troop has completed its regular range practice and is now in the field for ten days for combat practice.

The annual Sports Week was held March 16-22. Five visiting polo teams and a large number of horse-show participants and visitors from Manila helped to make this activity a complete success.

The Regimental baseball team under the able coaching of Captain A. W. Farwick promises to give a good account of itself this year.

A "sub-junior hunt" for children ten years of age and under, was held Sunday morning, April 2d. Little Miss "Paddy" Bayne was hostess to this group of young equestrian enthusiasts at a hunt-breakfast following the ride.

Colonel Andreas, honorary Colonel of the 26th Cavalry, sponsored an Easter-egg hunt for the children of the officers and American noncommissioned officers of Fort Stotsenburg on Easter morning. He also sponsored a controlled ride followed by a breakfast at the Stotsenburg Club for the officers of Fort Stotsenburg, their families and guests. Very attractive prizes were awarded to the three ladies and the three gentlemen having the highest scores. Miss Carol Clayton, Mrs. R. A. Blount, and Miss Betty Jones of Fort William McKinley were the recipients of the ladies' prizes and Master Ed Nelson, Don Nelson, and Lt. Ralph E. Haines won the gentlemen's prizes. Colonel Andreas has sponsored these activities each Easter for the past several years.

Lieutenants Wm. G. Bartlett, R. E. Arnette, and J. R. Barker have joined the regiment. They arrived on the March transport.

Colonel E. W. Taulbee and Captain R. L. Land departed for their new stations on the March transport.

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103rd Cavalry—Tyrone, Pennsylvania

COLONEL BENJAMIN C. JONES, *Commanding*

The regiment mourns deeply the death of 1st Lieutenant Edward C. Fisher, Troop E, Sunbury, which occurred on April 21. Lieutenant Fisher, a highway construction foreman, was shot at the back of the head and almost instantly killed by a disgruntled laborer of foreign birth. Full military honors were accorded at his funeral on April 24th.

Sergeant John A. Goodwill, Troop B, Philadelphia, was seriously injured in an automobile accident in Philadelphia on May 3. He spent two weeks in the Cooper Hospital at Camden, New Jersey, and is now well recovered. Sergeant Goodwill was the winner of the Regimental Noncommissioned Officers' Night Ride last year at camp.

The regiment will go to Indiantown for Field Training on June 17th, a date that will mark its reorganization as a component part of the 22d Cavalry Division. The changes that will occur will be quite radical. Instead of having squadrons of three troops, the regiment will have squadrons of two troops each. Only five of our present units will remain with the regiment, the troops at Sunbury, Lewisburg, Lock Haven, and New Castle and the Band at Northumberland. The regiment will lose all of its Philadelphia units. Troops A, B, and C will become part of the 104th Cavalry; Troop L will become Headquarters Battery, 166th Field Artillery; Medical Detachment will be transferred from this regiment to the 166th Field Artillery; Headquarters Troop will become 22d Signal Troop.

The regiment will also lose its present Machine Gun Troop at Bellefonte, and Troop I at DuBois, both of which will become Gun Batteries of the 166th Field Artillery.

The regiment will gain four units that are now part of the 104th Cavalry, the troops at Altoona, Tyrone, Clearfield, and Punxsutawney. There will be organized for the regiment a new Medical Detachment stationed at Sunbury. Regimental Headquarters will continue at Tyrone.

Everyone in the regiment regrets the departure of Major Maurice Rose, who will leave after camp to attend the Army Industrial College. But the announcement has been noted with pleasure that Major Burton C. Andrus now stationed at Ft. Knox, Kentucky, will come to Pennsylvania this summer to succeed Major Rose as regular army instructor. And these mountain cavalrymen are delighted to have with us now stationed at Sunbury as regular army instructor an old and dear friend in Major George H. Millholland who is this summer beginning his third four-year tour of duty with Pennsylvania Cavalry.

106th Cavalry—(Illinois Component)

MAJOR RALPH G. GHER, *Commanding*

Machine Gun Troop, Troop F, and members of the staff located in Springfield, attended the funeral of Brigadier General Richings J. Shand, Assistant Adjutant General, in Springfield, on March 28th. Machine Gun Troop and Troop F, forming a composite troop, acted as mounted escort. Noncommissioned officers of these troops were detailed as active pallbearers.

Captain H. P. Macnamara, M.C. 106th Cavalry, was recently elected president of the Springfield Saddle Club, a civilian organization of horsemen and horsewomen. Captain Mark Plaisted, Machine Gun Troop, was elected a director. The club has established club rooms in the 106th Cavalry stables, and uses the organization-owned animals of Troop F and Machine Gun Troop.

The second change in commissioned personnel in a number of years was caused by the transfer of Lieutenant Paul Yoggerst, Troop F, to the inactive national guard, and the promotion of 1st Sergeant Charles Greenup to the rank of 2d Lieutenant. Lieutenant Greenup has a record of sixteen years in the 106th Cavalry, and is well qualified for his new position.

Major E. A. Franklin, Army instructor with the 106th Cavalry, made the annual Federal Inspection of the Michigan units of the regiment in Detroit, South Haven, and Alma, Michigan.

The Federal inspections of Headquarters Troop, Machine Gun Troop, and Troop F were conducted by Major Alton Howard of the Army. All inspections down-state were attended by Major Gher and Captain Crookston, the Adjutant. Major Gher was also present at the inspection of the Band and Troop E in Chicago.

Lieutenant Richard Place, Personnel Adjutant, has been promoted to the rank of 1st Lieutenant after serving for a year as a second lieutenant in lieu of higher grade.

Lieutenant J. T. Walker, Troop F, who is a licensed pilot, offered an airplane trip to each man in the troop who succeeded in securing a certain number of suitable recruits. Lieut. Walker's week-ends have been spent recently in "paying off."

Sergeant Delmar Hughes, U. S. Army, who has been stationed in Urbana with Headquarters Troop, has been transferred to the Springfield station effective May 1st.

Major Gher and Captain Crookston attended the meeting of organization commanders and executives of the 33d Division, held in the Union League Club in Chicago on April 18th. Plans for the forthcoming tours of duty, training programs, armory building program, etc., were discussed.

Lieutenant James Bradley, Dental Reserve, who is attached to the 106th Cavalry for training, will attend the National Reserve Officers' convention in Porto Rico in June.

Captain Charles F. Sleeper, Supply Officer, and Lieutenant W. F. Hewitt, Adjutant 2d Squadron, both of Chicago, were present at the inspection of regimental headquarters, conducted in Urbana, on March 15th.

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109th Cavalry—Tennessee

COLONEL I. R. SUMMERS, *Commanding*

The "A's" have it. At least insofar as marksmanship is concerned. Troop "A" beat Company "A," 117th Infantry, by only eight points to win the National trophy awarded annually by the War Department to the rifle company, rifle troop, or combat company, or troop of engineers of the National Guard in each State attaining the highest figure of merit in its record practice with the rifle. The regimental commander has continually emphasized the importance of marksmanship in the regiment since he has assumed command. Results are beginning to show.

With the inspection of Headquarters Troop at Columbia on April 27, the Federal armory inspection was concluded for the regiment. The headquarters troop for its training inspection put on a CPX run entirely by the troop noncommissioned officers in which they demonstrated the various functions and duties of the personnel of this troop.

Either the regimental commander or adjutant was present at the inspection of every troop with the exception of Troop "K" at Clarksville, Tenn. All visitors to Columbia, Tenn. are convinced that this town can raise frog legs as well as put on their nationally famous "Mule Day."

The state armory board, recently announced by Governor Prentice Cooper, has allotted funds to Memphis ($75,000), Nashville ($75,000), Chattanooga and Knoxville ($50,000 each) to be matched by local appropriations and the total to be matched by Federal funds. Other towns in the state are to be allotted funds from a remaining $100,000 state appropriation.

Lt. Gordon S. Hammond, Troop "A," has been promoted to and has received notice of Federal recognition as 1st Lieutenant. Lt. J. Richard Fancher, MC, has been ordered to appear before an examining board to test his qualifications for appointment to Captain. Sergeant Hugh W. Nixon, Troop "B," has been ordered to appear before an examining board to test his qualifications for appointment as 2d Lieutenant. Sergeant William O. Terry, Troop "I," has made application for appointment as 2d Lieutenant of Cavalry in the inactive National Guard.

The regiment will go to Fort Oglethorpe, Ga., July 30 for its field training. Most of the "Oldtimers" are referring to Oglethorpe as a summer resort as compared to their last scene of field training, DeSoto National Forest, Miss. Plans are being made to carry out the major effort for this year ("The careful planning and direction of training by all concerned so as to make the most effective use of the means available to accomplish the prescribed training objectives"), so as to include the recreation time of field training. To this end sight-seeing trips to the battlefields in and about Chattanooga, Missionary Ridge, Lookout Mountain, are some of the things planned.

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111th Cavalry—N.M.N.G.

COLONOL CLYDE E. ELY, *Commanding*

The Annual Armory Inspection has been completed and the regiment has now settled down to intensive work in preparation for the field training period which will take place at Camp Luna, Las Vegas, N. M., August 6th to 20th. Included in field training this year for the first time will be a Platoon Test patterned after the "Cavalry Leadership Test for Small Units" in which all twelve rifle platoons of the Regiment will take part. The test will include musketry, marching, combat, reconnaissance, and a bivouac for the night.

The new radios SCR 209-A for the Scout Cars of Headquarters Troop have been received. They will be driven overland to Fort Bliss, Texas, where personnel of the Signal Corps will install the new sets. The SCR 209-A is a voice and CW set; is very compact and should stand a lot of hard use.

The 2d Squadron began showing of War Department Training films Sunday, April 23d, at Deming, for members of Troop E, staff officers of Deming and interested citizens. Five of these films will be shown by August 1st. The same films will be shown at Silver City for members of Troop F and others interested, starting Sunday, April 30th.

The 111th Cavalry Special Command and Staff School convened at the Silver City armory on April 19th at 8:00 P.M. for the regular scheduled bi-weekly staff school. This session was designated by Major Gyles Merrill, Cav., U.S.A., Instructor 111th Cav., for the Annual Armory Inspection of the Regimental Staff. The first concentration point was the home of Colonel Ely where a buffet supper was served to all the school contestants. Those present besides the host were: Major Gyles Merrill, U.S.A.; Lt. Col. Charles G. Sage, Capt. O. B. Witten, Capt. Henry M. Miller, Major Memory H. Cain, 1st Lt. Claud W. Stump, 1st Lt. Ben W. Fields, and 1st Lt. William F. Ely.

Capt. Henry M. Miller, Plans and Training Officer, was detailed to Silver City for ten days during April to compile the training programs, schedules and platoon test exercises for the coming field training period, August 6th to 20th.

Capt. Winnifred O. Dorris, Commanding Officer of Machine Gun Troop, is at present attending the National Guard officers class at the Cavalry School, Fort Riley, Kansas.

Each troop of the regiment will send a team of five men to compete in a shoulder to shoulder rifle match at Camp Luna, June 10-11, for the purpose of selecting a team to send to the National Matches at Camp Perry. Great interest has been shown and competition for places on the State team promises to be keen.

The Grant County Gun Club and Troop F fired the first stage of the Coronado Cup match on the new Hollett Target Range, April 30. The match is fired annually with all active rifle clubs competing. The second stage will be fired May 7th.

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112th Cavalry—Dallas, Texas

COLONEL CLARENCE E. PARKER, *Commanding*

On March 19th the regiment completed its Annual Federal Training Inspection most satisfactorily. General Walter B. Pyron, the Brigade Commander, took this occasion to make his spring inspection of the regiment. He accompanied the Federal Inspector, at the inspection of each unit of the regiment, and was very much pleased at the fine showing made by all.

Orders have been received that the regiment will go to Camp Wolters, Mineral Wells, Texas, from July 8th to 23d, for its annual period field training, and all units are preparing and looking forward to this yearly event where the whole brigade is together, and old acquaintances with the 124th Cavalry are renewed.

A surprise awaits all units upon arrival at Camp this summer as great improvements have been made during the past year.

The Brigade owes a vote of thanks to Major W. P. Cameron, 112th Cavalry, who secured WPA funds for the needed improvements, and to Lieut. Allan Wallace, Assistant S-4 of the regiment, who was in charge of constructions. Through the untiring efforts of these two officers Camp Wolters is now a model camp.

The Intermediate Phase of the Cavalry Leadership Test for platoons, being conducted in the regiment, was completed on April 16th as scheduled, and the platoons of Troops B, E, and F have completed the Final Phase, as this article goes to press. This test has produced great results and much valuable instruction in the basic cavalry field training has been absorbed by all competitors.

On March 20th, Colonel Joseph A. Atkins, Infantry, the new Officer in Charge of National Guard Affairs in the Eighth Corps Area, made an informal inspection of all units of the regiment. Colonel Atkins inspected the Armory and stable facilities of all troops and found everything in very satisfactory condition. He was particularly pleased with the remounts recently furnished the regiment by the Fort Reno Remount Depot.

At the Dallas Horse Show, held on April 30th, Lieut. J. H. Neal, on his beautiful thoroughbred polo pony *Silver Lady*, won first place in the Light Polo Pony Class.

At this same show Corporal Buster Ford, Troop A, on *Silver Taps*, 1st Sgt. Campbell's fine jumper, won the blue ribbon in the open jumping class. Several other members of Troop A took second and third ribbons in the jumping classes.

Captain Royal G. Phillips, Commanding Troop F, 112th Cavalry, at Tyler, Texas, held a unique ceremony at the dismissal formation of his troop on Sunday, April 30th. *Old Abie*, Stable Sergeant Norman's famous horse,

was brought into the Armory and with 1st Sgt. Toliver and Sgt. Norman on his right and left facing the troop at attention, the article that was published in the last issue of the CAVALRY JOURNAL was read to *Old Abie* and the entire troop, by Lieut. Manly Hood. At the close of the article the troop presented arms to *Abie* and the two sergeants whose "real love of the horse" brought *Old Abie* "with his heart of gold" back from death.

Sgt. Norman swears that *Old Abie* understood every word that was said about him and enjoyed the ceremony from start to finish.

The following named officers have recently been promoted in the regiment and are being congratulated by all:

Major Albert S. Johnson to Lieut. Colonel.
Captain John B. Dunlap to Major.
1st Lieut. William M. Hill to Captain.
2d Lieut. Melton L. Bass to 1st Lieut.

The sterling qualities of our beloved Chaplain, Bertram L. Smith are shown by an article recently published in the *Dallas Morning News*. This article states in gist as follows: "The spiritual quality of the *Dallas Morning News* corps of carriers noticeably improved last week. The Rev. Bertram L. Smith, rector of Christ Episcopal Church, has been carrying a route for his son, Bertram L. Smith, Jr., who is ill. Arising at 3:00 A.M., to make his rounds, the reverend carrier had to step fast to finish in time for 7:00 A.M. services. He finds it interesting. 'It gives a parent a chance to find out what his son faces,' he said. 'I recommend it to every father.'"

We have always boasted that our Chaplain is the finest in the Army, and the above article confirms our boast.

On the date that Staff Sergeant John B. Menard, DEML, completed 10 years as our Regimental Sergeant Instructor, he had filed with his record, a fine letter of commendation, through channels, from Major W. P. Cameron, Commanding the 1st Squadron, for the excellent work Sergeant Menard had done in the regiment since being assigned.

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62d Cavalry Division—305th Cavalry—Philadelphia, Pa.

COLONEL VINCENT A. CARROLL, Cav.-Res., *Commanding*

The annual regimental dance was held on March 17, at the Germantown Cricket Club. All who attended voted this dance the best we have ever held. The orchestra really did "swing it" and when two A.M. arrived and the crowd refused to leave, they played right on until 3:15. Lt. Sam Naftzinger produced a floor show extraordinary including an acrobatic dancer who did the physically impossible.

On the evening of March 31st, eleven teams of two officers each, set forth from Media Inn to find the stations in the Mechanized Night Ride. Capt. Doug Morrow and Lt. Ken Read proved themselves the expert map readers of the regiment by completing the course in 74 minutes. This was a novel problem prepared by Lt. Forrest Riordan, based on his experience in such a ride on horseback at Fort Riley, Kansas, last spring.

The Regimental Day ceremonies were held on April 15 at the First City Troop Armory. Major Bell trained sixteen officers for an exhibition ride which was perfectly executed. This was followed by a jumping contest which was won by Capt. Ed Young who had a clean performance in the jump off against Capt. Jack Allen. Colonel Wilson, our unit instructor, gave a short talk followed by Colonel Carroll and Colonel Wm. Innes Forbes, former commanding officer. Lt. Forrest Riordan read the regimental history and Colonel Carroll then presented awards and prizes to the following officers: Major Frederick Streicher—The George G. Meade Cup for military efficiency; Captain Edward E. Young—a saber for the greatest contribution to *esprit de corps* of the regiment; Lieut. Samuel P. Naftzinger—boot trees for the greatest professional advancement; Lieut. Gerry L. White—trophy for best natural rider; Lieut. James C. Gentle—trophy for best trained rider; Lieut. James F. Mitchell, Jr.—trophy for most extension school work; Lieut. Harry T. Rosenheim—spurs for best attendance at mounted drill; Lieutenant Shaler Stidham—trophy for being the best treasurer since Alexander Hamilton; Capt. Douglas Morrow and Lieut. Kendall E. Read—map measures for winning the Mechanized Night Ride; Lt. Kendall E. Read—Military book for best military article published in the *Stallion*.

Following the awarding of the trophies, sandwiches and cocktails were served.

Major Streicher and Capt. Jack Allen are to be congratulated on their well-deserved promotions.

On Sunday, April 30, the Regiment put on its Fifth Annual Horse Show at the estate of Major Alfred Biddle at Newton Square, Pa. Despite the fact that the weather was cloudy and rain threatened, there were over thirty entries in the seven classes. An unusually large gallery witnessed the event and the members of the regiment received more than their share of the ribbons and trophies.

The following officers placed in the various classes:

Class II, Green Hunters—Lt. James Gentle, 2nd Place.

Class III, 305th Cavalry Hunter Trials:
Lieut. Frank Howley—First Place.
Lieut. Forrest H. Riordan, Jr.—Second Place.
Lieut. James C. Gentle—Third Place.

Class VI, Open Hunter Trials:
Lieut. Forrest H. Riordan Jr.—Second Place.

Class VII, Military and Hunt Club Teams:
Capt. John W. Watson, Lieut. James C. Gentle, and Lieut. Frank L. Howley—First place.

Thanks for this event go to Lieut. James Gentle, chairman of the horse show committee.

The activity in correspondence work has been intensified and more than enough officers are eligible to fill the regimental quota for active duty.

306th Cavalry—Baltimore, Maryland

COLONEL MATTHEW F. JAMES, Cavalry-Reserve, *Commanding*

All conferences during March and April were a continuation in the preparation of the Regiment for the training of the Cavalry CMTC. Officers of the Washington Squadron and attached Cavalry officers, had conferences by Lt. Col. Joseph L. Philips on "CMTC Orientation," by Lt. Mortimer B. Morehouse on "Care of Animals, Weapons, and Equipment," "Rifle and Pistol Marksmanship," by Lt. Robert W. Castle, Lt. Ernest St. Jacques, and Lt. Frederick D. Knoll. Capt. E. Humphrey Daniel and Capt. William I. Irby conducted the conference on "Light Machine Gun Marksmanship."

Emphasis has also been placed on preparation for CMTC duty at the regular rides at Fort Myer. Under the able instruction of Lt. Col. Edward B. Harry, 153rd Cavalry Brigade, and Major Edward A. Kane, 306th Cavalry, the troop officers have been given training in "Equitation" and "Mounted Drill."

A rifle team, Lt. Robert W. Castle, team captain, will represent the Regiment in the District of Columbia Competitive Matches to be held at the Marine Corps Rifle Range, Quantico, Va. These matches will begin May 14th and be held each Sunday until June 25th.

The officers of Baltimore heard Lt. Col. Bolles, Inf-Res., lecture on "Supply in the Field." Lt. Richard W. Loheed instructed on "The Manual of the Rifle," and Lt. Col. Wm. H. Skinner conducted the conference on "Care of Animals and Equipment," Capt. Henry G. Sheen had the subject "Scouting and Patrolling." During April, officers of all branches attended a lecture by Col. Bruce Palmer on "Antimechanization." A training film "Mounted Instruction Without Arms" was shown at this same conference. At the other conference Lt. Col. Wm. H. Skinner instructed in the "Manual of the Saber" and on "Arm Signals." Lt. Robert L. Beziat supplemented his instruction on "Mounted Drill-Squad" with a training film on the same subject.

Recent assignments to the Regiment were: Captain John F. Clagett, First Lieutenants Baxter C. Crane, Glen F. Leet, Douglas MacArthur, 2nd, Mountford H. Smith; Second Lieutenants Busey H. Howard, Robert G. Long, Wilfred S. McClaren, Harry G. Randall, and William B. Shelley. Relieved from assignment by Division orders were: Captain Edward M. Perkins, First Lieutenants Theodore A. Baldwin, George P. Frazer, Rowland F. Kirks, Laurie F. Hess, Howard H. Ruppart, Thomas G. Slater, and Second Lieutenant William W. Emory.

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307th Cavalry—Richmond, Virginia

LIEUTENANT COLONEL R. B. H. BEGG, *Commanding*

Lieutenant Colonel Edward L. N. Glass, Cavalry, Unit Instructor, departed from Richmond, Virginia, on March 31, 1939, for Washington, D. C., under War Department Orders to temporary duty in the office of G-2, thence to Guatemala City as Cavalry Advisor to the Guatamalan Army. While the regiment regrets very much losing Colonel Glass as its instructor, the best wishes of the officers of the regiment for continued success are extended to him. Major Thomas B. Burgess, Infantry, Headquarters 80th Division, Richmond, Virginia, is acting as Unit Instructor of the regiment, pending the assignment of a Cavalry officer to replace Colonel Glass.

Colonel Bruce Palmer, Cavalry, Chief of Staff, 62nd Cavalry Division, conducted the regularly scheduled conference at Regimental Headquarters, Richmond, Virginia, on April 13, 1939. Colonel Palmer's subject was "Marching—Horse and Mechanized Cavalry." The Colonel has been one of the leaders in developing both horse and mechanized Cavalry and his talk was extremely instructive and interesting to those who attended the conference and heard him.

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308th Cavalry—Pittsburgh, Pa.

COLONEL GEORGE H. CHERRINGTON, Cavalry-Reserve, *Commanding*

The regimental commander returned April 1st from his two months' vacation near Tucson, Arizona. The long stay in that healthful climate put the Colonel in excellent condition for business. On the day after his return the officers of the regiment staged a reception in his honor at the Training Center. He was met by a mounted escort some distance away and conducted to the clubhouse. Here the Colonel inspected the escort and later the stables and other installations. Upon conclusion of the inspection, luncheon and refreshments were served.

Training of the regiment has been progressing steadily, so far as the theoretical phase is concerned, and approximately twenty-four officers are already qualified for active duty. On the practical side, however, the weather has been responsible for delaying our usually early spring start. The first Wednesday period was conducted on May 3d with an excellent attendance, despite the coolness of the evening. Discounted pistol practice will be inaugurated on Sunday, May 7th, following mounted instruction. All the remaining conferences are scheduled to be held at the Training Center and will consist of one hour's mounted and one hour's theoretical work.

Our two officers at school are most enthusiastic about the courses. Captain J. T. Ross is attending the Staff School at Fort Leavenworth, and says that all that has been said of the great amount of work involved is a "gross understatement." He has been quite successful so far, however, in his problems and is decidedly keen for the military life. The family are with him, living in Leavenworth. Lieutenant J. Roy Degenhardt, attending the Cavalry School, is just as enthusiastic, and, judging by the scarcity of his letters, must be just as busy. He succeeded in getting his first fall within a couple of weeks and, since then, has been able to relax and enjoy himself. Mrs. Degenhardt will journey to Riley to spend the last month and imbibe the Cavalry atmosphere.

307th Cavalry—Richmond, Va.

LIEUTENANT COLONEL R. B. H. BEGG, Cavalry-Reserve, *Commanding*

We welcome the assignment of Major Albert J. McCurdy, who takes the 3rd Squadron, vice Major McComas, relieved.

Lieutenants Preston and Trolan are now wearing their Captain's bars. Little things like that make a difference, especially on the pay roll at the end of camp. Congratulations.

Colonel Bruce Palmer, the Division Chief of Staff, was guest speaker on November 29th. A turn-out of nearly forty, including National Guard officers from the Richmond Blues and Howitzers, derived much benefit and pleasure from his talk on Mechanized Cavalry. It might well be interpolated into Cavalry subscourse 30-3, intact and in toto.

Our Lieut. Colonel, Max Livingston, far from the fields and fences of far-away Albemarle County is pounding the pavements of Philadelphia pursuing pelf and prosperity perforce.

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308th Cavalry—Pittsburgh, Pa.

COLONEL GEORGE H. CHERRINGTON, Cavalry-Reserve

Activities of the regiment have been generally satisfactory thus far in this school year. Naturally, during the holidays just past there has been more play than work, but things are picking up fast and causing much activity in the headqaurters.

Outside activities have been slightly hampered by bad weather, but are at least as great as last year. The real horsemen are nearly always out to keep themselves and the horses in good condition.

The schedule of instruction for the second part of the school year is in the process of preparation and should be quite interesting.

Now that Captain Rosenbaum has returned from his honeymoon in the Bahamas, the regiment is on its toes and ready to accomplish great feats of learning in the next few months. It really needs his presence to give it that vital "Umph."

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862d Field Artillery (Horse)

MAJOR FRANK GOSNELL, JR., *Commanding*

The 862d F.A. (Horse), after a very successful active duty training period last summer, resumed its inactive duty training on October 19, 1938. Of the 16 two-hour conferences scheduled, seven (7) will be devoted entirely to unit conferences, making possible the presentation of several map problems. During the general conferences, although emphasis is being placed upon the "rôle" of the various arms and services, other subjects include supply in the field, anti-mechanization and mobilization.

Cavalry District, 8th Corps Area

Effective January 1, 1939, all Cavalry Reserve officers in the 8th Corps Area came under the administrative jurisdiction of the newly-created "Cavalry District, 8th Corps Area," with Colonel Arthur E. Wilbourn, as Chief of Staff, and Major James B. Taylor, as his Adjutant. Thus all officers assigned to the Regular Army units, reserve regiments, and mobilization center are consolidated under a single administrative head.

In addition to his present duties as Unit Instructor for the 311th Cavalry, Major Taylor now assumes similar duties for Reserve officers attached to Headquarters, 1st Cavalry Brigade; 5th Cavalry; and 12th Cavalry.

Major Minton at Tucson, Arizona, in addition to his present duties as Unit Instructor for 312th Cavalry and Fort Clark Mobilization Center becomes Unit Instructor for all Reserve officers attached to Headquarters, 1st Cavalry Division; Headquarters, 2nd Cavalry Brigade; Special Troops of 1st Cavalry Division; the 7th Cavalry; and the 8th Cavalry.

Headquarters for the Cavalry District, 8th Corps Area, will remain at 403 Federal Building, San Antonio, Texas. More than 250 additional reserve officers are included in the new set-up, bringing the total number under Cavalry District jurisdiction to more than 850.

The new arrangement will entail no immediate changes in assignment of any of the officers. Reserve officers who have been assigned to Regular Army Active units and who now come under the jurisdiction of the Chief of Staff, of the Cavalry District, 8th Corps Area, will remain on the same assignment.

The newly acquired Regular Army units are attached to the existing set-up for inactive status training.

Porte Cavalry

(Continued from page 71)

Of the various types of horse carrying vehicles used on this movement, namely two types of truck frames, a home-made two horse trailer, and the regular Type 4 semi-trailer, the latter definitely proved itself as the best vehicle for the purpose. While the six horse semi-trailer has not the cross country ability of the one and a half and two and a half ton trucks, its greater troop capacity of six men and horses or thirty dismounted men and their equipment, makes it an ideal vehicle for the transportation of troops as well as cargo. The greater economy of the semi-trailer over light trucks in matériel, operating personnel, and road space required indicates the desirability of equipping motor transport companies operating in rear areas, with these vehicles.

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CONTENTS

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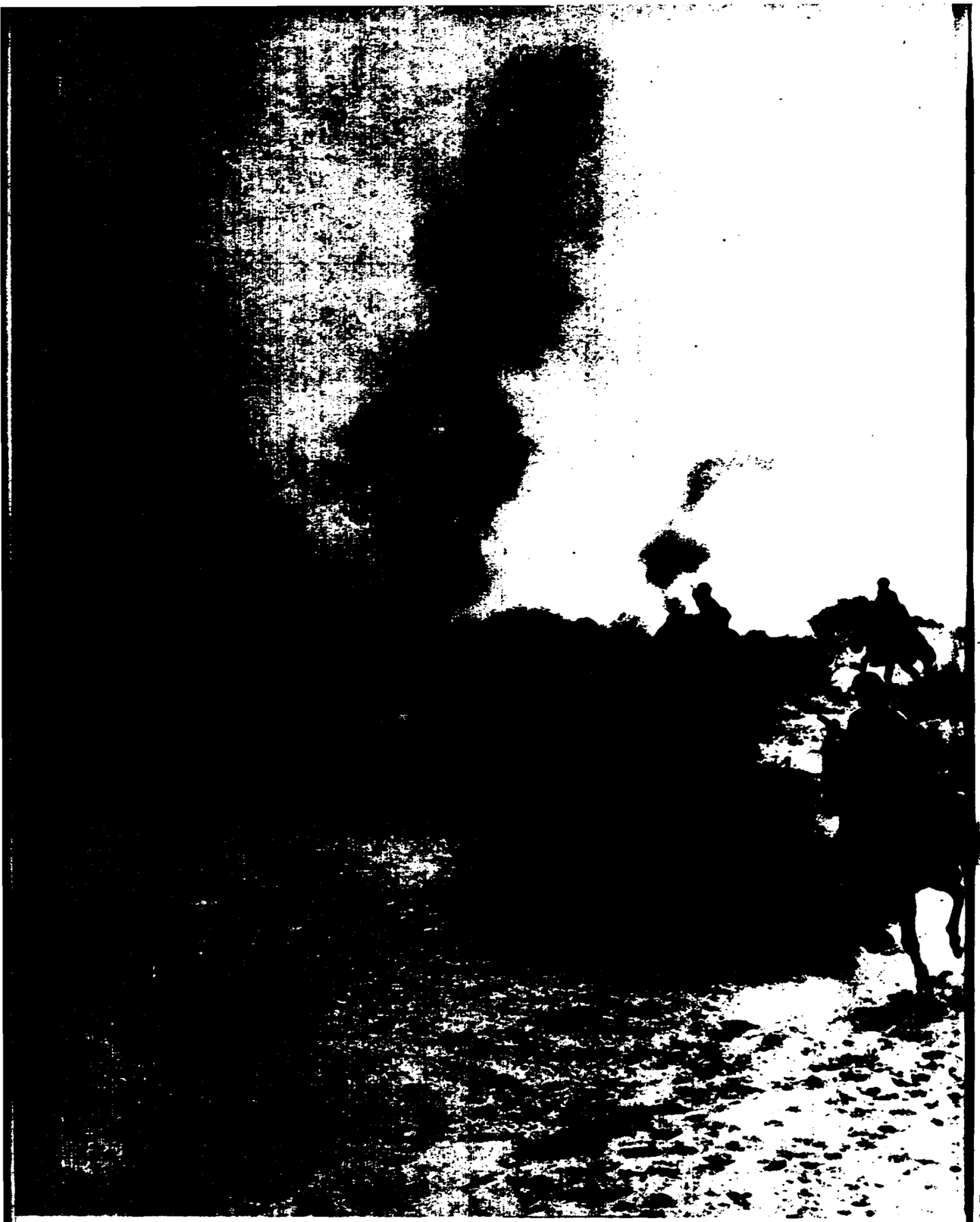


MODERNIZED CAVALRY

Wide World

Supply of a Mechanized Cavalry Brigade on a March

By MAJOR R. F. PERRY, 13th Cavalry

A march of the Seventh Cavalry Brigade (Mechanized) to Fort Riley, Kansas, with participation in demonstrations and maneuvers at the Cavalry School was authorized by the War Department from early October until November (1938). It was my lot to have the supply of this movement. The work necessary to supply this command and the logistical problems that presented themselves I am setting forth herewith.

The routes from Fort Knox to Fort Riley offered two possibilities. The more desirable one seemed to be via Louisville—Vincennes, Indiana, then on National Highway No. 50 to Scott Field or Jefferson Barracks—Columbia, Missouri—Kansas City or Fort Leavenworth—Fort Riley. An alternate route was to the south by Evansville, Indiana—Scott Field or Jefferson Barracks—Jefferson City, Missouri on National Highway No. 50—Kansas City or Fort Leavenworth—Fort Riley.

Both routes were on good highways and through cities near which we might camp and have supply facilities readily accessible. These proposed camp sites were approximately 150 miles apart, a most important factor in planning since that distance constitutes a practical day's march for mechanized cavalry, moving by easy stages.

With preliminary plans decided upon and with the data as to supplies required (which were based on experience of a march to Fort Oglethorpe in May and numerous other shorter practice marches) a reconnaissance was made by Lieutenant Colonel J. F. Davis, Brigade S-3, and myself.

On this reconnaissance we were chiefly concerned with road conditions, camp sites, gasoline supplies, and local supply facilities for provisions, water, wood, straw, coal, etc. Among these, the road conditions and camp sites were predominant and the remaining supply facilities would have to be made to conform to the best roads and camp sites we could find. We had no particular worry as to the road conditions as all routes were on state or national highways and all bridges were constructed for heavy traffic and would stand our maximum load. The matter of adequate camp sites did present a real problem, for to put the brigade with attached troops (100 officers, 2,000 enlisted men and 638 vehicles) into camp required a minimum of 35 acres of well drained ground with good approaches and available water. We had gone through this experience in Kentucky, Tennessee, and Georgia in May and had found considerable difficulty which had necessitated splitting the command in some instances to get adequate camp facilities. In the flat country of Indiana, Illinois, and Missouri, we expected less difficulty but it developed that 35 acres are difficult to find anywhere if they are to have all the desired requirements and are to be had at a minimum cost to the government.

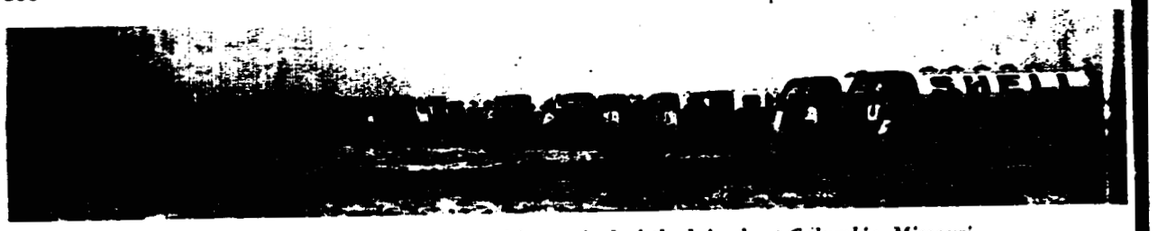
The idea of marching the command in two columns was considered but was discarded because the two best routes were at some points over 100 miles apart and would thus increase unnecessarily the difficulties of the maintenance and supply problem.

With these objectives in mind and a good estimate as to the supplies of gasoline, provisions, wood, straw, etc., necessary we left Fort Knox August 8th in a government car planning to spend ten days on reconnaissance and at Fort Riley where Colonel Davis was to make arrangements for demonstrations and maneuvers and I was to take care of the supply situation. Our normal procedure in reconnoitering a town was as follows:

Being supplied with T.P.S. schedules for V-75 gasoline procurement, we knew (or thought we did) the bulk dealer of gasoline in each city who would have to supply us with a greater part of our gasoline. We went directly to this dealer in each place, and, upon acquainting him with our wants of from 8,000 to 11,000 gallons of gasoline delivered by him on both of our proposed stops in his city, we had an ally who was more than eager to have us come there. Each dealer devoted his entire time to showing us around and was largely responsible for getting a good camp site for us.

With the bulk dealer's help (and he invariably seemed to know everyone) we would spend at least half a day visiting every possible camp site and eventually reached the point where we talked knowingly of clover crops and the state of Lespedeza in growth or why last year's circus grounds were not suitable. As a result of these rather long camp site reconnaissances we were able to secure excellent camp sites adjacent to main highways on the more desirable route, i.e. at Vincennes—Scott Field—Columbia—and Kansas City.

During this reconnaissance we built up a large acquaintance in each locality and were able to make contacts with vendors and to make preliminary arrangements for provisions and camp site supplies subject to definite confirmation by correspondence upon our return to Knox. We also contacted the city officials and Chambers of Commerce and arrangements were made through them for local police escorts over the best routes through each city to the camp site, and, through their influence we arranged for water to be supplied to us from the city water works. In our rather large contact with civilians, I would like to say that we were received with the utmost courtesy everywhere and a very friendly and interested attitude



Gasoline trucks and transports awaiting arrival of the brigade at Columbia, Missouri.

was shown by them all to the Army in general and to the mechanized cavalry brigade in particular.

At this point I want to stress the fuel problem that confronts a mechanized brigade and the plans that have to be made locally to gas efficiently this command.

The Seventh Cavalry Brigade with attached Ordnance, Quartermaster, Signal and Air Corps units totals 638 vehicles and requires 107 gallons of gasoline per mile traveled. This gasoline is divided into 38.1 gallons of V-92 (aviation) gasoline for combat cars and 68.9 V-75 (ethyl) gasoline for all other vehicles. Figuring on this basis will give a total requirement for both types gasoline for an average 150 mile day march of 5,715 gallons of V-92 and 10,335 gallons of V-75. The V-92 gasoline is not available in such quantities in any city and the V-75, while a commercial product, is usually not carried by bulk dealers in quantities larger than our daily requirements. This makes it very apparent that all gasoline for our use had to be especially assembled for us.

Both types of gasoline, together with Diesel oil and engine oil, had to be delivered to our camp site *simultaneously* upon the arrival of the brigade in camp. And with such simultaneous delivery it took from 2½ to 4 hours to gas all vehicles. To get a visual picture of the amount of gasoline required, it took 17 tank wagons of from 300 to 1,200 gallons capacity all working at once to gas the command efficiently. The dealers had to get three extra railroad tank cars to meet this demand.

To have dealers deliver this gasoline as we desired it was necessary to impress and insist upon this simultaneous delivery. To a bulk dealer who operates from one to four tank wagons, this was a big order. In a small locality this meant drawing in all tank wagons from a wide radius (in some cases over 100 miles) and assembling ten or more wagons with drivers. If this were not done, the gassing continued on after dark. (The physical gassing of vehicles was done by the soldiers and in the majority of cases with buckets and funnels. Where power pump tank wagons were supplied the time required to gas was cut in half.)

All necessary requirements were impressed on the bulk dealers, and as far as could be foreseen, we had laid the ground for our supplies and all further details would have to be arranged by correspondence upon our return to Fort Knox. This referred to our V-75 gasoline requirements only and we worked on the assumption that all government contracts expiring on October 1st would be renewed as they usually were.

We knew the government contracts on V-75 gasoline expired on October 1st. We were able to get advance copies of the October 1st-December 31st contract by September 12th and found that every one had been changed and we had to make new contracts throughout. For the four camp sites en route and the one at Fort Riley, we had to deal with five oil companies (i.e., Ohio, Standard, Shell, Sinclair and Texaco). This necessitated considerable correspondence as their chains of correspondence seem to be as complicated as the Army's. We wrote to their main offices in Chicago, St. Louis, or New York, and then, in turn contacted their district officer who dealt with the local bulk dealers. Then, in some cases, the bulk dealers had to act through the local distributors.

In addition to the gasoline and Diesel oil, we required a supply of engine oil at each camp site. This was arranged for delivery on government contract through the Texaco Company.

We spent five days at Fort Riley. Colonel Davis made plans as far as could be determined definitely for demonstrations and maneuvers while I made arrangements for our camp at Camp Whitside and the supply of the brigade while at Fort Riley. The supply facilities of Fort Riley were made available and any extra tentage, stoves, cots and mattresses needed were borrowed by Fort Riley from CCC and National Guard sources. This gave us an excellent camp. Some of the installations were made by Fort Riley prior to our arrival and the canvas was put up by the 2nd Cavalry.

Upon our return to Fort Knox we had definitely settled upon our route of march, camp sites, and had made sufficient contacts to enable us to complete all arrangements by correspondence.

Bids were at once let by the Post Quartermaster for the supply of V-92 gasoline and Diesel oil for delivery at all our camp sites on specific days. These bids were consummated within 20 days. Upon the Shell Petroleum Corporation getting the V-92 contract and Standard the Diesel contract, steps were taken immediately to have this gasoline laid down and the type of delivery we required assured. The Shell Company upon receiving our order sent a representative with the brigade who stayed during the entire march and gave us excellent service. The matter of Diesel oil required no particular plan as to the type of delivery as it came in 55-gallon drums to be delivered on the field.

The matter of supply rations for a command of this size (24 messes) with the available supply facilities left only one practicable solution and that was "to live off the country" on a reimbursement ration. To facilitate this a standard menu was published and the number of items standardized and limited. This menu met with the general approval of troop commanders. It is believed that it greatly simplified the procurement of supplies in that we bought only items specified on the menu and were able to centralize our purchases and thereby cut down the number of bills that had to be settled by each mess daily.

On the return trip it was possible by our previous experience to deal with only one or two vendors at each camp and to contract the entire supply of meats, eggs, butter, etc., with one packing company through their "hotel service."

This system of feeding twenty-four messes, while the only practical one at the time, is not satisfactory. It is a financial hardship on troop messes as the reimbursement on rations is about 5% of the total deficit to the mess. It entails a large amount of clerical work on the troops both in the field and upon their return to settle up the reimbursements. These details should be borne by the staff. The daily purchase of rations in this manner with a command moving 150 miles per day can be arranged only by personal contact with vendors in advance and the final arrangements made by very voluminous correspondence.

The ideal solution would have been to have had sufficient trains to carry 2 or 3 days' rations and to have fed the entire command on a modified field ration, the Quartermaster agencies, by purchase and contract, arranging in advance the necessary distributing points. This was impossible as neither the truck space nor the Quartermaster agencies were available.

All the necessary details were completed when, late in September, the route had to be changed from via Louisville—Vincennes and Highway No. 50 to a southern route via Evansville—New Harmony—McLeansboro. This was due to construction which was begun on the road from Fort Knox to Louisville. This necessitated a complete re-arrangement of supply from Vincennes to Evansville. These changes completed, I felt we were ready to march as far as supplies were concerned. In all these arrangements it was necessary to keep up a continual correspondence with all five points of supply through the entire month of September and to resort to telegraph and telephone to straighten out certain last minute points. I even had to fly to St. Louis to settle gasoline difficulties just before we were ready to take off. It looked at times as if it were not possible to get all the people I was dealing with to get exactly what I wanted when I wanted it delivered. A final highlight came when I was expecting an urgent message about gasoline from St. Louis and a baker called me up by long distance from there late in the evening to discuss the width of layer cakes. I doubt if he will ever mention cake to me again!

This preliminary work paid us good dividends for when we went into the field the dealers in all cases were prepared to give us exactly what we expected. This cooperation on the part of the dealers, together with the fact that everyone is eager to sell where the quantity is large and the payment sure, leads me to believe that we could have shortened the time of our reconnaissance by notifying the Chambers of Commerce well in advance of our arrival and ask them to have the dealers come to us rather than to have searched them out ourselves.

On the march to and from Fort Riley the routine supply procedure was to have an advance party precede the main body. This consisted of all regimental and separate battalion supply officers, regimental supply sergeants, clerks, and gasoline NCO's and an NCO from each separate unit. In addition to these were Major Gaffey, who had charge of laying out the camp and myself with a clerk and the brigade supply sergeant.

This advance detail made minute arrangements for the forthcoming troops and was familiar with every possible supply contingency so that when the heads of each unit arrived there was no delay in supplying them. An armored car with radio also accompanied this advance detail and by keeping in constant communication with the main body we were able to inform them of last minute changes and to know the exact time of their arrival.

The advance detail left each morning fifteen minutes ahead of the others and traveling at a higher rate of speed arrived at the camp sites two to three hours ahead. Upon arriving at a camp site, the approaches were first settled upon the camp areas allotted and laid out by markers carried by each unit. While this was going on, I was able to contact all dealers, make any last minute changes, and inform them of the exact time of the arrival so different articles could be brought when needed and spotted in the right localities. Final arrangements had to be made for the water supply and disposal of garbage. Entrances had to be fixed in some cases, and traffic control planned. With all these things to do the time available was not too much.

The gasoline trucks were lined up at the vehicular lines and when the first troops came into line the gassing started at once and continued with from 8 to 18 trucks pouring gasoline into the vehicles until every tank and drum was full. It was usually essential to keep one tank truck on the field until 8 or 9 PM to catch any stragglers that had been delayed on the road.

After the command was all in camp and the gassing completed, all gasoline and oil bills were receipted and all locally purchased supplies paid for in cash. This took a good bit of time as it was necessary to reconcile all troops' receipts for gasoline and oil against our checks on the tank wagons before a final settlement could be made with both the gasoline companies. This was usually done well after dark and if everything were settled by 11:00 PM we were doing very well.

At Fort Riley, during the three weeks of demonstrations and maneuvers, the supply problem as to gasoline and oil was entirely unpredictable and gave us an indication of what we would be up against in an emergency move. The supply of rations and routine camp supplies were normal and procured from the Post Quartermaster as no marches were made over 24 hours in duration.

Vehicular line of the 7th Cavalry Brigade in camp at Swope Park, Kansas City.

When planning the gasoline supply at Fort Riley, I allowed for 250 miles of marching there and 150 miles returning to Kansas City. To cover this we had 14,000 gallons each of V-92 and V-75 gasoline in government tank cars equipped with hose connections on the sidings at Camp Whitside. Also, we had notified government contracting companies that we would call upon them for both V-92 and V-75 gasoline as needed and that we would give them ample notice as to our wants. A large supply of engine oil, grease, kerosene, and Diesel oil had been ordered purchased and was awaiting our arrival at Fort Riley.

These amounts seemed ample and it was thought would take care of any extra needs. The actual mileage to be covered or the type of mileage was undeterminable before we arrived. I might state here that a marching mile and a maneuvering mile is about in a ratio of 1 to 2 as to gasoline consumption. As soon as the brigade started demonstrating and maneuvering at Fort Riley the gasoline consumption took a tremendous jump. By checking all gasoline on hand daily, I realized that we would have nowhere near the amount needed and that our tank car supplies were being rapidly depleted.

This meant calling upon contracting gasoline companies for large quantities of gasoline and they were at once informed of the approximate quantities we would need. They began delivery about five days after our arrival at Fort Riley.

This worked very well for the V-75 gasoline as there were storage tanks in Manhattan. The company immediately having gasoline shipped in. The bulk dealer made daily deliveries to two 500-gallon tanks which were equipped with electric pumps. On days the brigade maneuvered or marched he employed four tank wagons to refuel the brigade. To do this he hauled from Manhattan all day.

During the last two weeks we were at Riley, we had to anticipate our local deliveries and keep the bulk dealer informed in order that he could have tank cars moved from the refineries at Shreveport, Louisiana, in sufficient quantities to keep up with our needs. This we kept to a minimum as we did not want to stock up this dealer with large quantities of V-75 gasoline which he would have to keep on hand for several months before disposing of it. For our last deliveries he had to get the V-75 hauled from Topeka and Lawrence. In explanation of this, it might be stated that the average bulk dealer will normally keep on hand from 3,000 to 8,000 gallons of V-75 gasoline. With our wants running as high as 10,000 gallons per day, it became a major problem for him to get a sufficient amount for us and still not be overstocked.

We had more difficulty getting the V-92 (aviation) gasoline. We started off with 14,000 gallons in government tank cars at Camp Whitside and a tentative agreement for from 5,000 to 10,000 gallons to be delivered from Kansas City. It soon became apparent that the combat cars were using far more gasoline in maneuvering and going much longer distances than had been anticipated. We called on Kansas City for the gasoline. It developed that the entire supply available in Kansas City was only 4,000 gallons and further difficulties arose as to clearing this gasoline out of the Port of Kansas City. To protect our anticipated needs we wired to the refineries in Houston, Texas, to have a car moved to Fort Riley at once. Before it started we had to order another one to cover further needs. In the interim, while these cars were en route, we operated on the 4,000 gallons we finally got from Kansas City and on our small remaining reserve in the government tank cars. We even had to supplement this on one occasion by using V-100 gasoline from the Air Corps.

The problem of supplying V-92 gasoline was always pressing. Although we had an ace in the hole by having V-100 gasoline available at a very excessive cost from the Air Corps and in further emergency we could have gone to V-75, it was most desirable and economical to use V-92 procured at contract prices. However, we managed to keep abreast of our gasoline requirements until the two cars came in from Houston. I went down to the yards in Junction City on Sunday, October 22nd, and had them moved out to Fort Riley for our Monday's gassing.

The gasoline situation seemed well in hand for the remainder of the stay at Fort Riley. We thought we would get back to Kansas City with what we had and with some left over. Therefore I began to look around for a place to dispose of the anticipated excess of V-92. This proved to be a useless worry as our gasoline consumption continued to be high throughout the week and upon leaving for Kansas City we had less than 50 gallons of V-92 gasoline on hand in tanks out of a total of 33,500 gallons we had acquired at Fort Riley. This was plain good luck as no one could figure any gasoline that close.

The problem of keeping a mechanized command gassed as we did in peace time and in a community where there were numerous supply agencies close at hand made us visualize what a major item this would be in a move of any size in the theatre of operations.

The best solution for a single operation for a mechanized brigade is to have the gasoline in an easily handled container (10-gallon non-returnable) and to have this supply moved as far forward as possible. The command would then be gassed and combat trains filled at an advanced D.P. With this type of container the vehicles could be filled very expeditiously wherever the cans are dumped. With this forward refueling, the radius of operation could be 150 miles out and 150 miles back. The extreme limit could be obtained by cutting supplies to a minimum and carrying gasoline in forty-six trucks of the combat train. This would permit a total operation of 450 miles. Beyond this point supplies and gasoline could not be stretched without the assistance of a division train.

One other set of difficulties was met on our return trip. On three occasions we had our supplies held up in the company's yards by truck drivers' strikes. This seemed pretty serious at the time as the gasoline supply for the entire command was held in the company's yard at one point; in another the provision truck drivers were on strike; and at a third point the oil supply was tied up by strikers. Even in peace time this presented a rather trying situation but by some rapid action on the companies' part these obstacles were overcome in two cases and in the other we had to do without for the day.

☆ ☆ ☆

SPAIN

Again, I salute Spanish bravery. The superiority of fire power, equipment and training of the Nationalists were the main factors, but in the final operation the success rested with the Cavalry Division. It is hardly fashionable to mention it in this country just now, but the fact remains that cavalry have been *the* successful arm of the current war in Spain. One does not see many tanks there; nor are they highly thought of. The final recapture of Teruel was based on an outflanking movement to the North, in the Sierra, by a cavalry division.—By WING-COMMANDER A. W. H. JAMES, M.C., M.P., from a lecture entitled "The Spanish Civil War," as printed in *Journal, Royal United Service Institution*, London, February, 1939.

(Preface to above article: The Chairman, on introducing the Lecturer, said that probably there was no one better fitted to speak on this subject. Wing-Commander James had made a great many visits to Spain since the outbreak of the Civil War, and had probably been given more favourable opportunities than anyone else for actually seeing the battle front and observing the course of the operations; in fact, he could truthfully be described as an eye-witness.)

Neglected Mobility

The Corps Conneau at the Marne, September, 1914

By Lieutenant Colonel E. E. Schwien, Cavalry

INTRODUCTION: Whether a large cavalry force is assigned a proper or an improper mission in war depends primarily on the conception of cavalry of the commander of the theater of operations, army, or other force to which this cavalry force it attached. If this individual lacks comprehension of the potentialities of this ideal weapon of opportunity, the results attained by its employment will fall far short of its maximum capabilities. Although these statements may appear pure platitudes, the fact remains that, while perhaps well understood in theory, they are still incomprehensible to many higher commanders in practice. For substantiation of this, one has only to study recent maneuvers both in this country and abroad. If further proof is desired, turn back to the history of any war.

Where possible, cavalry should be employed in mass ***and in a decisive direction***. There is nothing startling or new in this doctrine. Cavalry history for centuries past is a continuous testimonial to its soundness. Its enunciation is found in all of our texts. In spite of all this, however, a study of any war reveals situations in which there existed magnificent opportunities for a strategical *coup de grâce*—opportunities which passed unexploited because of the ignorance of the commander of the combined arms as to the proper employment of his cavalry. In most of these instances, the cavalry commander was too timid to deviate from the faulty mission assigned him and exploit upon his own initiative. We find many such situations in the World War, ***and we are going to find just as many in the next war.*** Unfortunately, some of these opportunities will, and for the very same reasons as in the past, again be permitted to vanish.

Shortly after 1870, the French established their Ecole Superieure de Guerre—unquestionably the finest and ***most practical*** school of war in the world today. No small part of its course was devoted to a study of our Civil War and in particular to cavalry operations in the Civil War. The very fact that the French Army of 1914 included ten cavalry divisions in addition to corps and divisional cavalry is sufficient attestation to the importance attached to the action of large cavalry masses in the French pre-war doctrine. We also know that the Ecole de Guerre *at least taught* sound cavalry theory.

Although properly indoctrinated and with sufficient cavalry available to carry out this doctrine, the commanders of 1914, when vis-à-vis with the actualities of war, permitted many fleeting opportunities for decisive action to elude them simply because of a fundamental lack of *practical* knowledge of the strategic capabilities of a cavalry mass.

Will American cavalry suffer this same indirection in the next war? Very possibly it will.

* * * * *

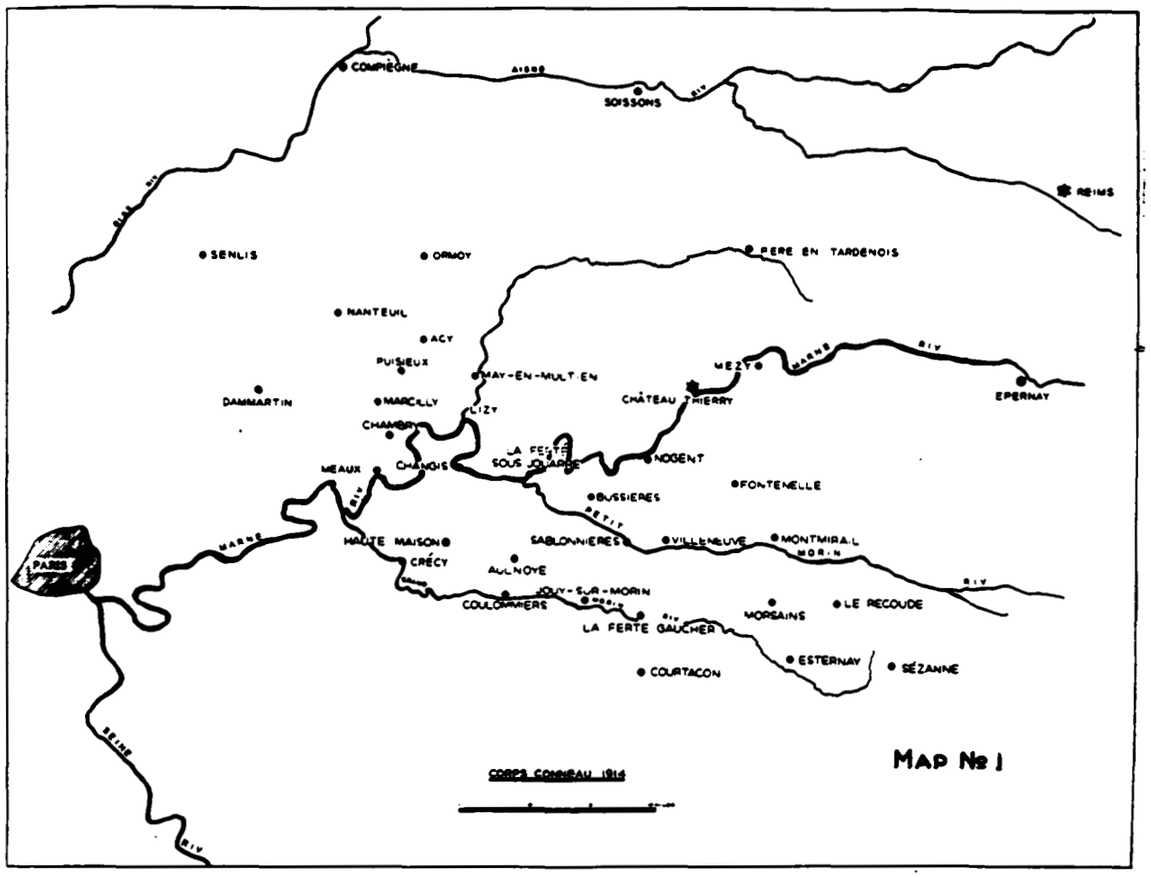
In order to emphasize *primarily* the vital importance of a thorough *practical* knowledge on the part of all higher commanders of the true rôle of massed cavalry, we shall devote this article to a study of the Corps Conneau at the Marne in 1914. This operation illustrates in striking fashion the point in question.

The Corps Conneau was attached to the French Fifth Army, commanded by General Franchet d'Esperey. A brilliant leader, d'Esperey had shown his sterling qualities at Guise, where he saved the day with his I Corps. In the cold light of post-war criticism he is still classified as one of the outstanding officers of the war. A man of strong character, possessing power of decision and great courage both moral and physical, his qualities were immediately recognized at the beginning of the war, and within two months he was given an army.

An ideal army commander? Yes, but—his direction of the Corps Conneau on the 8th of September, 1914, will always remain a classic example of ignorance of the strategic employment of cavalry. There can be only one conclusion. He was unable to grasp mentally the decisive exploitation potentialities of the cavalry mass.

We shall divide our study into two principal parts. In the first part, we shall endeavor to portray the operation as it actually took place. Then having described the events of the 8th and 9th of September, 1914, in as accurate a

The Cavalry Mass in Strategic Exploitation



Map 1: General map (without situation)

fashion as possible, we shall, as the second part of our study, reconstruct the operation as it should have been executed. In so doing, we will not deviate in any way from the historical basic situation except to assign a different mission to the Corps Conneau and to replace its commander with a cavalry leader. We shall also retain the exact composition and armament of the Corps.

There is sufficient justification for a change in the Corps mission, for although *systematic* reconnaissance was almost totally lacking, the army commander was in possession of sufficient information to enable him to formulate a sound exploitation decision.

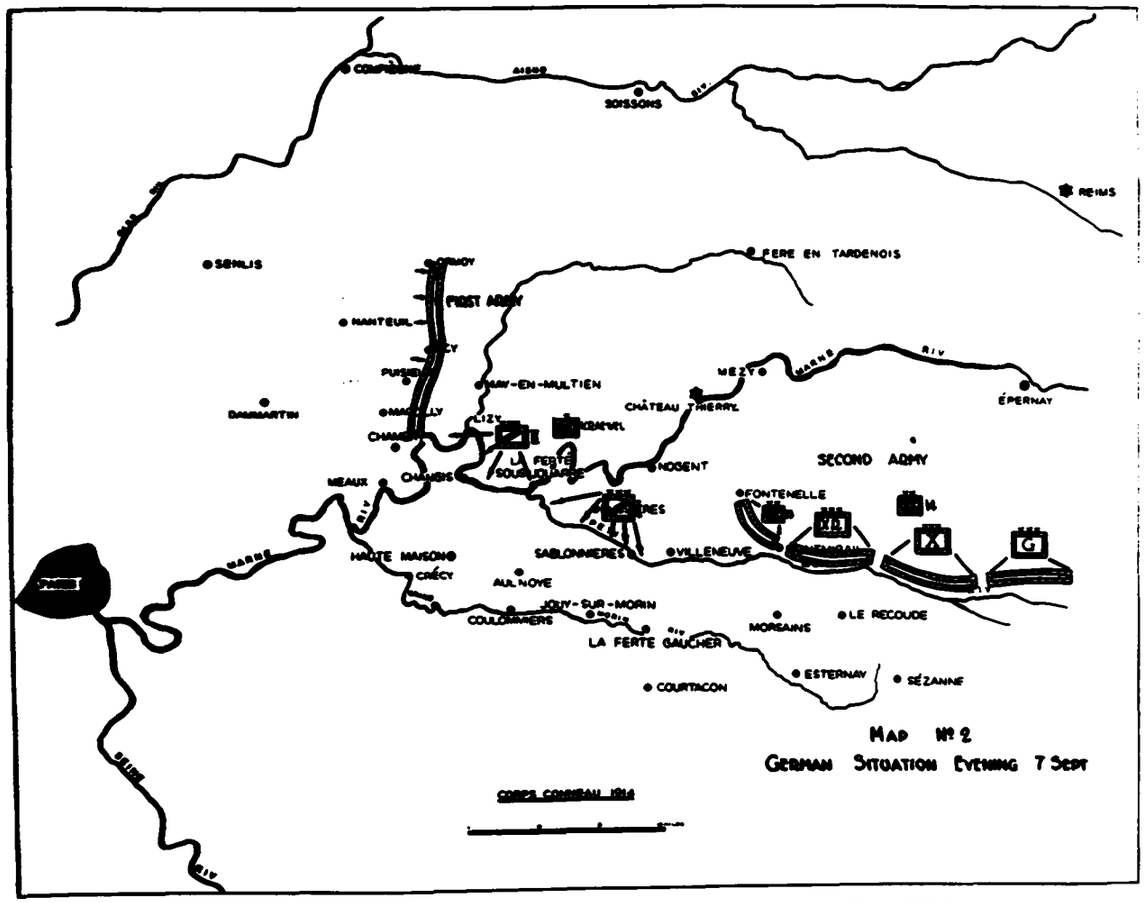
PART I

Historical Narrative of the Period 6-9 September, 1914

General Situation on the Marne

The events leading up to the battle of the Marne are generally understood by most military students. However, as they form a very important background to our present study, they should be reviewed briefly.

GERMAN FORCES.—In the early part of September, 1914, Von Kluck, the Commander of the German First Army, decided to change direction and move to the southeast of Paris in order to seize and attack the Allied left (west) flank. By so doing, however, he exposed his right flank and rear to the possibility of a French sortie from the fortified area of Paris. German GHQ, recognizing a situation fraught with danger, ordered the First Army to flankguard the area between the Marne and the Oise against this threat. In like manner, the German Second Army was ordered to protect its west flank in the region to the south of the Marne. Upon the receipt of this order, however, the First Army was already almost entirely far to the south of the Marne. In his eagerness to locate and envelop the Allied west flank, Von Kluck temporarily ignored the instructions given him. He was soon to receive a rude awakening. The IV Reserve Corps was echeloned to the right rear of the First Army and was the only unit of this army north of the Marne. Advancing south from the region of Nanteuil, it collided with the advance detachments of the French Sixth Army. The latter was just completing its concentration in the Paris area. Von Gronau, the Corps Commander, made an energetic reconnaissance in force and quickly discovered that he was



Map 2: General map—German situation, evening 7 September, 1914

opposed by a greatly superior force. It was only upon the receipt of this information that Von Kluck, alarmed, began his conversion movement to the north of the Marne. The II and IV Corps, which had advanced far to the south of Meaux, were immediately rushed northward to the Ourcq front. The III and IX Corps, which were engaged in a joint offensive operation with the right wing of the German Second Army in the region to the southwest of Esternay, were permitted to be attached to the Second Army for the time being.

As the situation on the Ourcq daily and hourly became more and more critical, Von Kluck finally decided to concentrate the whole of the First Army in that region and deliver a decisive blow against the French Sixth Army. Consequently, without previous consultation with the Second Army commander, Von Bulow, he ordered the immediate movement of the III and IX Corps to the Ourcq front.

To further complicate the desperate plight of the Second Army, it was itself very heavily engaged with the French Fifth Army and parts of Foch's newly created Ninth Army.

The withdrawal of the four active corps of the First Army from the south of the Marne exposed the west flank of the German Second Army and created a gap of approximately fifty kilometers between the two armies. Naturally, Von Bulow was unable to carry out the orders he had received from GHQ to flankguard the area south of the Marne, as he was already engaged with almost all of his force in frontal action to the southeast of Montmirail.

In order to close the gap between the two armies of the right wing, two cavalry corps were given this mission. On the 7th of September, the Marwitz Corps was ordered to hold the line of the Marne west of La Ferté-sous-Jouarre, while the Richthofen Corps was directed to defend the Petit Morin between La Ferte-sous-Jouarre and Villeneuve.

The situation of the German armies of the right wing on the evening of September 7th was as shown on Map No. 2.

The First Army was completely engaged along a north-south line west of the Ourcq. The Kraewel brigade of the IX Corps, however, had been detached with a mission of holding the crossings of the Marne between La Ferté-sous-Jouarre and Nogent l'Artaud. Actually, in the execution of this mission, the brigade commander made no effort to defend the bridges on this front, nor were any of them prepared for destruction. The brigade simply moved to the heights about five kilometers northwest of Nanteuil and entrenched itself in a defensive position.

Evening of the 7th found the II Cavalry Corps (von Marwitz) holding the line of the Marne west of La Ferté-sous-Jouarre. The I Corps (Richthofen) was bivouacked in the area between Bussières and Sablonnières. The Corps Commander had completed the issuance of orders prescribing a night movement to the line of the Petit Morin between La Ferté-sous-Jouarre and Villeneuve.

On the front of the Second Army, the situation was as follows:

The 13th Division of the VII Corps occupied a defensive position extending between Fontenelle and Montmirail. This was in the nature of a "crochu-defensive" for the purpose of protecting the west flank of the Army. The right flank of the division itself, however, was exposed tactically to a possible French thrust in the gap between Fontenelle and Villeneuve.

To the east of the 13th Division, the X Reserve Corps was committed to the defense of the north slopes of the Petit Morin east of Montmirail. Its right flank was hinged on the Forêt de Beaumont while its left rested on the heights northwest of Le Thoult. The Corps Command Post was established at Vauchamps.

To the east of the X Reserve Corps was the X Corps. During the day of the 7th, its two divisions had formed a salient to the south of the Petit Morin. The Army Commander ordered it to withdraw during the night to a position in rear of the stream. In compliance with this order, the 19th Division retired to the north and occupied a position between Le Thoult and Talus-St. Prix. The 20th Division likewise withdrew and took over a line from the heights west of Villevénard extending to the east as far as Courjeonnet.

On the extreme left of the Second Army, the Guard Corps held the line Aulnizeux—Normée. It had its two divisions in line.

During the day of the 7th, the threat of a French penetration between the Guard and the X Corps caused the Army Commander to move the 14th Division of the VII Corps to the vicinity of Champaubert in army reserve. Obviously this action further weakened the right flank of the Army, already susceptible to a potential envelopment in the region of Fontenelle.

ALLIED FORCES.—Let us now examine the Allied situation. By a gradual shifting of forces from his right and center, Joffre succeeded in constituting the new Sixth Army in the vicinity of Paris. By the 6th of September, it had almost completed its concentration. To the southeast of the Sixth Army was the British Expeditionary Force along the upper Seine. It had retreated far to the south of the French Fifth Army on its right, maintaining its safe echelonment since Mons. To quote von Kuhl, ". . . the British, in their ardent desire to retreat to the south of the Seine, were left so far in rear that when the battle began, they could not reach the line of departure assigned them!"

The French Fifth Army, on the right of the British, had retired to a line extending east from Esternay. During the day of the 5th of September, the left flank of this army, exposed by the defection of the B.E.F., was seriously threatened by the enveloping action of the German III and IX Corps.

French GHQ was in possession of sufficient information to determine, generally, the composition of the German First and Second Armies. During the days of the 6th and 7th of September, the majority of the divisions of these armies were identified. Consequently, a summation of the information available would have revealed the fact that neither the German First or Second Armies possessed strong reserves.

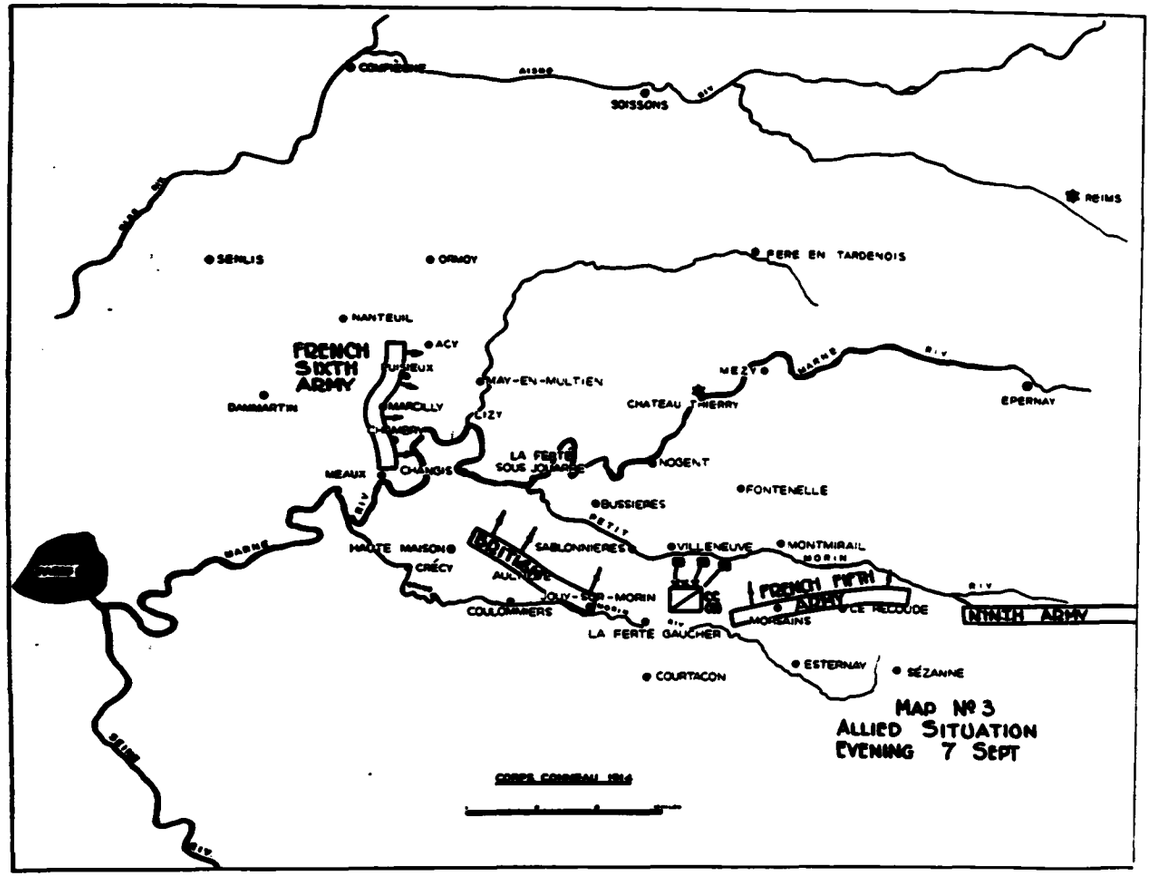
On the evening of the 4th of September, Joffre's famous order for the counteroffensive of the 6th appeared. We shall quote it verbatim:

> "It is advisable to take advantage of the precarious situation of the German First Army by attacking it with our armies of the left wing.
>
> All measures will be taken during the day of the 5th to initiate this attack on the 6th.
>
> The following dispositions will be made on the 5th:
>
> The entire mass of the Sixth Army, now concentrated northeast of Meaux, will be prepared to cross the Ourcq between Lizy-sur-Ourcq and May-en-Multien. Direction of attack: Château-Thierry. Neighboring elements of the I Cavalry Corps (Sordet) will be placed under the orders of General Manoury for this operation.
>
> The British Expeditionary Force will take position on the front: Changis—Coulommiers prepared to attack in the direction of Montmirail.
>
> The French Fifth Army will launch its attack due north from the line: Courtacon—Esternay—Sézanne. *The II Cavalry Corps will assure liaison between the British Army and the Fifth Army.*
>
> The Ninth Army will cover the right of the Fifth Army by holding the southern exits of the passage of the Marais de St. Gond and advancing a part of its forces to the plateau north of Sézanne.
>
> The offensive will begin the morning of the 6th.
>
> Joffre."

Events of September 6th

In compliance with the foregoing order, the French Sixth Army advanced to the attack on September 6th. By evening, it had reached the line: Chambry—Marcilly—Puisieux.

The British Army, on the other hand, made practically no advance on this day. Although rested and resupplied with armament and matériel, its attitude reflected the exaggerated prudence of its commander. By evening, it was still cautiously feeling its way toward the Grand Morin, out of contact with the enemy and incredulous of the fact that a *determined* counter-offensive was in preparation.



Map 3: General map—Allied situation, evening 7 September, 1914

The French II Cavalry Corps (Conneau) reached Cour-tacon.

To the east of the Conneau Corps, the French Fifth Army, after violent combats, arrived on the line: La Villeneuve—Esternay—Courtacon.

Events of September 7th

On this date, the French Sixth Army received reinforcements. It advanced to the attack early in the morning endeavoring to envelop the right flank of the German First Army. The arrival of the German II and IV Corps on the Ourcq stalemated this effort, and the end of the day found the Sixth Army in almost precisely the same situation as on the evening of the 6th.

The British continued their cautious advance on the 7th. Although encountering but very little opposition, they did little more than cross the Grand Morin on this day. The morning of the 8th found them advancing from the line: Jouy-sur-Morin—Aulnoye—La haute Maison.

The Conneau Cavalry Corps reached and passed La Ferté Gaucher and by evening had its reconnaissance detachments close to the Petit Morin.

The situation on the right of the Cavalry Corps, however, was not developing too favorably. The Fifth Army had encountered extremely stubborn resistance from the German Second Army. Late in the afternoon of the 7th, the Fifth Army had the bulk of its forces on the line: Le Recoude—Morsains—La Ferté Gaucher.

Such was the situation on the Marne front, when, early on the morning of the 8th, the reconnaissance detachments of the Conneau Corps began to attempt a crossing of the Petit Morin.

The Actual Operations of the Corps Conneau (8-9 September, 1914)

During the morning of the 8th, reports from the reconnaissance detachments of the Conneau Corps indicated that the enemy west of Montmirail were in full retreat. To quote:

> "Enemy columns of all arms moved during the night and early morning from the regions of Verdalot and Montdauphin on Nogent and Château-Thierry. Other columns retreated from Montmirail toward the northeast."

Upon the receipt of this information, the Corps Commander ordered the pursuit continued (?) on the following axes:

10th Division: Villiers les Maillets—Montdauphin—Epine-aux-Bois.

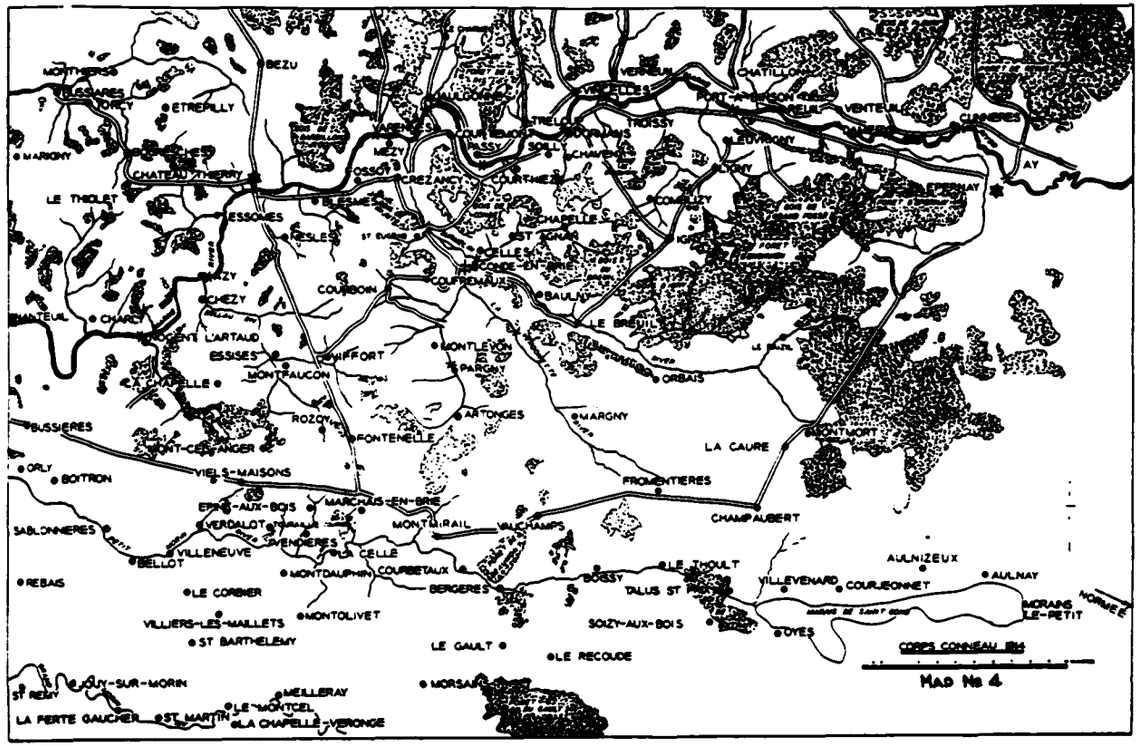
8th Division: Saint Martin—Saint Barthelemy—Verdalot—Montfaucon.

4th Division: La Ferté Gaucher—Bellot—Chezy.

At 10:00 AM, at his command post at Villiers les Maillets, the Corps Commander received a report that an enemy column of all arms was retiring from Fontenelle on Château-Thierry and that other smaller columns were marching on Chezy and Nogent-l'Artaud. He issued orders to his divisions to attack at once the column moving on Château-Thierry. Unfortunately, however, enemy rear guards along the Petit Morin prevented the divisions from striking this column.

The 10th Division proceeded to halt north of Montdauphin preparatory to forcing a crossing. The 4th did likewise south of Bellot, while the 8th moved up into the region of Verdalot. The 4th and 10th Divisions wasted several hours in preparing to cross the stream. During the afternoon, however, the 8th Division forced a passage at Verdalot. A little later the 4th crossed at Bellot. The 10th Division then changed direction and followed the 8th through Verdalot.

Late in the day, the two leading divisions reached the Montmirail-Bussières highway in the region of Viels-Maisons.



Map 4: Special map (without situation)

At 4:00 PM, the 36th Division, the left division of the XVIII Corps (Fifth Army), which was advancing in the direction of Marchais-en-Brie, was held up in the Bois de Courmont by fire from Marchais-en-Brie. The division commander asked for support from the Cavalry Corps.

General Conneau ordered the 10th Cavalry Division, which was concentrated near Epine-aux-Bois, *to attack in the direction of Viels-Maisons—Montmirail so as to outflank the heights of Marchais-en-Brie and thereby assist the advance of the 36th Division.*

Assisted by the 10th Cavalry Division, the 36th finally was able to take Marchais-en-Brie.

Following this operation, *the cavalry corps bivouacked for the rest of the night in the area between the Petit Morin and the east-west highway through Viels-Maisons. It continued to maintain liaison between the French XVIII Corps and the British Army.*

During the night 8-9 September, the corps zone of action was changed. The left corps (XVIII) of the French Fifth Army was given a left (west) boundary to include the Fontenelle-Château-Thierry highway. The right boundary of the British was also side-slipped so as to include the bridge at Nogent l'Artaud.

Late on the evening of the 8th, the Corps received the Fifth Army order prescribing the operations for the following day. The Conneau Corps was assigned a mission of crossing the Marne at Azy and of pursuing the retreating

German columns in what was apparently intended as a direct pressure pursuit. It was also directed to cover the British right flank and to assist the French XVIII Corps in its crossing of the Marne at Château-Thierry. There has never been a more glaring example of two definitely conflicting missions. Ordered to pursue, the Corps is held back at the same time as a liaison detachment!

Pursuant to the foregoing order, General Conneau issued his instructions to his corps, the principal provisions of which were as follows:

"The 10th Division will advance on Château-Thierry in order to clear the way for the XVIII Corps.

The 4th Division will cross the Marne at Azy and take the plateau of Le Thiolet-Etrépilly. It will then advance a portion of the division to the southeast from Etrépilly and capture the heights overlooking Château-Thierry, thereby assisting the 10th Division in its crossing. The 4th Division will also maintain liaison with the British.

The 8th Division will follow the 4th across the Marne at Azy. The crossing completed it will then push up on the left and abreast of the 4th Division *so as to extend the pursuit front of the latter to the west.*"

The morning of the 9th found the corps in process of executing this order. No undue haste was manifested. This tardiness was *attributed* to the condition of the animals and to the fact that both the French XVIII Corps and the British overlapped the corps zone of advance and retarded the cavalry. However, the 4th Division, which had a leading rôle to play in the corps scheme of maneuver, was actually the principal cause of the delay. Having crossed the Marne at Azy, it received information that some German cavalry had been located in the vicinity of Bouresches. This terrifying news caused the division to halt for several hours pending reconnaissance of this area.

In the meanwhile, the 10th Division had reached the southern exits of Château-Thierry, where it was held up for a considerable period of time by about a troop of German cavalry. As no elements of the 4th Division appeared on the heights to the north of the city, as prescribed by the corps order, the division commander of the 10th Division made no energetic effort to force a crossing by the means at his own disposal.

Late in the afternoon, enemy rear guards were discovered along the line: Bézu—Etrépilly. The advance elements of the corps reached the plateau to the south of this line in contact with these enemy detachments. As darkness was falling, it was too late to attack them, *required too much marching to go around them,* so the corps bivouacked its main bodies for the night along the Marne between Château-Thierry and Azy.

* * * * *

Thus ends two days of active operations of a cavalry corps in exploitation!

Paralyzed by impossible conflicting and contradictory missions, as well as rendered impotent by ineffectual leadership, it is quite remarkable that the corps ever crossed the Marne! The rôle assigned it could have well been played by an infantry regiment. Of one thing we are certain, it surely did not require the employment of a cavalry corps. There appeared to be a complete lack of objectivity on the part of General Franchet d'Esperey. It is quite apparent that the Commander of the Fifth Army did not possess the faintest conception either of the potentialities of the situation or of the strategic possibilities of the cavalry mass as a weapon of exploitation.

The Cavalry Corps Commander displayed an amazing lack of initiative in accepting without protest and in attempting to execute a mission which was not only faulty but failed to utilize the principal characteristics of cavalry.

* * * * *

In order to complete our picture of the ensemble, let us now sketch briefly the operations of the *German* forces which had the mission of closing the gap so tantalizingly inviting to exploitation.

On the evening of the 7th, we left the Richthofen Cavalry Corps bivouacked in the region west of Boitron. The Corps Commander had issued his orders for the occupation of the line of the Petit Morin. The following defense sectors were assigned:

5th Cavalry Division: The Petit Morin between La Ferté-sous-Jouarre and Orly.

Guard Cavalry Division: The Petit Morin between Orly and Villeneuve.

At 8:45 AM, the morning of the 8th, Richthofen reported that the French had penetrated his defensive screen at Orly and at Villeneuve and that he had issued orders to his divisions to retire to the Dollau. Apparently, however, this order was not carried out, for at 11:30 AM, he reported having repulsed an attempted penetration between St. Cyr (Map No. 1) and Vardaloc.

At 1:15 PM, becoming somewhat alarmed by the British advance toward the Marne, Von Kluck ordered the II Cavalry Corps (Marwitz) to hold this stream *west* of La Ferté-sous-Jouarre. At the same time, he directed the Kraewel Brigade (infantry) to extend this defense to the east as far as Chezy. Specific instructions were also given that the Marne bridges be destroyed in the event of an enemy attack.

At noon, the French did execute a successful penetration at Boitron and Sablonnières on the front of the Guard Cavalry Division. This time, the corps withdrawal order actually was issued. The 5th Division was directed to fall back to the Dollau and defend this stream between its confluence with the Marne and the village of Essises. The Guard Division was ordered to take over the sector between Essises and Rozoy.

As far as can be ascertained, the 5th Division failed to receive the order. Eventually, it withdrew right through the prescribed position to the north of the Marne, abandoning all the crossings east of La Ferté-sous-Jouarre and making no effort to destroy or block the bridges. (See map 2.)

In the meantime on the right of the Second Army, the 13th Infantry Division was still clinging to the line: Montmirail—Fontenelle in a desperate effort to cover the west flank. Portions of the 14th Division, which had been held in Second Army reserve near Champaubert, were engaged during the day of the 8th on the flank of the X Corps to the south.

Consequently, the Army Commander had committed practically all of his reserves.

The Kraewel Brigade, which had been detached from the IX Corps for the purpose of defending the Marne between La Ferté-sous-Jouarre and Chezy, simply moved to the heights five kilometers northwest of Nanteuil and established itself in a defensive position! No detachments were sent to the bridges in its assigned sector, nor were any of these bridges prepared for destruction!

The Guard Cavalry Division withdrew during the afternoon of the 8th to its assigned sector on the Dollau. Late in the evening, with its right threatened because of the withdrawal of the 5th Division, it again retired to the region of Condé-en-Brie.

PART II

Assumed Operations of the Corps Conneau, 7-8 September, 1914

In part two of our study we will relive the period of the 7th and 8th of September, 1914, first by placing ourselves in the exalted position of the Commander of the French Fifth Army and then finally adapting ourselves to the rôle of the Cavalry Corps commander. In the echelon of Army Commander we shall endeavor to assign the Cavalry Corps a mission commensurate with its capabilities. In the echelon of Corps Commander we shall endeavor to execute this mission as it should have been carried out by a real cavalry leader. In neither of these rôles will we deviate the actual historical situation. The strength and dispositions of the enemy will remain actually those of September, 1914. *Nor will we augment or modernize the means available to the Corps Commander.*

We shall therefore begin with a description of the composition of the Corps Conneau as it was constituted on the 7th of September, 1914.

1. Corps Headquarters and Staff

The Corps General Staff was composed of five officers detailed from the various divisional staffs. The Headquarters included a number of mounted messengers, clerks, cyclists, four automobiles and two automobile-transported radios.

2. Aviation

Several aeroplanes.

3. Transfort

A small truck train.

4. Divisions

Three divisions (4th, 8th and 10th), all of the same composition except the 10th, which had only two brigades.

Each division consisted of:

a. A general staff.
b. Three brigades of cavalry (two regiments each).
c. One battalion of 75-mm artillery (three batteries).
d. One cyclist battalion (400 men).
e. Quartermaster, medical, signal, finance, etc., services.
f. Three sections of machine guns (two guns each).

5. Attached Cavalry

One regiment of Spahis (Moroccan cavalry).

6. Attached Infantry

One regiment of infantry (45th) in trucks (three battalions).

All troopers in the divisions were armed with the carbine, lance and saber. Troops had an average strength of approximately eighty men. Animals were exhausted and shoeing was said to have been in a deplorable state.

To summarize, we find that the combat troops of the corps consisted of:

Seventeen regiments of cavalry,
Three battalions of artillery,
Three battalions of cyclists,
Sixteen machine guns,
One regiment (three battalions) of motorized infantry.

Late in the afternoon of the 7th of September, G-2, Fifth Army, presents the following intelligence estimate of the situation to the Army Commander:

"German cavalry forces hold the line of the Petit Morin west of Sablonnières. These forces may extend their defense to the east during the night.

The German 13th Division (VII Corps) has been identified in the region of Marchais-en-Brie and to the west of Montmirail.

The two divisions of the X Reserve Corps have also been identified along the front south of the Petit Morin. These two divisions apparently extend from a point south of Bergères to the Bois de Boitrait.

The 19th Division of the X Corps has been found in the area northwest of Soizy-aux-Bois, while the 20th Division of the same corps has been located in the Marais de Saint Gond between Courjeonnet and Villevénard.

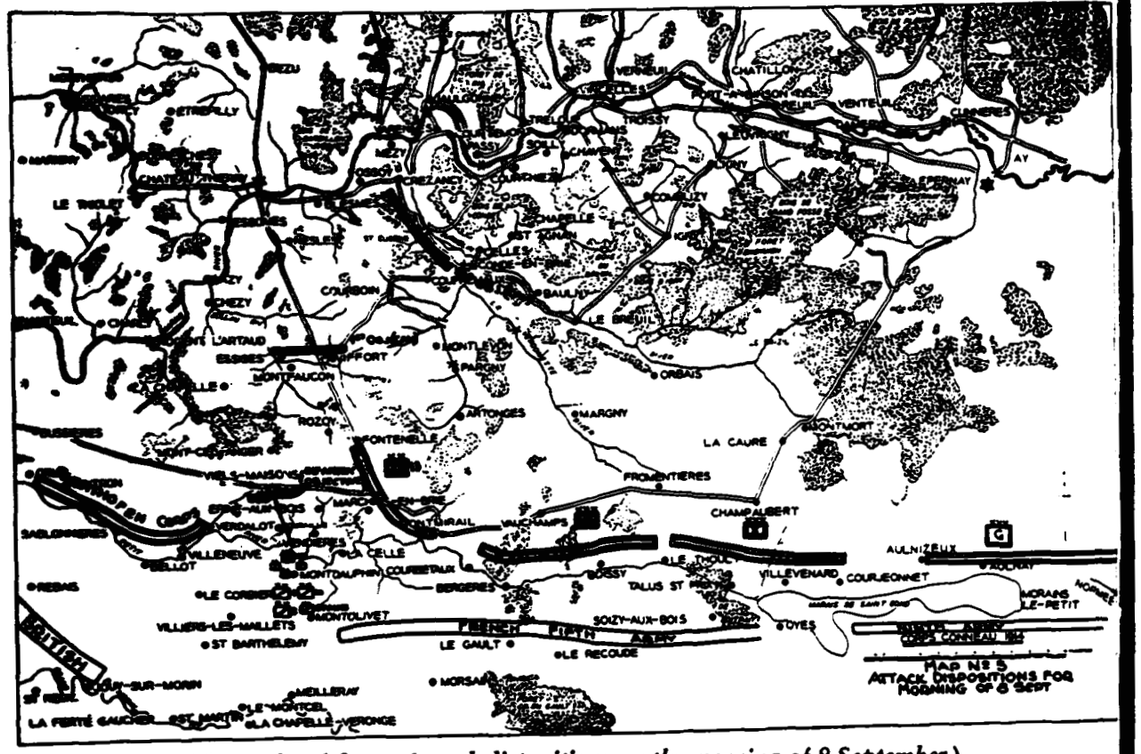
The 1st Guard Division of the Guard Corps has been identified at Aulnizeux and Aulney. Our Ninth Army reports the 2d Guard Division in the region of Normée.

Our enemy army organization and order of battle tables which we have formulated in the past two weeks indicate only one other division in the German Second Army. The division, the 14th, has not yet been identified on our immediate front. Aviation, however, reports a concentration in the region of Champaubert. Consequently this division may be in that area.

Apparently, most administrative establishments and all command posts are considerably south of the Marne.

Our aviation has found the bridges over the Marne intact and in use at the following places:

Azy, Château-Thierry, Mezy, Jaulgonne, Passy, Dormans, Verneuil, Port-à-Binson, Damery, Cunneres and Epernay.



Map 5: Special map (attack dispositions on the morning of 8 September)

No concentrations of enemy combat troops have been discovered in enemy rear areas either north or immediately south of the Marne.

Conclusions:

There is apparently little possibility that the German Second Army can be reinforced in the near future.

This force has three capabilities:

(1) It may attack.

(2) It may defend along the Petit Morin and take the counter-offensive later.

(3) It may begin a withdrawal to the north of the Marne. At present there are no indications that such a withdrawal will take place before tomorrow night.

With the exception of a comparatively weak cavalry screen along the Petit Morin west of Sablonnières, the right flank and rear of the German Second Army appear to be unprotected and susceptible to a rapid envelopment."

At 6:00 PM, the Commander of the Fifth Army issues orders for an attack on the 8th.

In substance, the Fifth Army will make a frontal attack due north, while the II Cavalry Corps is assigned the mission of:

(1) Breaking through a possible enemy screen on the front La Celle—Villeneuve.

(2) Advancing rapidly to the northeast for the purpose of seizing the crossings of the Marne in rear of the German Second Army, thereby preventing the withdrawal of the latter to the north of the river.

The Army Attack Order arrives at La Ferté Gaucher, II Cavalry Corps Headquarters, at 7:00 PM. During the late afternoon, our patrols along the Petit Morin have reported enemy cavalry located as far east as Villeneuve and that enemy infantry has been seen in Vendières. No information was available on enemy dispositions between these two places.

The intelligence estimate prepared by G-2, II Cavalry Corps, substantiated the conclusions of the Army Intelligence Estimate.

At 7:30 PM, the Corps Commander announces his decision:

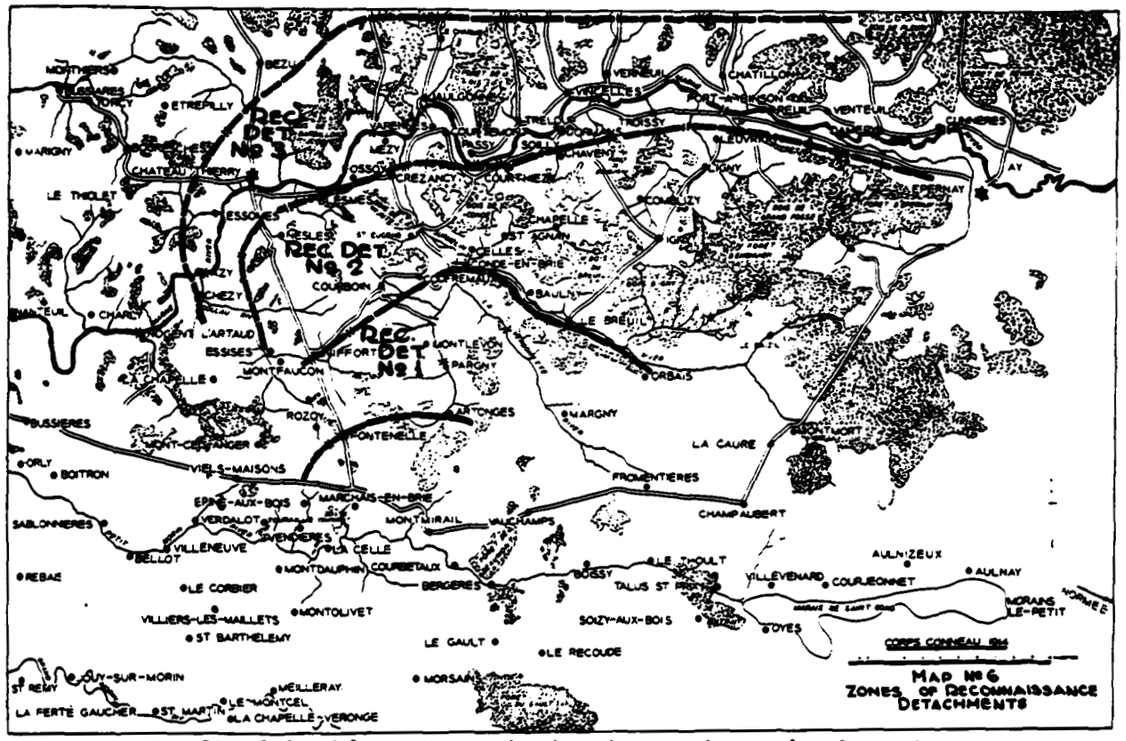
"To penetrate the enemy screen in the region of Touraille by an infantry attack heavily supported by artillery. To move the Corps rapidly through the gap created and advance along the axis: Viels-Maisons—Viffort—Crezancy to the Marne for the purpose of seizing and holding the bridges between Epernay and Mezy, both inclusive.

Essential Elements of Enemy Information:

Will any enemy forces be found in the rear areas of the German Second Army?

Will these forces attempt to block the II Cavalry Corps in its march to the Marne bridges?"

The detailed Plan based on the foregoing decision was



Map 6: Special map (zones of action of reconnaissance detachments)

prepared and ready for issue in the form of an order by 8:30 PM.

Its principal features included the following:

An attack at dawn by the 45th Infantry supported by all three battalions of divisional artillery.[1]

Zone of attack: The terrain compartment immediately east of Touraille.[2]

Infantry objective: Woods southeast of Viels-Maisons.

The infantry is then to reorganize on this objective, have their trucks advanced to Viels-Maisons, where the regiment will entruck and follow the cavalry to Crezancy.

When the infantry has reached a line east of Touraille, the remainder of the corps is to begin its advance across the Petit Morin and move rapidly up the Touraille compartment passing through the infantry.

Formation: 10th and 4th Divisions abreast in first echelon (10th on the right), each in column of squadrons in a suitable approach formation.

8th Division to follow the 4th.

Spahi regiment to follow the 10th.

Objectives:

(1) *The Dollau between Viffort and Essises.* Heads of main bodies of leading divisions are to reach this objective not later than 8:00 AM.

(2) *The Surmelin River northwest of Condé-en-Brie.* Head of the main body of the 10th Division is ordered to reach this objective between Condé-en-Brie and St. Eugene at 9:15 AM. The head of the main body of the 4th Division, in echelon to the left rear, is to arrive thereon at 9:45 AM.

(3) *The crossings of the Marne between Epernay and Mezy.*

The 10th Division is to seize the bridges over the Marne at Epernay, Cunnères, Damery and Port-à-Binson not later than 3:00 PM.

The 4th Division to take the bridges over the Marne at Verneuil, Dormans and Passy not later than 1:00 PM.

The Spahi regiment to take the bridges over the Marne at Jaulgonne and Mezy not later than 1:00 PM.

The 10th Division is to move rapidly from the Surmelin to its final objective. All routes south of the Marne and east of the Surmelin, with the exception of the route Crezancy—Courtemont—Dormans, are to be made available to this division. The division is to defend the sector of the Marne between Epernay and Port-à-Binson, both inclusive.

The 4th Division is to move by the shortest routes from the Surmelin directly to its final objective. It is to use no routes south of the Marne and east of the Surmelin except the road Crezancy—Courtemont—Dormans. The division is to defend the sector of the Marne between Verneuil and Passy, both inclusive.

The 8th Division in second echelon is instructed to reach the route east of Viels-Maisons by 8:00 AM. It is

[1] The enemy cavalry may extend still further to the east during the night. Consequently, an attack must be planned in order to secure a penetration.

[2] This compartment averages only 1,000 meters in width.

INTELLIGENCE PLAN

II CAVALRY CORPS

Phase or Periods of the Operation	*Essential Elements of Enemy Information*	*Indications: (Analysis of Essential Elements of Enemy Information)*	*Reconnaissance Agency or other source*	*Specific Orders, or Requests*	*Hour and Destination of Information* REMARKS
Dawn 8 September **to** **Dark 8 September**	Will any enemy forces be found in the rear areas of the German Second Army? Will these forces attempt to block the II Cavalry Corps in its march to the Marne bridges? *Indications:*	At the present time, there are apparently no forces in the area between the Marne and the front of the German Second Army, with the exception of the 14th Division. However, some elements of the German Second Army may be regrouped and rushed north or northwest to meet our threat. Consequently, during our advance we must constantly reconnoiter the right flank and rear of the German Second Army for the purpose of determining such a movement. There may be some Line of Communications troops north of the Marne which can move south on our objectives. Consequently, the area north of the Marne and east of Château-Thierry must be reconnoitered. The rear areas of the German First Army must be watched, as some elements of this force may attempt to flank guard along the Marne. Cavalry units already identified along the Petit Morin must be kept under continuous surveillance, as they may be able to regroup after our penetration and interpose themselves between the II Corps and its objectives.	Air Observation	1. Observe the crossings of the Surmelin River between Le Baizil and Celles for any enemy movement from the south toward the Marne, also the crossings of the Verdonnette between Margny and Condé-en-Brie for any movement to the northeast. Report strength and composition of any forces noted as well as their direction of movement. Reconnoiter the stream crossings between Artonges and Condé-en-Brie for any enemy forces moving into the area to the northwest. (Last mission to cease at 9:00 AM.) (All missions to begin at dawn.) 2. Reconnoiter the area north of the Marne and east of Château-Thierry. Determine the strength, composition, and direction of movement of any enemy forces advancing on the line of the Marne. Particular attention to the following roads: a. Main highway from the north into Château-Thierry. b. Route north from Mezy. c. Main route north from Jaulgonne (through Le Charmel). d. Two routes leading south into Treloup and Dormans. e. Main north-south highway into Verneuil. f. Routes to the north from Chatillon, Damery, and Epernay. 3. Reconnoiter the route Torcy—Château-Thierry.	Report positive information when obtained. Negative information every hour beginning at 7:00 AM. To Corps C.P. at: (1) St. Barthelemy, until 7:00 AM. (2) Viels-Maisons, between 7:00 AM and 8:00 AM. (3) Montfaucon, between 8:00 AM. and 9:00 AM. (4) Courboin, between 9:00 AM and 10:30 AM. (5) Dormans, after 10:30 AM. All by dropped message. (No radio available.)
			Corps Reconnaissance Det. No. 1 (to be furnished by 10th Div.) 1 squadron cavalry 1 cyclist troop.	Zone: Right boundary: Fontenelle—Artonges. Left boundary: Viffort—Condé-en-Brie—Orbais. Report any movement to the northeast, north, or northwest in your zone. (Strength, composition, and direction of movement.) Detachment to reach the stream between Artonges and Condé-en-Brie by 7:30 AM; the line Artonges—Orbais by 9:15 AM.	Report positive information when obtained to Corps advance message center along axis: Viels-Maisons—Viffort—Courboin — St. Eugene—Dormans. Negative information at: 8:00 AM to Viffort. 9:20 AM to St. Eugene. 10:30 AM to Dormans. (Cyclists or mounted messengers.)
			Corps Reconnaissance Det. No. 2 (to be furnished by 4th Div.) 1 squadron cavalry 1 cyclist troop.	Zone: Right boundary: Viffort—Condé-en-Brie—Orbais (all exclusive.) Left boundary: The line of the Dollau and the Marne to Epernay. Report: (1) Any movement to the west or northwest in your zone. (Strength, composition, and direction of movement.) (2) Condition of bridges over Surmelin north of Condé-en-Brie. (3) Condition of bridges over Marne between Mezy and Epernay. (4) Presence of any enemy forces at these crossings of the Surmelin or of the Marne. Detachment to reach: (1) The Surmelin by 7:30 AM. (2) The line Le Breuil—Igny—Port-à-Binson by 9:30 AM. (3) The line Orbais—Epernay by 12:00 noon.	Report positive information when obtained to Corps advance message center along axis: Viels-Maisons—Viffort—Courboin — St. Eugene—Dormans. Negative information at: 8:00 AM to Viffort. 9:30 AM to St. Eugene. 10:30 AM to Dormans. 12:00 noon to Dormans. (Cyclists or mounted messengers.) (Use local telephones if possible.)
			Corps Reconnaissance Det. No. 3 (to be furnished by 4th Div.) 1 squadron cavalry 1 cyclist troop.	Zone: Right boundary: The Marne. Left boundary: Line parallel to the Marne and approximately 10 kilometers to the north thereof. Report: (1) Any enemy detachments encountered in your zone. (Strength, composition, and direction of movement.) (2) Condition of bridges over Marne. (3) Presence of any forces at the Marne bridges. Detachment to reach: (1) Azy-sur-Marne by 7:00 AM. (2) Jaulgonne—Le Charmel route by 8:30 AM. (3) Main highway north from Verneuil by 9:30 AM. (4) Epernay by 1:00 PM.	Report positive information when obtained to Corps advance message center along axis: Viels-Maisons—Viffort—Courboin — St Eugene—Dormans. Negative information at: 7:45 AM to Viffort. 9:30 AM to St. Eugene. 10:30 AM, 12:00 noon, 1:30 PM } to Dormans. (Cyclists or mounted messengers.) (Use local telephones if possible.)

then to advance behind the 4th Division via Montfaucon, Blesmes, Fossoy and Mezy to the vicinity of Le Charmel. Further instructions placing it in corps reserve are to reach it at this place.

The Spahi regiment in second echelon is ordered to cross the route east of Viels-Maisons by 8:00 AM. It is then to advance behind the 10th Division via Viffort to Courboin, where it is to change direction and march to Crezancy. It will then follow the 4th and 8th Divisions across the Marne at Mezy and Varennes and defend the sector of the Marne between Jaulgonne and Mezy, both inclusive.

At Crezancy, one battalion of the 45th Infantry is to be attached to the 10th Division and one battalion to the 4th Division. The regiment (less two battalions) will proceed to Le Charmel for attachment to the 8th Division in corps reserve.

The Marne is ordered to be held at all costs.

Reconnaissance instructions are to be issued in an Intelligence Annex.

* * * * *

While the order for the 8th of September was in course of preparation, G-2, II Cavalry Corps, prepared an Intelligence Plan which was later transformed into an Annex to the Operations Order and issued with the latter.

The Plan itself was prepared as follows:

Execution of the Attack and Exploitation

The Attack

On the 8th of September at 5:30 AM, the 45th Infantry launches its attack in the terrain compartment to the east of Touraille. As the compartment is scarcely a kilometer in width, the regiment attacks in column of battalions.

One battalion of the supporting artillery is assigned the mission of placing protective fires on the eastern edges of the village of Touraille and of the woods to the south thereof. Another battalion of artillery blocks off with protective fires the ridge marking the east boundary of the compartment. The third battalion places close supporting fires in front of the attacking infantry. The initial breakthrough accomplished, the artillery battalions will join their respective divisions as the latter pass through their positions.

The remainder of the corps is massed with its leading elements close behind the artillery positions. The reconnaissance detachments designated in the Intelligence Plan are at the head of the Corps.

At 6:30 AM, the assault battalion reaches a line east of the northern exits of Touraille. It has encountered some very slight resistance from small enemy cavalry detachments.

The support battalion is engaged in mopping up Touraille and in solidifying the west shoulder of the penetration. There is apparently no enemy immediately to the east of the compartment.

At this hour, the Corps Commander is in personal contact with the infantry regimental commander and is familiar with the situation. He therefore promptly orders the three reconnaissance detachments to pass through the infantry and to proceed on their respective missions.

The Exploitation (First Phase)

At 6:40 AM, the leading squadrons of the divisions of the first echelon pass through the infantry. The infantry battalions begin to assemble and reorganize. The trucks which were grouped in the vicinity of Montdauphin are having some difficulty in negotiating the crossing of the Petit Morin.

The leading squadrons of the main bodies of the 4th and 10th Divisions reach the Montmirail—Viels-Maisons highway at 7:15 AM. The security elements of these divisions have reached the line: Rozoy—Mont-Cel-Anger.

At this hour, the following information is available to the Corps:

Reports of Observation Aviation.—

"Between 6:30 and 7:00 AM, small mounted groups of the enemy have been observed retiring north from the line of the Petit Morin in the region of Verdalot and to the east thereof. These withdrawing elements are disappearing into the large wooded area northwest of Mont-Cel-Anger.

Considerable activity observed along the plateau between Montmirail and Fontenelle. A number of trenches have been constructed in this area. Enemy troops have been observed in Marchais-en-Brie.

North of the Marne, no movements or concentrations have been noted.

South of the Marne, the entire rear area of the German Second Army north of the line Viffort—Orbais seems to be free of the enemy."

Actions of the Corps Commander.—The Corps Commander issues instructions to the 4th Division to protect the left flank of the corps in its advance to the first objective against any possible interference from enemy elements reported in the large wooded area northwest of Mont-Cel-Anger.

The 4th Division details a flank guard for this purpose.

Exploitation (Second Phase)

Shortly after 8:00 AM, the leading squadrons of the main bodies of the first echelon reach the first objective.[a] During the march to this objective, several attempts were made by enemy cavalry to debouch from the eastern edge of the wooded region on the left flank of the Corps. These efforts were effectively blocked by the action of the flank guard of the 4th Division. At this time the Corps Commander orders the 8th Division, which has reached the Viels-Maisons—Montmirail highway, to relieve the 4th Division flank guard and take over the task of protecting the Corps left flank until the troops in the second echelon have cleared the wooded region. The 8th Division is ordered then to protect the rear of the corps by the detail of a suitable rear guard.

At 8:10 AM, the Corps Commander is at the Corps Advance Message Center at Viffort. A message is received from the XVIII Corps (left corps of the Fifth Army) to the effect that its 36th Division on the west flank is held up in the Bois de Courmont by enemy forces in Marchais-en-Brie. The Cavalry Corps is requested to attack this village in flank. The Cavalry Commander refuses to become involved in this purely local operation and lends no immediate assistance to the 36th Division. He is fully cognizant of the fact that the wide turning movement of the Cavalry Corps will eventually cause a complete breakdown of the enemy frontal resistance to the Fifth Army.

Upon his arrival at Viffort, the following information is available to the Corps Commander:

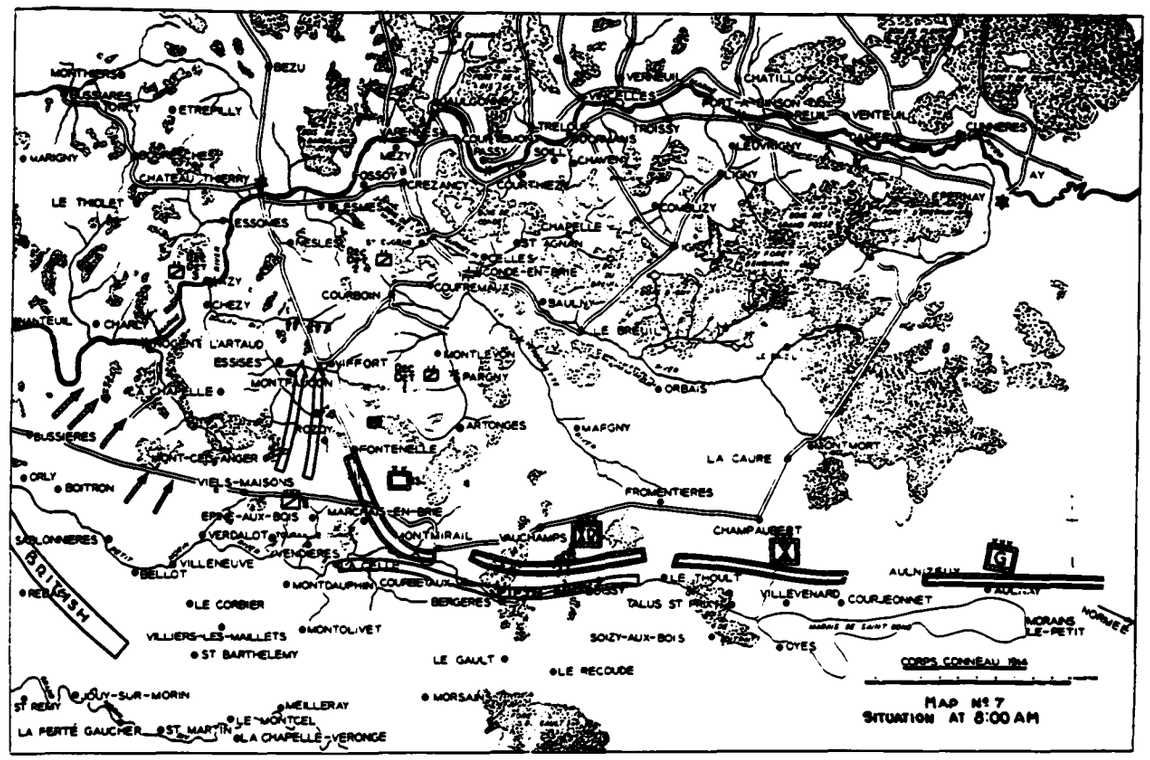
Observation Aviation:

"Numerous small cavalry columns have been observed in the area north of the Petit Morin on the west flank of the Corps. These columns moving northeast from the line Verdalot—Orly have not yet appeared north of the covered valley southeast of Nogent l'Artaud.

North of the Marne, no positive information has been obtained.

The situation on the west flank of the German Second Army remains unchanged."

[a] It is contemplated that divisions would march cross country, each division on a squadron front of approximately four or five hundred yards. Squadrons would be in a suitable approach march formation.



Map 7: Special map (situation at 8:00 a.m.)

Reconnaissance Detachment No. 1:

"The woods two kilometers northeast of Fontenelle is occupied by enemy infantry. The detachment has reached its first objective without encountering any other enemy forces and is now proceeding to its final objective."

Reconnaissance Detachment No. 2:

"Detachment No. 2 has reached its first objective. Some enemy trucks and animal-drawn supply vehicles, encountered on the Crezancy—Condé-en-Brie road, were destroyed. No other enemy detachments located. Bridges over the Surmelin are intact. Am now continuing the advance to the second objective."

Reconnaissance Detachment No. 3:

"Detachment No. 3 reached Azy at 7:15 AM. Experienced some difficulty in crossing the Marne due to interference by small groups of enemy stragglers. Outskirts of Château-Thierry reached by our leading elements at 7:45 AM. Two stragglers belonging to the German IX Corps were taken at Essomes."

Actions of the Corps Commander.—The Corps Commander orders an advance to the second objective.

Exploitation (Third Phase)

At 9:30 AM, the 10th Division reaches the second objective (the Surmelin River).

At this hour, the 4th Division, in echelon to the left rear, is still approximately two kilometers west of this objective.

The 8th Division has arrived on the line: Viffort—Essises and is continuing its movement to the north on Blesmes.

The leading elements of the Spahi regiment are about a kilometer northeast of Viffort.

Both the 10th Division and the Spahis have strong flank protection to the south.

The 45th Infantry has just completed entrucking at Epine-aux-Bois and is beginning its movement to Crezancy.

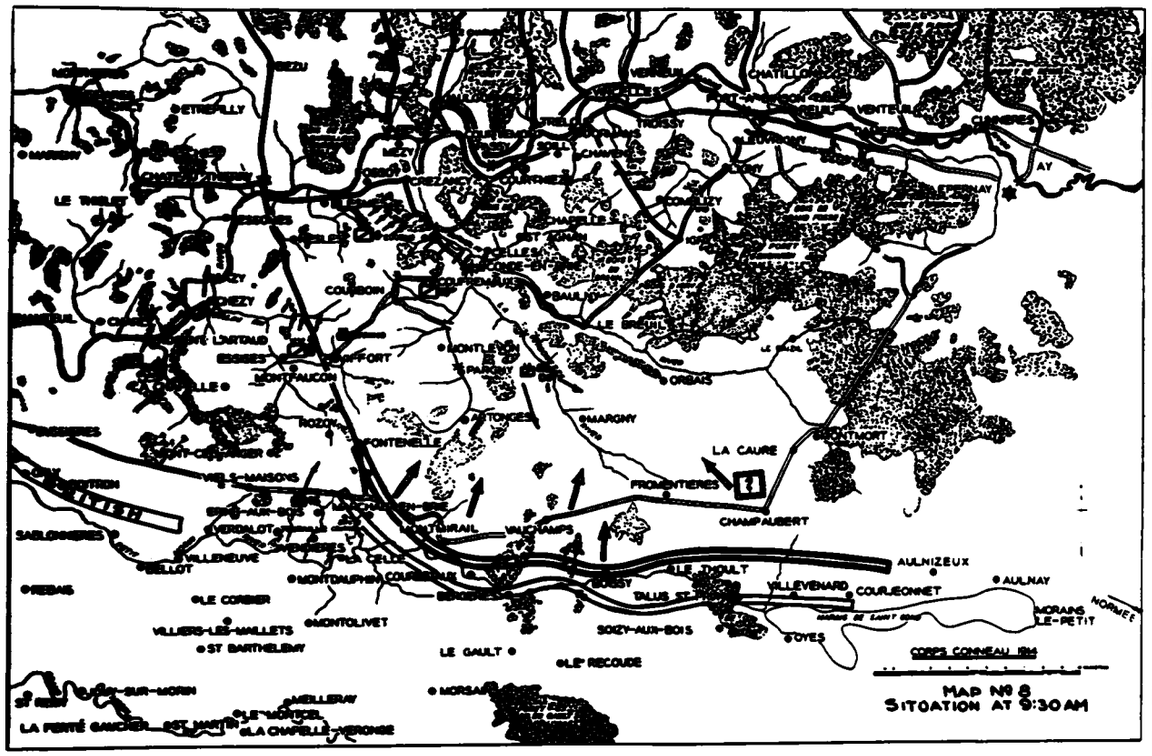
At 9:30 AM, the Corps Commander arrives at his advance message center at St. Eugene. The following information has arrived:

Observation Aviation:

"Large concentration of troops of all arms observed in the region of Champaubert. A few small columns moving out of Champaubert in a northwesterly direction.

A number of small enemy columns beginning to move north from the vicinity of Boissy and Montmirail. Some movement of small detachments to the northeast noted from the line: Montmirail—Marchais-en-Brie.

Small detachments of cavalry are moving north across the Marne at Nogent and Azy.



Map 8: Special map (situation at 9:30 a.m.)

What appears to be at least a regiment of infantry has been observed entrenching on the heights about six kilometers northwest of Nanteuil."

Reconnaissance Detachment No. 1:

"One of our patrols driven out of Artonges by enemy infantry advancing from the large woods to the south thereof. This infantry is apparently attempting to organize a position on the heights east of Artonges. Our patrols have not yet reached Orbais and Margny. However, the woods east of Pargny and the woods northwest of Orbais have been reported free of the enemy."

Reconnaissance Detachment No. 2:

"Detachment No. 2 has patrols approximately within three kilometers of its second objective. No enemy combat troops encountered. The bridges over the Marne at Jaulgonne, Passy, Dormans and Verneuil are being used by vehicular traffic. In order to prevent their destruction, recommend their immediate seizure. Detachment No. 2 is unable to do this and still continue on its mission."

Reconnaissance Detachment No. 3:

"No enemy troops have been observed in the zone of Reconnaissance Detachment No. 3 as far east as the eastern edge of the Forêt de Ris. The Marne bridges at Mezy, Jaulgonne, Passy and Dormans are being used by vehicles. Our observers have been unable to see any bridge guards."

Actions of the Corps Commander.—Upon the receipt of this information, the Corps Commander issues the following instructions:

(1) *To the 10th Division:*

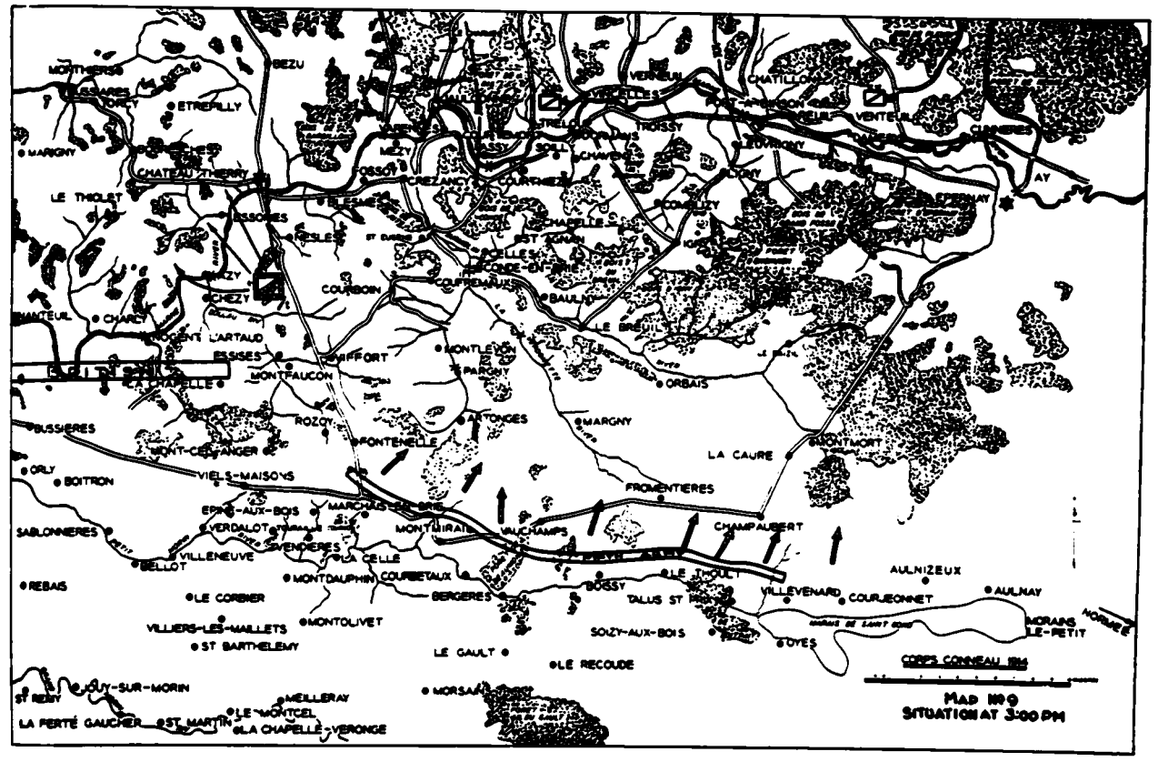
"Protect your advance to the third objective by a strong flank guard along the heights to the south of the Marne. When east of Dormans, move the bulk of your division to the east astride the Marne, utilizing the two main routes available to you. Detachments will be posted at the various bridges to be held in your sector."

(2) *To his Chief of Staff:*

"Send a staff officer to Crezancy for the purpose of directing the three battalions of the 45th Infantry upon their arrival at that place. They will be moved via routes to the north of the Marne to the command posts of the divisions to which they are to be attached."

Exploitation (Fourth Phase)

The movement of the corps is continued without incidents of importance. There are no enemy troops capable of interfering with the occupation of the defense sectors assigned on the Marne. Later in the morning, enemy cavalry in considerable force but apparently highly disorganized was observed along the Dollau and crossing to the north of the Marne at Azy and Nogent.



Map 9: Special map (situation at 3:00 p.m.)

By 3:00 PM, all elements of the Corps are in position for the defense of the Marne. The dispositions for this defense are in general such that strong detachments are maintained to cover the actual crossings while the bulk of the 10th and 4th Divisions and the Spahi regiment are held in local reserve in their respective sectors.

The 8th Division, with the 45th Infantry less two battalions attached, is kept in corps reserve in the vicinity of Anthenay (six kilometers northwest of Chatillon).

Conclusion

Two articles appearing in the American *Cavalry Journal* on the mass employment of cavalry in 1914 by the Germans and French have recently been reviewed by the British *Cavalry Journal*. The reviewer was quite caustic in his criticism, principally for the reason that these articles were predicated on what he termed quite theoretical hypotheses which might or might not have been capable of execution.

This criticism was partially justified.

The portrayal of all the details of execution of the suggested plans for the massed employment of the French and German cavalry was done only for the purpose of vivifying the theses. The author frankly admits that many of these details would unquestionably have had to be modified or changed because of logistical, supply, and other reasons.

We must not, however, lose sight of the forest because of the trees.

The author still maintains that had Germany massed the bulk of her cavalry behind her enveloping wing and reserved it for strategic exploitation at or after the battle of the Sambre, there would have been no "miracle of the Marne."

There was only one way in which the Allies might have countered such a plan. *The French cavalry should likewise have been massed on this same flank but assigned a totally different strategic rôle—a defensive one.*

The reviewer requested "Case III, in which both belligerents place their entire cavalry masses facing one another on that flank," and demands a solution!

At this point, the author agrees heartily with the reviewer that "speculative theorizing" is apt to produce sterile results. If, however, the latter is fully aware of the *defensive* power of modern cavalry with its great fire power, he might draw his own conclusions as to the theoretical outcome.

In this present article devoted to the operations of the Corps Conneau, there is *nothing* speculative or theoretical or which might be attacked as unsound on logistical, tactical, or supply grounds.

The German situation, as portrayed, is historically correct. *There was nothing to oppose an uninterrupted march of the French cavalry to the bridges of the Marne in rear*

*of the German Second Army!** It is true that men and animals were fatigued. It is true that shoeing was in a lamentable state. Assuming even that only half of the animals could have made the march, this alone would have placed eight or nine regiments in addition to the infantry and cyclists on the final objective in less than eight hours! If the animals failed, then units should have been dismounted and marched on foot. There are no limits to the endurance of men when there is a will in the leader. To the Marne they should have been pushed, even had their weary feet marked with a trail of blood their "via dolorosa"!

What an opportunity for cavalry!

The situation presented:

1. An open door to the rear of an army which is on the verge of retiring.

2. A wide unfordable river behind which the cavalry could effectively block this retirement.

3. Crossings intact for the passage of the cavalry over this river.

4. Time available for the subsequent destruction of these crossings.

All of these ideal conditions existed, yet—

Nothing was done!

Why?

The answer can be found in the Fifth Army Commander. In spite of his brilliance, he failed to realize the strategic capabilities of cavalry. Nor is Joffre free from blame. In his General Instructions No. 5, the order which launched the Marne counteroffensive, he displayed this identical lack of comprehension when he appended to the Fifth Army paragraph the sentence:

"The II Cavalry Corps will assure liaison between the British Army and the French Fifth Army."

*Editor's Note: Unfortunately for the French, the true situation, as usual, was probably wrapped in the fog of war.

In spite of the faulty directives of both GHQ and Fifth Army, the situation might still have been exploited had the Corps been commanded by a real cavalry leader. What an opportunity for the display of initiative! A single squadron might have been detached to play the prescribed liaison rôle, while the remainder of the Corps was pushed to the Marne in exploitation.

As for the British,—with a little more temerity, they might have advanced rapidly to and across the Marne in the region between Château-Thierry and Nogent. The bridges along this reach of the river would have been found unoccupied or inadequately defended, and the B.E.F. could then have advanced unopposed toward the Ourcq—*actually on the rear of the German First Army*. This is *not* "speculative theorizing." Such a maneuver might have doomed the German First Army.

The Corps Conneau could have accomplished its exploitation mission with the means it actually had available. A much smaller *modern* cavalry force with its greatly increased fire power, could certainly have performed the same mission with equal facility.

As conditions actually existed, modern mechanization supported by a portée infantry could also have quickly and effectively moved to and defended the passages of the Marne. Had the Germans destroyed the bridges over the Surmelin as well as those over the Marne west of Mezy, however, nothing but horse cavalry could have accomplished the mission in the prescribed time.

The conclusion is obvious.

A mobile force consisting of both horse cavalry and mechanization with some motorized infantry attached must be available to the high command for exploitation opportunities which present themselves during a decisive engagement.

And what is of equal importance, all higher commanders must realize the powerful weapon of opportunity they have at their disposal when they possess such a force.

☆ ☆ ☆

Significance*

Over his road Chiang Kai-shek cannot obtain sufficient munitions to carry on extensive field operations against the Japanese, but can import enough for large-scale guerrilla warfare. And last week it was announced that henceforth one-third of all China's armies will be organized as guerillas. At the same time Japan received evidence of the effectiveness of these new tactics. Five hundred well-drilled Chinese cavalrymen waylaid a freight train on the Peiping-Tientsin railway—chief Japanese communication line in North China—burned it, and tore up a mile of track, paralyzing traffic for 24 hours.

**News Week*, January 23, 1939.

PART X

My host in Plauzat, M. le Comte De Seray, had about three hundred acres of vineyard. He also had three well-trained Blue Auvergne pointers, a black and white or blue-ticked breed of pointer, much taller than the English pointer and with long ears like a hound. In hunting partridge in the vineyards they rapped their tails against the vines and got them bloody, so the practical count had amputated their tails! However, they were steady to shot and wing and excellent retrievers and covered their ground well; the count loaned me an old muzzle-loading shotgun and many a delightful shoot I had with him on Saturdays and Sundays. The first time we shot, however, the count horrified me by ground-sluicing a partridge. He was out for meat. I walked my birds up and killed them in the air and the count thought this was taking a very unnecessary risk of losing the bird. I found the red-beaked partridge easier to hit than the Chinese pheasant, but both are easy for one trained on California valley quail.

After the Armistice was signed Ordnance sent four G. P. F. rifles and four tractors up to the target range at Randanne and we went up there again for real target practice with these big guns. The entire regiment went this time. My battalion got there first and found a sort of bay in a strip of thick woods, which sheltered us from the bitter northwest winds, for it was winter now and there was snow on the ground. We made our kitchen in this bay and built a mud oven and got a battalion mess going and were quite happy, until another battalion arrived.

Now, the major commanding the battalion ranked my major, in priority of appointment, by six months, so promptly he ordered my major to move out of our snug kitchen and let him have it! He claimed this was his undoubted right by virtue of his seniority. My major wasn't at all certain that this right did not exist, so before obeying he asked me about it. I went crazy. I denied the right and said no gentleman would do such a thing, that he might rank a junior out of a pleasant kitchen location, but never an equal, and to tell him to go to hell, and if he didn't care to I would have great pleasure in performing as his Victrola. Finally my major decided that, in the interest of peace he would give up the kitchen and I almost wept with rage. I pointed out to him that he would lose caste with his subordinates, but evidently he didn't believe me, either as a prophet or volunteer judge advocate. The men, of course, were furious.

This was one of the most extraordinary bits of jackassery I had witnessed to date and is here offered as evidence of the crackpot ideas that come to some men in the army, although in civil life no crackpot ideas are in evidence. I thought at the time: This could not have happened if the commanding officer of this regiment had been competent to instruct the officer personnel on military etiquette and had taken time out to do it.

Upon investigating the equipment we were to shoot with I discovered that Ordnance had not sent us any loading trays, rammer staffs or cleaning rods, as well as a supply of rags and gasoline to get the enormous gobs of cosmoline out of the tubes. We had an ungodly supply of shell, powder and primers, however. When I reported this state of affairs to my major and stated that, under the circumstances, I would not be able to start shooting at 11:00 A.M., next day he pulled one of those queer notions of military efficiency that some boob had inculcated in him. Probably he acquired it in school when reciting Tennyson's "Charge Of The Light Brigade:"

Their's not to reason why,
Their's but to do or die.

"Captain Kyne," he informed me, "you will start shooting those guns tomorrow at 11:00 o'clock—or else. You seem to lack initiative. You can cut a small tree in the forest yonder and whittle out cleaning rods and rammer staffs—"

"Passing the fact that a G.H.Q. order forbids us to raid French forests, I haven't a man thin enough to crawl into the gun and dig out the cosmoline with his finger nails, and a home-made rammer staff will not do, and water and oil will not mix, else I'd use water on the cosmoline instead of gasoline, and a loading tray is really necessary. So, until you get me the tools to work with there will be no shooting."

He repeated his instructions, to my vast amazement, for he was and is a very sane and sensible man. I have always thought he was trying to discipline me. I assured him we would never shoot the guns anyhow because every time we fired a gun it cost Uncle Sam about forty dollars and somebody down at the training center would awaken to the absurdity of wasting ammunition on a regiment that would be starting home very presently. And I was right in this, for the following morning at ten forty-five an order arrived fobidding the shoot, whereat I hooted joyously. And the next morning we returned to Plauzat because orders had been received for us to clean up our affairs in our respective villages and be prepared to move out and take train to Bordeaux, there to await water transportation back to the United States.

Now, my pal had had a grouch against the colonel for a year. It appeared the colonel had one day sent for him

and then had made him wait an hour outside the door. So now, when we were about to go home old pal swore he would not go home with the regiment, that he would be shot before he'd walk up Market Street behind the colonel. He began scheming to get a new job and presently he saw an opening in Paris. So he and the major decided it would be a nice thing to take a jaunt to Paris, the goal of every man in the A.E.F., and to that end they went down to Clermont-Ferrand and struck for a pass to Paris from the old brigadier who had temporary command over us, now that we had been made army artillery and detached from our original brigade. They were refused, but the old man's sympathetic adjutant told the schemers they must have a sort of military excuse for the granting of such a favor and suggested they go get one.

Now, the colonel and the lieutenant colonel had gone in the former's car up to view the wreckage of the Western Front, and my fellow author, Major Stewart Edward White was commanding. So the two schemers induced White to write the brigade commander a letter requesting that the pair be sent down to Bordeaux immediately in order to prepare billets for the regiment which would be leaving for Bordeaux any day. This constituted a military excuse and it was so ordered. The old brigadier did not know that at the Bordeaux port of embarkation, Camp Genecourt, there were hutments enough to house a division!

While this was going on I had been very ill with tonsilitis and had a high fever, but this did not stop this precious pair from beating it to Paris and leaving me in command with all the dirty work of cleaning house before boarding the tain. Old Pal felt sad at leaving me but at the last he had a bright idea. Said he: "What's to prevent you joining us in Paris after you've cleaned up here?"

"You two have used up the only military excuse available," I replied.

"Nonsense," replied Old Pal. "You're a fiction writer and it should be no trouble for you to invent a marvelous military excuse. Meet us in Paris in seventy-two hours," and he fled without leaving me his Paris address. Later I will tell you how I invented an excuse and met him in Paris in forty-eight hours, after ten minutes of detective work.

I must here relate a couple of tales of this old brigade commander. He was an old regular, close to the retirement age, a prissy old dud whom field artillery had passed by shortly after Capron's Battery ceased firing at Santiago. He appeared in Plauzat with his staff one morning when I was temporarily in command, so I crossed to his car, opened the door, saluted and named myself and my outfit and command. I knew he was sudden death when, instead of giving me a smile, which costs nothing, he gave me a dirty look, as if he suspected me of dirty work and would presently uncover it, and said: "I'll inspect your billets, captain."

Now, I had soldiers billeted upstairs and downstairs, but I elected to show this aged general the upstairs ones only, so that quickly wearied him and he went on the prowl for dirt in my kitchen. What a chance! That was Snooper's domain. Finally, unable to find anything at which to complain he said he would inspect my latrine, so I led him down to it and he said:

"Hah! No overhead covering, I observe. Are you not aware, sir, that the rainy season is approaching; that men coming down to this latrine will, unless protected by overhead cover, get wet, take cold and possibly develop pneumonia? Hah! Heavy sick report. Maybe some deaths. And all your fault. Hah!"

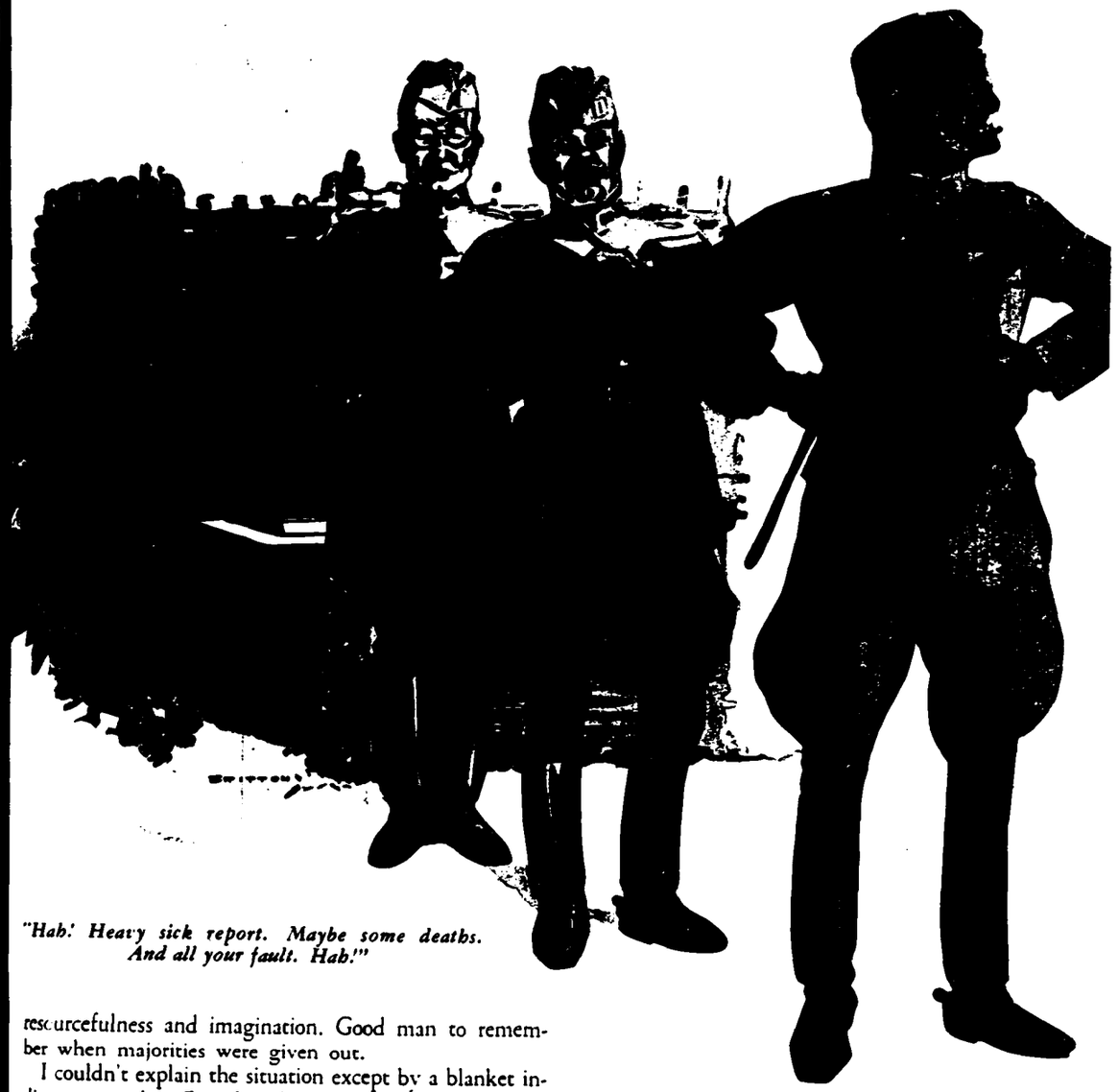
I said "Fiddlesticks, sir. I was a wet private in the Philippines for a year and nobody worried over me." I then went on to inform him that I had not given any thought to the subject of overhead covering and enumerated my reasons. I could weave a sort of porch from branches of trees but an order from G.H.Q. forbade us cutting as much as a switch off any Frenchman's tree. I could have bought some lumber and erected cover, but to do so I would have had to use the battery fund, and the purchase of lumber from the battery fund was not authorized. I would, if I broke the law in this respect, have to camouflage my purchase as fresh vegetables and I was beyond such crookedness. Of course I could buy the lumber with my own money but investigation had developed the fact that the nearest lumber was sixteen miles away, I had no transportation to go there and none to bring back the lumber if I succeeded in buying it.

He told me I was an unenterprising, unresourceful, neglectful fellow and went back to the kitchen to see if he couldn't, by unusual diligence, uncover something dirty.

Now, a French girl in our village had a little Bayard car, a sort of French Ford, and in return for flour and coffee and bacon grease, etc., she had told me I could use her car if I could secure oil and gas. So my motor mechanics fell upon it and fixed it up and I went to our supply officer and solicited a gift of gas and oil and was brutally refused. Unfortunately for the supply officer, his supply sergeant, one Samuel Marcovitz (Berlin papers please copy) heard me and after dark that night this excellent fellow arrived in my village on a motorcycle with a bathtub attached and the bathtub full of oil and gas. All he asked was that I keep away from the supply officer's village.

Well, now, while my general continued his snooping, I summoned faithful Marchand and ordered him to take the little car and run down to Authezat, where a wag I liked commanded D Battery. He was to inform Captain Richmond that the brigade commander was out in force, with a particular grouch against battery commanders who did not have overhead covering on their latrines.

That afternoon my colonel came over in his Cadillac car, quite excited, to ask what I had been doing to the brigade commander. It seems the old gentleman had called on the colonel to inform him that the man Kyne, commanding in Plauzat, was a pretty small military potato. No initiative, no imagination, careless, indifferent and too pert. On the contrary, the man Richmond, commanding in Authezat, was a splendid fellow, full of initiative, resourcefulness and imagination. Good man to remember when majorities were given out.



"Hah! Heavy sick report. Maybe some deaths. And all your fault. Hah!"

I couldn't explain the situation except by a blanket indictment to the effect that the general was in his dotage and ought to be chloroformed. But when the colonel departed, still disturbed, I ran down to Authezat to ask Richmond how he had fared with the old man, and was informed the old man hadn't inspected anything in his village except the latrine. It happened to be a new latrine they were just digging and the old latrine had just been filled in and posted. Acting on my tip about overhead cover he decided to beat the old gentleman to the punch, so he said: "I'll have this latrine ready in an hour and then I'll put my overhead covering on it. Got to protect my soldiers from rain."

"And how, my dear captain," purred the general, "do you purpose effecting overhead covering on your latrine?" Whereat the devil, Richmond, always the quiet wag, replied: "I'm going to take the tarpaulin off my kitchen!"

So that was it. I was damned because I declined to keep dry a soldier bent on a three minute job, and Richmond was a hero because he purposed making the mess sergeant, four cooks and six or eight K. P.'s work out in the rain sixteen hours a day; because he would permit the rain to pelt down into the hash and the soup and stew, and thus drive his soldiers crazy. Of course Richmond was much more intelligent than I. He had recognized the old man for a nut on sight and had treated him accordingly. And how that rascal did laugh at me, charging me with that gravest of all field artillery crimes—a total lack of initiative and instantaneous decision!

I had a feeling that the general would return in a mad

effort to dig up something else on me, and I was not surprised when presently he appeared one day when I was down in a potato field training my gun crews on a G.P.F. rifle.

Now, I had sent a smart sergeant down to Clermont-Ferrand with my first string gun crews to learn the technique of the G. P. F. In reading the scant literature the French gave us on this subject I learned that it was considered good work if one put this Big Betsy into action in soft picking ground in one hour and a half. Always a skeptic where the French were concerned, I didn't believe this. I *knew* we could knock fifteen or twenty minutes off that time so I instructed my sergeant to learn all the French had to teach him and then use his own judgment. What I craved was speed and speed could be produced by wise coördinated effort.

Well the sergeant had returned and reported that he could do the job in soft picking ground in exactly one hour. I challenged him to show me and he did, but he could not have done the job in fifty-nine minutes to save himself from a firing squad.

After greeting me after the fashion of an old dog growling over a bone the general asked me how long it took me to put the gun into action and in my customary spirit of deviltry I assured him we did it in fifty-eight minutes. So he said he knew I was an arch-bluffer, because the gun couldn't be put into action under an hour and a half. "Pheui," I assured him. "You have been reading some bad French literature, general. That's Frog time. A stately measure. My lads prefer jazz."

"I'll call your bluff," he declared. "Let me see you put that gun into action in fifty-eight minutes."

I called to the sergeant and ordered him to put the gun into action in fifty-eight minutes. The worthy fellow's eyebrows went up a trifle but like the good soldier he was he bowed his head and took the deadly stroke. I got out my stop watch. "In the rear of the piece! Fall in! Prepare for action. How-wowow!"

At the tick of fifty eight minutes I signalled the sergeant who tossed his arms aloft and yelled: "In action, sir." I begged the general to inspect the piece and the wretched sergeant went away from there, unwilling to be a witness to my humiliation. The spade could have stood a lot more tamping, the gun was not level, as any boob could have told by looking at the bubble (provided he knew where to look) and the aiming stake had not been put up. But of these things the old gentleman was blissfully unconscious. He was so angry he could have struck me, I think, and in silence he climbed into his car, and left and I never saw him again. The minute his car turned the bend in the road the gun crew started throwing picks and shovels into the air and capering like the wild young devils they were. I gave the sergeant some francs and instructed him to take my brave lads up town and buy them liquid to wet their whistles, for they were hot and perspiring.

We remained in Plauzac two or three weeks before receiving the order to move. We roved over the area at will and presently we heard that the 339th Field Artillery, in a village between us and the railroad, was fighting a terrific battle with influenza. Our information was that it had lost a hundred men and had about four hundred incapacitated before its medical unit broke down from exhaustion—whereupon the colonel of the 339th called on our colonel and asked him to loan his regiment our medical corps. Our old man, always courteous and obliging, readily granted the request.

When my battalion surgeon got the order he screamed like a wounded horse. "Our men are passing through that 339th village by the dozens daily," he said. "Does our colonel think *his* regiment is immune from this scourge?"

I borrowed a bicycle from a French woman and pedaled nine kilometers to protest against this latest and most serious bit of jackassery. I reminded my colonel that it was just too bad about the 339th, but charity began at home and that it was just pretty awful to leave his own regiment defenseless and sacrifice us Native Sons of California to a regiment from Iowa. So verbally he threw me out and got very angry because I had assumed to tell him his business. "If my men get flu and there is no help and one of them dies," I warned him, "I'll certainly prefer charges against you." "Clear out of my office," he commanded.

Well, our battalion surgeon mixed up about ten gallons of Dobell's Mixture and gave me a big squirt gun and a clinical thermometer. Snooper prowled among doc's stock of medicine and got familiar with them and said he knew how to use a hypodermic and give injections of morphia and strychnine. And with a heavy heart doc left us. Immediately I lectured to the noncoms about flu. At the first sign of a watery eye and a blowy nose and pains and aches they were to bring the man to Snooper or me. If he showed half a degree of fever we put him in a hospital I had already provided by appropriating a ruined chateau, with a vast baronial dining room and a huge fireplace at each end. I bought small wine casks and sawed them in two for use as toilets; I bought clean oat hay and made beds; in the old chateau kitchen I installed a diet kitchen and we were ready for the siege.

It came and as fast as a man came down with flu I put him to bed, with his clothes on and kept him full warm and dry, with a shot of rum every little while. They had to put on their shoes and keep their blankets around them when answering Nature's calls. I saw to it that every man had his nose and mouth sprayed with Dobell's Mixture and each day I took the battery out into a pasture and let a feeble winter sun shine for an hour on all their effects. I made the men strip so the sunlight could disinfect their clothing and their bodies and I gave them setting up exercises to keep them warm while the disinfecting process was going on. I made them sleep head to foot with shelter tent walls between them. Snooper was chief surgeon and a good one and once or twice our weary battalion surgeon came up to see how we were getting along.

We had about fifty pretty sick men, but only one got pneumonia and died. And he would not have died if I could only have succeeded in inducing old Doc, our chief

medical officer, to get an ambulance out for him from the hospital at Royat. I knew the boy had pneumonia and made him a pneumonia jacket and did all we could for him, but when Old Doc finally got him to hospital he passed on. B Battery lost a first lieutenant and he only died because he was scared to death.

The morning after the major and Old Pal left me, I received a warning order from regimental headquarters, followed later in the day by a definite order commanding me to have my battalion at a certain village at 8:00 o'clock the following morning, there to entrain for the port of embarkation near Bordeaux.

I got out of bed quite groggy and shakey on my legs after a week of tonsilitis or quinsy and settled all claims the French could trump up against the outfit. Dear old jolie Madame Cosson almost broke my heart. She claimed three hundred francs damages for broken windows, the damage having occurred when my men played baseball in the street. I knew this was a lie because they only played catchers, but Madame Cosson said she had the balls that had come through the windows and had, with true Gallic perspicacity, held them as material witnesses. So I told her to bring down the balls and she arrived with six—all superannuated tennis balls! I dropped a baseball on the floor, then picked it up and handed it to her, which broke the heart of dear old jolie Madam Cosson and she burst into tears. Seems to me I always had madame weeping. Three times she imported a flock of foolish non-virgins, hoping to make a clean-up while the troops were there and three times I had banished the girls. She could not be cured of a habit of overcharging so I had declared her estaminet out of bounds. She couldn't win a bet.

Four old frogs tried to collect sums of from fifty to eighty francs for a hardwood log that had lain beside the highway for twenty years. They said they could have made wooden shoes out of that log if my men hadn't cut it up for fuel. I settled with the first claimant for fifteen francs and told the first sergeant to settled with the other three, which he did by vigorously booting them down the stairs of the mairie, to the great scandal of His Honor, the mayor, who had the claims filed with him for adjustment.

The mess bills had to be settled and we owed several hundred dollars. One by one every officer under me came to me, confessed he was short and begged me, as a favor,

"Dear old Madame Cosson almost broke my heart. She claimed three hundred francs damages. . . ."

to pay his mess bill and carry him until next pay day. And I was broke myself, and the only man from whom I could hope to borrow five or six hundred dollars was my major and he was somewhere in Paris doing a little high and lofty hell-raising. I was afraid I'd have to ask the colonel for the jack. I knew I'd get it but sometimes I hadn't been as patient with him as I might have been and I think he thought so, too, which made it a little difficult to come around asking favors.

In the midst of my desolation I received from my literary agents in London a draft on Paris for some two hundred and fifty pounds sterling and an accounting of the royalty on six months sales on my books. I fled to the Comte de Seray with my interpreter and explained that I yearned for his favor in helping me cash this check at his bank in Clermont-Ferrand. The count reduced two hundred and fifty pounds sterling to francs and commenced to tremble. He wanted to help me out but what if my draft on Paris bounced after he had endorsed it and I far away on the billow?

He took me down to his bank, however, and the entire board of directors had a look at my draft and then they'd look suspiciously at me and the count would talk. I think he must have told them all about the sacks of white flour and white granulated sugar and the cans of real coffee and the sides of bacon and ham I had bought him in our commissary and the cigars and candies for Madame La Comtesse and the fact that I was a real author, if the gossip of my men could be believed. Even the clerks and stenographers finally got sucked into this business vortex; there was wild figuring of exchange and I knew they were going to murder me on that. But I didn't care. I had to have the money, so finally, after reducing me to a pulp they socked me a stiff fee for the trouble of cashing my check and did me out of about ten bucks on the exchange. But I went home and paid the mess bill, and felt quite virtuous, as one does, when he can certify to his commanding officer that he has moved out with all bills paid.

Now, as previously stated, Old Pal had, when leaving with the major for Paris, ordered me to invent a sound military excuse that would enable me to join them in Paris in seventy-two hours. Having cleaned up all my bills I now laid my mind to this job and presently gave birth to a bright idea.

The colonel was still angry with me as a result of our battle over loaning our medical detail and I doubted if my plan would work, but anyhow I decided to try. So I wrote him a note informing him that I had been very ill abed for ten days with a terrific sore throat that might be tonsilitis or quinsy or flu. Without the aid of a doctor I could only guess. I told him I would put my troops aboard the train on time but that I dreaded a ride of two days and two nights sitting up in a cold second-class coach all the way to Bordeaux and having to live on cold rations. I feared pneumonia and now that we were ordered home I didn't want to get pneumony of the lungs and perish. So please couldn't I go down to Bordeaux by a regular passenger train, in advance of the troops and there, in a comfortable hotel, await their arrival? And couldn't I take my striker with me to look after me? I was so weak and ill I feared to travel alone.

This note I sent to the colonel by my striker on a borrowed bicycle. Back came a nice friendly note, expressing regret at my illness and granting me permission to do as I desired and I could consider his letter as a travel order. It was written in long-hand and had neither seal nor adjutant's attestation appended. And the colonel knew better than that. He knew it was no travel order but he hoped, I think, that I wouldn't, and when I tried to use it as a travel order I'd be in all sorts of difficulties and maybe the M.P's would take me for a skulker or a spy and jug me while they investigated my standing. The old man also sent me a pint of Dobell's Mixture and begged me to use it freely. I cursed him for his slyness in appearing to be a good fellow when all the time he knew he wasn't. I did, however, agree with him that he owed me a poke or two.

I met him when we loaded the troops and he gave me his Cadillac car to ride to Clermont-Ferrand in and there turn it in to Ordnance. The first thing I did thereafter was to go to the railroad station and make a reconnaissance. A marine guard was there with a corporal in charge, but the railway transportation officer was not present. Why should he be? The last troops in his area had just gone through en route home, so he could go up town now and get soused and nobody would find it out.

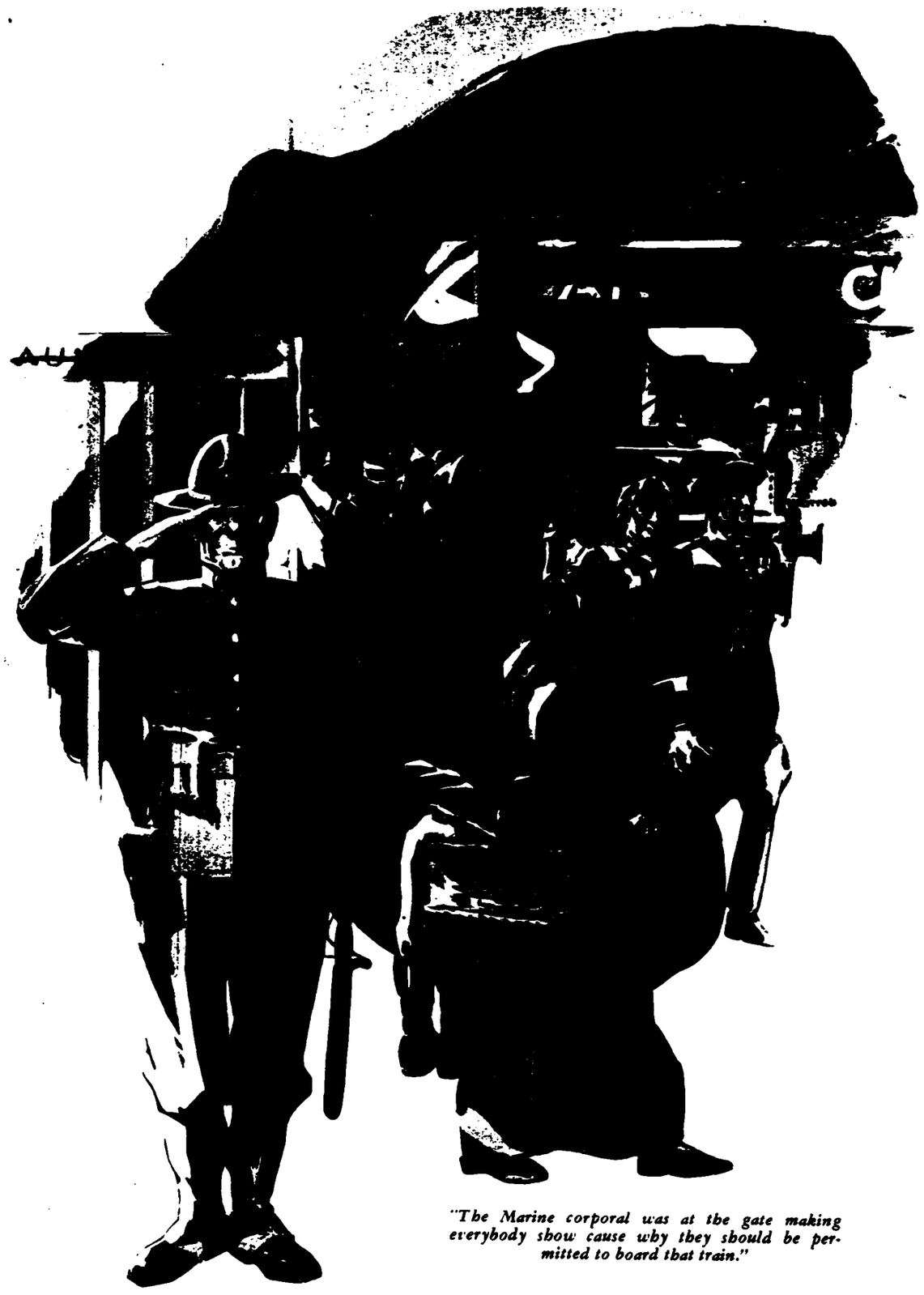
I discovered that this marine corps corporal would be on guard again when the train for Paris left at 11:21 that night. He had a wound stripe so I asked him where he had been wounded. He said he blushed to tell me, but the fact was that one day he started chasing a Prussian guard around a tree. At least he laid the flattering unction to his soul that he was chasing that Prussian guard but it seems that all the time the Prussian Guard was chasing him! And caught him on the posterior. I laughed and craftily asked him how long since he had been paid. Well, it had been three months. So I said that was a horrible way to treat a marine and handed him a hundred franc bill. "When you come off guard, corporal," I instructed him, "take your gang over into the town and buy them a nice luncheon and cigarettes. Hoist a few on me."

So he took the hundred francs—being a marine, because a marine will take anything except a punch in the snoot. . . .

Well, at eleven o'clock the striker and I arrived and the B.T.O. was still A.W.O.L., and the marine corporal was at the gate making everybody show cause why they should be permitted to board that train. He smiled at me and said: "The boys thank you for the party, captain. I suppose the captain has a travel order for himself and this soldier."

I produced the colonel's letter and the corporal read it and looked at me sadly. "But this isn't a travel order, sir." he said.

"Hell's fire," I said, "do I have to have a marine corporal tell me that?"



"The Marine corporal was at the gate making everybody show cause why they should be permitted to board that train."

"I think your colonel doesn't like you, captain. I think he hung something on you?"

"No, he didn't corporal. I'm too smart for that."

We looked hard at each other. Now, marines are pretty intelligent, by and large, and suddenly this corporal thought. "I've been swindled. I've accepted for myself and my squad a swell luncheon from this field artillery captain, and now he's here to collect." He grinned all over.

"Dirty pool, sir," he declared, "but you win. All aboard, sir. Good-bye and good luck to you and your man in Paris. They do things to soldiers in Paris if they can't show proper authority for being there. For of course nobody in the A.E.F., ever traveled in France without doing it in circles so as to make at least a one-night stand in Paris." He gave me a snappy salute. "If the frog conductor tries to collect for the ticket you haven't got, sir," he advised, "pretend you are stone deaf and speak nothing but Chinese. If you give him any money he'll keep it."

So we lit in Paris at 7:00 o'clock next morning and without having any more idea where the major and Old Pal were than a baboon has of hydrostatics, but I located them in half an hour. The late Colonel Charles E. Stanton, paymaster of the A.E.F., was our good friend and belonged to our clubs in San Francisco. It was Stanton who, in the 1917 Fourth of July oration at the tomb of Lafayette, in Picpus Cemetery in Paris, coined the famous line: "Lafayette, we are here." I recalled that the morning Old Pal and I landed in France we sent Charley a telegram that read: "Lafayette, we are here, too." So I knew he would have called on Charley, at the Elyesee Palace, and so he had and I picked up the trail and ran him to his hotel.

My first move was to go to my friend, Colonel Whitney, chief of staff to General Harts in the Paris sector. He had a snappy guard at those headquarters and I complimented him highly on his guard until I got him in good humor and asked him to issue me a three-day pass to save me from the M.P.'s. I got it but when I asked for one for my striker he refused. He said no enlisted man had ever had one of those passes, but I told him that a foolish consistency is the hob-goblin of little minds and unless he wanted to be considered the proprietor of a little mind he had better kick in. So finally he did.

Old Pal had already fixed things so he would not have to march up Market Street behind the colonel. Herbert Hoover had a few days before arrived in Paris to organize a mission to feed Mittel Europe, and Mr. Hoover and Old Pal had been to Stanford University together. So he had called on the old fraternity brother and said: "Bert, I do not want to go home with my regiment. I want to stay here, join up with you and help distribute the loaves and fishes."

This was up Mr. Hoover's alley, for he knew, out of his own intimate experience, that my pal was a man of power, imagination, driving force and mad enthusiasms. So he wired General Pershing to give him Old Pal and Pershing did it instanter and immediately Mr. Hoover put Old Pal in supreme command of what turned out to be the mightiest job of feeding that has ever been attempted by man. It had a lot of barter and trade in it and some shell-fire, like the night Old Pal, having traded some Serbian pork for Esthonian gasoline and oil, had to run the gantlet of fire from a battalion of Polish field artillery that fired on the train. He rode in the cab and looked back and counted the overs and shorts and said: "Well, if a shell lights in one of my gasoline cars I'm gone." But it didn't.

Well, having caught up with him and the major and listened to the news we went out to luncheon and ran into Samuel G. Blythe, the old political writer for the *Saturday Evening Post*. Further up the Rue di Riloi we bumped into Will Irwin, then a war correspondent, and held a convention of authors. In the midst of the luncheon Old Pal said to Sam Blythe, without consulting me:

"Sam, I want you to fix it to have Peter detached from our regiment and given a nice soft job in Paris. You can do it, Sam. You know everybody and his dog."

So Sam said he thought he might be able to put me over. Anyhow he'd think it over. The next day he ran into one Hurley, president of the Emergency Ship Corporation and said to Hurley: "Hurley, I'm going to do something nice for you. I'm going to give you a military attaché."

Said Hurley: "I don't need one, Sam, and I'll be shot if I know what I'll do with him when I get him."

"That's the big idea. Do nothing. This chap doesn't like to work. He's a writer and he was raised in the shipping industry before that. You're a tool manufacturer over here buying ships. What do you know about ships? Nothing. Take Peter B. Kyne and he'll tell you about them. He'll buy himself some nice new uniforms and ride around Europe with you in your car and keep you amused. How about it?"

"Well, since he's a friend of yours—"

"Wire Pershing and tell Pershing you want him and he'll be ordered to report to you immediately."

So Hurley wired General Pershing who handed the telegram to somebody else and after three happy days I went down and joined my regiment at Camp Genecourt. And here, for three weeks, it rained and I never saw the sun and suddenly I began to think it would be silly of me to go gallivanting all over Europe with Old Pal just because he loved me and wanted me around to raise hell with when the day's work was done. I told myself I should go home and take care of my wife and start writing again. I'd been out of the game nearly two years and a magazine writer is soon forgotten.

Pretty soon I was nearly nuts to think that the order would come any day and ruin me. I told my major all about it. One day he sneaked up to Paris with the colonel and upon his return he said. "Peter, little as you deserve it, I did something nice for you in Paris yesterday. I was

in Colonel Whitney's office and he picked a document out of his tray and said: "Pretty soft for Pete Kyne, isn't it? Here's an order from G.H.Q., detaching him from his regiment and ordering him to report to Hurley of the Shipping Board as Hurley's military attaché."

"Tear it up," the major pleaded. "If Peter gets that order he'll die. He wants to go home."

"He gets what twenty thousand men would give an ear to get and then he throws it away," said Whitney. "Isn't that an author for you? They're all nuts, although personally I always regarded Peter as reasonably sane."

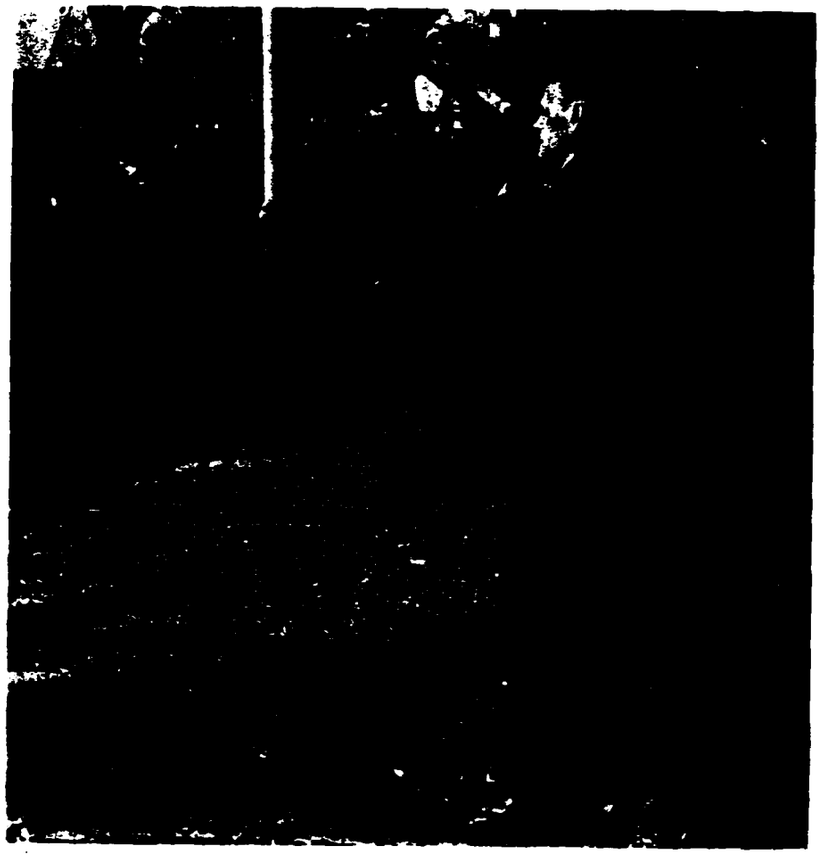
So Colonel Whitney tore up the order and I went home and a year and a half later Old Pal came home with a couple of foreign decorations on him for giving pigs knuckles and sauerkraut to starving Bohunks. But he was broke and had to start his abandoned law practice all over again and I was having plans drawn for a ninety-seven foot auxiliary schooner yacht to sail the seven seas and search for the Happy Isles. However, I never built that yacht. A man got hold of me and told me I could build a much bigger yacht the following year if I'd put the money into his oil wells. So I did.

Only recently a lady asked me what I had done with all the money I had made writing and I replied: "My dear lady, I took it out of the air and put it in the ground!"

(To be concluded)

Major General Guy V. Henry, Retired

Captain, Army Olympic Equestrian Team
Assistant Commandant, The Cavalry School
Commandant, The Cavalry School
Chief of Cavalry



General Henry renders final official military salute upon relinquishing command of Fort Riley and The Cavalry School. "The termination of forty years of distinguished service in the Cavalry. His shadow will lengthen as time marches on."

Cavalry Affairs Before Congress

Major General John K. Herr, Chief of Cavalry, appeared before the Subcommittee (Military Affairs) of the Committee on Appropriations, House of Representatives, to discuss matters pertinent to the cavalry. Extracts of his remarks follow:

Mr. SNYDER. General, we have your Cavalry School item before us, but before we turn our attention to that, I am sure you would like to tell us something about your branch.

GENERAL STATEMENT

General HERR. Mr. Chairman, the Cavalry School is both an institution for the instruction of officers and enlisted men, Regular, National Guard, and Reserve, and a center of cavalry studies. Its importance to the Army extends far beyond what is commonly considered the curriculm of an educational institution.

During the past eight years, cavalry has conducted intensive study and development in mechanization. Our studies and experiments have convinced us that we can apply automotive machines to the execution of cavalry missions to a very considerable extent. We are satisfied that the iron horse is here to stay. Each year, however, brings a more complete realization that the present development of fighting machines falls far short of the requirement that mobile warfare places upon cavalry, our most mobile ground fighting force. I am convinced that American horse cavalry today constitutes the most effective highly mobile fighting force in the world for operations on the American continent or similar areas. I am equally convinced that combined with a proper proportion of mechanized cavalry, the capabilities of cavalry are greatly increased.

Our problem is perfectly clear. It consists of continuing the improvement of our iron horses of every type always with a view to increasing the mobility and fighting power of cavalry; at the same time continuing to increase these same qualities in our horse units; and finally to maintain a proper balance between horse and mechanized units so that our cavalry as a whole will always be at maximum efficiency.

Although most of the technical development of mechanized cavalry must be carried on at Fort Knox, Ky., the station of our mechanized cavalry brigade, it is essential that the Cavalry School keep fully abreast of this development and take the lead in those highly important studies connected with the combined employment of horse and mechanized units. Mechanized cavalry studies at the Cavalry School have only been carried on at a scale commensurate with their importance for the past two or three years. They must be still further expanded as our ideas become more crystallized and suitable facilities and personnel become more available for research and instruction.

COMBINED HORSE AND MECHANIZED FORCE MOST EFFECTIVE

MR. STARNES. In the development of a mechanized cavalry, is it your experience that probably the most effective cavalry force, speaking of the cavalry for combat purposes, that is, the cavalry you are developing now, a combination of horse cavalry and mechanized force is the most effective?

General HERR. That is my opinion. Of course, there are occasions when you could better use the combined cavalry in operations and there are certain times when just the one would be better.

Mr. STARNES. They are complementary to each other?

General HERR. Yes; and the most important use of cavalry is in large groups. You may recall at the beginning of our Civil War, General Scott fought bitterly the forming of cavalry regiments and Sherman referred to them as the arm of romance. It was only in the latter years of the war after the Union forces had learned to raise and concentrate cavalry in great groups and turn it over to leaders like Sheridan for independent movements that it was able to achieve decisive results contributing so vitally to ending the war.

Mr. COLLINS. Of course in the Civil War they did not have any automobiles.

General HERR. I am not referring particularly to horse cavalry; I am referring to any cavalry.

Mr. STARNES. You are using the word "cavalry" in the sense of your present organization?

General HERR. Yes. They have a very great mobility and fire power, and I can conceive, for instance, of a cavalry corps made up of two or three horse cavalry divisions and a mechanized cavalry division as being a tremendous instrument; it would be highly mobile. The mechanized cavalry has great strategic mobility and has great volume of fire. If the two are used together, and I have studied this to a considerable extent, I think it would be a very powerful weapon in any war of movement.

CAVALRY VALUE IN RECONNAISSANCE WORK

Mr. STARNES. Of course, in times past they relied upon the cavalry for reconnaissance purposes more than any other branch and it was very valuable for that purpose because of its mobility and its ability to operate over a much wider range than other troops.

General HERR. Yes.

Mr. STARNES. To what extent has its use been supplanted for reconnaissance purposes?

General HERR. Of course, aviation takes over long-distance reconnaissance work; and also the mechanized units can carry on a considerably longer distant reconnaissance, but for close reconnaissance, such as you have in a timbered country, no vehicle can actually do it. Of course, the mechanized vehicles could do the work along roads, but no vehicle is adequate for complete ground reconnaissance off the roads.

Mr. STARNES. You do not envision at present the mechanizing of the cavalry to an extent that it can be finally mechanized to take the place of the horse for all reconnaissance cross-country work.

General HERR. The answer is distinctly no. No vehicle can go over the difficult country that a horse can. Then, when you take a vehicle and there is a lot of firing to be done, going over bumpy, rough terrain, it is hard to hit anything. It does not have the actual mobility of the horse where there are no roads, and you will not have roads on a battlefield in the next war, in my opinion.

EMPLOYMENT OF CAVALRY DURING TIME OF WAR

Mr. ENGEL. Did I understand you correctly to say, General, that the best results were obtained by use of masses of cavalry during time of war?

General HERR. If by cavalry corps you mean——

Mr. ENGEL. The horse cavalry.

General HERR. Horse and mechanized.

Mr. ENGEL. You do not mean to state that you are going to lead a Charge of the Light Brigade in the face of the modern machine gun?

General HERR. Oh, no; not at all; far from it. The popular conception seems to be that cavalry might do something of that kind, charge against a machine gun. But nothing is further from the truth. The operation would be through dismounted cavalrymen. And they would not be combined into any big, solid mass; but I mean to say that a large organization that would spread out for the purpose of reaching a common objective and for delivering firing power, because it is more mobile, would be able to reach such objective, and that is how it would be used. But under no circumstances would the cavalry all be jammed close in mass formation. We never would do that.

Mr. ENGEL. How far do you think that Sheridan or Jeb Stuart would have gotten if you had had half a dozen, 10, or 15 men with machine guns spotted in the woods on both sides firing into them?

General HERR. I do not think there would have been any great probability of their doing that; they would not under any circumstances have charged right into a machine-gun nest.

Mr. ENGEL. They would not have undertaken any such movement.

General HERR. I do not believe they would have undertaken to move with machine guns being fired on their right and left.

Nevertheless, in spite of the popular idea to the contrary, there are times when it is practicable to attack individual machine guns mounted. For instance, consider this butter right here in front of us as a flat plain. I will put one machine gun right down here on this edge; back here some six to eight hundred yards distant I can place four horsemen behind a ridge at intervals of about 100 yards and start them simultaneously at a run toward this machine gun and across this plain which has no cover and they will capture the gun. A machine gun must have some time to target. It may do this by striking dust or by use of tracer bullets. Men crawling along the ground would be picked up without any difficulty where there is no cover, but I doubt that this machine gun would strike a single one of these fast-moving horses under the conditions described.

That is just giving you one little simple instance; but the cavalry is not going to charge machine guns.

Mr. ENGEL. But my question is: Suppose you had had machine guns scattered along in the woods, back in the Civil War with the cavalry and army moving like it did at Fredericksburg and around through Winchester, say, with a half dozen machine guns, what chance would they have had against those hidden machine guns?

General HERR. They would not be surprised. There are security detachments. No horse cavalry is going to run up against a machine-gun nest; we have advance guards with scouts to discover these machine guns.

Mr. ENGEL. And tanks, with the infantry following up.

General HERR. Of course; you might say also that when a tank comes along the road it would be waylaid by hidden antitank guns.

OPERATIONS OF CAVALRY DURING WORLD WAR

Mr. ENGEL. Let me ask you this question: So far as the horse cavalry exists today, would you point out to us what it did in the last war?

General HERR. Well, that is a pretty big question. I would like to discuss that a little if I may. When the World War broke out, the European cavalry was in no wise——

Mr. ENGEL (interposing). I am talking now of the mounted cavalry.

General HERR. I understand; I am, too. But you have to be mounted in order to get places before you can dismount, you need the horse to get to the place where you can apply the fire to the best advantage; and, furthermore, in actual fighting many times, with the use of horses, and the cavalry, you can get your men there immediately and delay the approach of the opposing side until the infantry can come up.

But when the World War broke out no European cavalry was equipped as the American cavalry is equipped. The American cavalry, first of all, was better than the European cavalry. They were still attacking mounted, carrying a gun that was nowhere near as effective; it was supposed to be effective at least 300 yards but with the best shots they could not hit anything at more than 200 yards.

Both their training and equipment were different from our own. Many of them were still equipped with the lance, and they were taught to attack normally mounted. They had practically no dismounted training except as to the British who had taken to heart somewhat the lessons of our Civil War and of their Boer War.

Let us consider first what took place on the western

front (and, in my opinion, we are not going to have another western front insofar as we are concerned but rather a war of movement. Certainly if we are to fight on this continent or on this hemisphere it would mean a war of movement). Even on this front whenever there was movement, there was need for cavalry in large groups. When there is no movement, we have a war of futility. At the very beginning of the war, during the retreat from Mons to the Marne, the British Cavalry Corps by protecting the left and rear of the British Second Corps saved it from destruction and thereby prevented the entire allied forces from being thrust off their line of retreat and meeting disaster; and in the subsequent "Race to the Sea" two French Cavalry Corps, augumented by the British Cavalry Corps, for several weeks established a mobile curtain from the Aisne to the Lys, thereby holding back German forces and permitting infantry divisions and corps to arrive and take over the front, thus blocking the capture of the channel ports and the turning of the allied left. Again, in 1918, when the Germans were rupturing the allied lines in different places, the cavalry was brought up rapidly and, in fighting here, there, and everywhere, sometimes mounted and sometimes dismounted, were able to contain the enemy until reinforcements definitely checked them. If the Germans had had any cavalry to exploit their breakthroughs, they would probably have won the war.

Justification for Horse Cavalry

Mr. Engel. I would like to have an answer to this question and you need not answer it at this moment but may insert the statement in the record if you desire: What justification is there, in the face of modern warfare, for the existence of a cavalry unit in the Army; what is the mission of the cavalry unit in the Army, in the face of modern machine gun at this time. Those are questions that are going to have to be answered and I would like to be in position to answer them by referring anyone to your answer in this record.

Mr. Snyder. The horse cavalry.

General Herr. I welcome your question.

Mr. Engel. Yes.

Mr. Collins. Suppose you let him put the answer in the record.

Mr. Herr. I had just as soon do it now if you wish.

Mr. Snyder. In order to save time will you just insert your statement in the record?

General Herr. I will be glad to do that.

(The statement referred to is as follows:)

Justification for horse cavalry must rest on two pillars of support.

The first pillar of support is that of historical facts concerning the use of horse cavalry in the World War, where we have very solid support because the recorded facts show that horse cavalry was used in all the historic rôles of cavalry to be described hereafter, that its use was vital and necessary, and that, even on the western front with its seige warfare, whenever movement was restored there was urgent need for cavalry.

The second pillar of support is to show clearly that the airplane and motor cannot displace the cavalry by executing more effectively its historic missions. In this connection it must be remembered this is somewhat like considering a man guilty until he proves himself innocent when, as a matter of fact, there has been nothing except theory, conjecture, and peacetime maneuvers to uphold the thought that the horse cavalry which has stood the acid test of war may be displaced by elements which have not yet demonstrated their ability in the same acid test of war. It is also interesting to note that considering all these factors, that is, the use of horse cavalry in the Great War and since, and the devlopment of air and motor, that all the principal nations of Europe are retaining more or less horse cavalry; that the average percentage of horse cavalry with reference to the total active forces in the principal European nations is greater than that in the United States.

It is also interesting to note that those nations which are retaining a greater amount of horse cavalry appear to be those which have greater resources in horses and forage and also wider reaches of country somewhat similar to our own which would seem to indicate a war of movement. Both Poland and Russia are maintaining great masses of horse cavalry and even France on the western front is maintaining a larger percentage of horse cavalry than we are. The United States is in a peculiarly fortunate position as regards its resources in both horses and motors. We have over 12,000,000 horses and more than 4,500,000 mules in this country and our motor industry is the best in the world. We have therefore an unequaled opportunity to develop the best cavalry in the world, both mechanized and horse.

It must be borne in mind that in any consideration or discussion of these cavalry missions that modern horse cavalry is completely armed with the latest weapons of every kind.

In order that we may understand clearly the missions which horse cavalry can perform in warfare under modern conditions, I should like to review briefly the war organization of our modern American horse cavalry.

The horse regiment at war strength has nine rifle troops (grouped into three squadrons of three troops each), a machine-gun troop, a special-weapons troop, and a headquarters and service troop.

Each rifle troop has 132 officers and men, all mounted on horses and armed with automatic pistols. Of these men, 97 are mounted with the model 1903 rifle, which is to be replaced by the semiautomatic rifle as soon as it is available. The troop also has 6 light, air-cooled machine guns carried on pack horses. The saber is no longer used.

The machine-gun troop has 12 heavy, water-cooled machine guns and the special weapons troop has 8 caliber .50 antitank machine guns and four 60 mm. mortars for antimachine-gun fire, all carried on pack horses.

The headquarters and service troop includes the necessary staff for administration, intelligence, operations, and supply of the regiment. It has personnel for radio communications as well as messenger service, both horse and motorcycle, scout cars with ¼-inch armor for reconnaissance and command, and cargo trucks for supply. Each scout car is armed with one caliber .50 machine gun, two light machine guns, and one submachine gun. Cargo trucks carry weapons for their defense.

The war strength regiment has 1,687 officers and men; 1,812 horses, both riding and pack; 11 scout cars; 12 motorcycles; 33 trucks; 86 light machine guns; 12 heavy machine guns; 23 caliber .50 machine guns; 11 submachine guns; 4 mortars; 1,687 pistols; 1,013 of the new semiautomatic rifles; and 17 radio sets.

Of course, we do not maintain this strength in time of peace. The above figures should be about halved to show our peace organization. Since we expect to use our cavalry early in the event of war, this discrepancy of one to two is too great and I have recommended that the peace organization should more nearly approach the war strength.

Thus, you can see that our modern horse regiment has been equipped with all the modern means for combat. It has a small arms fire power comparable to that of infantry in equal numbers and this fire power is extremely flexible and maneuverable on the battlefield. Should the regiment be separated for any reason from its motor vehicles, it can still operate efficiently by using horsemen for command, communications, and reconnaissance. It can then be supplied by attached pack trains or airplanes and, in emergencies, can live off the country.

Our 12 Regular Army horse regiments are grouped together by fours to form three horse divisions. Each division, in addition to its four horse cavalry regiments, has a regiment of horse artillery (75 mm. howitzers), a division headquarters and headquarters troop, two brigade headquarters and headquarters troops, all of which are largely motorized, a scout-car squadron of 39 scout cars for division reconnaissance, a light tank company, and the usual auxiliaries, including a signal troop, an engineer squadron, a medical squadron, a quartermaster squadron, and an ordnance toop, all motorized.

The horse division is, in reality, an independent unit of all arms, except air corps and infantry, in which all modern means are utilized to the fullest possible extent.

The characteristics and limitations of horse and mechanized cavalry must also be considered.

Mechanized cavalry.—Mechanized cavalry has great strategical mobility over roads and can ordinarily march about 150 miles a day. It has considerable volume of fire, but it is difficult to hit anything while moving over rough terrain. It will move largely on the roads and will be very vulnerable to air attack. It will be difficult to control in large groups in any combat because, when the shutters are put up, the drivers must look through slots. Its armor will deflect or stop ordinary rifle or machine-gun fire. It must be remembered, however, that there is no combat car or tank built or to be built for which there has not been or cannot be manufactured a multitude of antitank weapons at less cost than that of the vehicles and which will shoot holes through them in the same manner that the rifle or machine gun may shoot through a man or a horse. This force has not within itself the adequate elements of complete ground reconnaissance because it is composed entirely of vehicles which will move largely on the roads and which are unable, even though moving across country, to negotiate the many difficult types of terrain such as woods, bogs, streams, stone walls, and ditches which are easy for the horse. Also, the moment one of these vehicles stops, it is highly vulnerable not only to antitank gun fire but also to artillery fire. Their defensive capabilities are admitted to be one of the weakest points. The initial cost and maintenance of mechanized cavalry regiments is three times as great as that of horse cavalry.

Horse cavalry.—The horse cavalry has not the strategical mobility of mechanized cavalry but can be moved by rail or motor over long distances. It is capable, however, of making forced marches of 100 miles in 24 hours or 150 miles in 48 hours. In battlefield areas where there will be few roads, it is the most mobile of all ground troops because the horse can transport its fire power to desired points. The horse cavalry is capable of protecting itself at all times; and has greater fluidity and flexibility than has mechanized cavalry because each man is a self-contained fighting unit. It is less vulnerable from air attack because it has greater power of cross-country mobility and dispersion. It can at times cut loose entirely from its motor elements and be supplied by pack trains or by air, or live entirely off the country.

In general it may be said that the characteristics and limitations of horse and mechanized cavalry are such to render them complementary to one another, that is, when used in large groups such as corps, the main objectives or missions can as a rule be better attained by using both horse and mechanized cavalry than by using either alone.

Getting down to brass tacks, let us consider very definitely whether or not the airplane or the motor can displace or assist horse cavalry in each of its main historic missions. If it can assist it or displace it in any or all of such missions, let us set forth to what extent in each case. Also, if it is not able to completely displace the horse cavalry in each mission, let us set forth clearly why this is the case.

The traditional missions of cavalry may be grouped into those of reconnaissance, pursuit, covering, and combat. What effect will the adoption of airplanes and motor vehicles to modern warfare have on these cavalry missions?

The enormous expansion of the Air corps of all nations and the importance of this arm are well known to all. Nevertheless, certain limitations of airplanes for military purposes must be understood. In the first place, while great advance has been made in flying under adverse conditions, such as darkness and in bad weather, the very term "blind flying" shows that the aerial observer cannot see the ground when flying under such conditions. An even greater limitation to aircraft, however, is the fact that they cannot hold ground. They will undoubtedly cause

casualties among ground troops which they have located, but that portion of the ground forces which is not killed or wounded will push on and, if not stopped by opposing troops on the ground, will accomplish their missions in spite of the efforts of aircraft to prevent it.

There seems also to be some misapprehension as to the current status of motorization, at least in our Army. Some people have the idea that in future war the whole mass of the army can be permanently motorized. In our newest infantry regimental organization, on the other hand, all of the rifle companies, that is about 80 per cent of the regimental strength, still march normally on foot. This is the regiment which forms the basis of the so-called streamlined infantry division. The foot troops of a few such divisions can be placed in motortrucks when necessary and moved with the motorized elements of their divisions at the speed of motors to a threatened point. This speed is about 150 miles per day, the same as that of mechanized cavalry. Such a command would need the protection of mechanized cavalry temporarily detached from their cavalry corps for that purpose.

Again, by a system of shuttling all available motortrucks back and forth, all of the foot troops of the whole army can be given lifts in relays one after the other. By this method, the rate of advance of the army as a whole can be stepped up to about the average daily rate of march of horse cavalry, which is about 35 miles per day. Thus horse cavalry, brought into the theater of operations by water, rail, or motor just like other troops, and placed in front or on the selected flank of the army, has the mobility necessary to maintain its relative place in the whole formation and there perform its missions.

Any idea that a large army can be moved all together at the average speed of motors is an empty dream. Even were many roads and the necessary number of trucks available, the length of the truck columns on the roads and the resultant congestion would be so great that the object of increasing the speed of advance of the army would be defeated by the very means adopted to attain it. Anyone who has ever driven to a large football game, or similar event, where the roads are usually good, can recall the slow speed of the vehicles as they draw together at the appointed place and as they leave after the event until the vehicles break up into small groups and move off in different directions. But an army cannot separate into small groups. It must be kept together.

Another thought on motorization should be kept in mind during the consideration of cavalry missions. It is this: Unlike some nations we never know beforehand where we are going to fight. It may be in some theater of operations where roads and other modern means of communications are practically non-existent. In such a theater motors will prove of very little value, except for purposes of supply behind the combat zone, where roads can be built as the army advances. In this type of warfare we must rely on the old established combat branches, Infantry, Cavalry, and horse artillery, supported by long-range aviation, based, if need be, in the zone of the interior.

Let us consider the mission of reconnaissance. As you know, reconnaissance means finding the enemy, determining his strength, composition, and disposition, and also reporting on the nature of the terrain over which the fighting will occur. Before the era of airplanes and motors, cavalry was the only reconnaissance agency available to the army. Lee called Jeb Stuart's cavalry the eyes of the army.

Nowadays the Air Corps, in spite of certain limitations, is the best branch for distant reconnaissance. Darkness and bad weather will hardly last long enough to prevent the Air Corps from discovering the main concentrations of the enemy. When the opposing forces draw closer together, however, these intermittent periods of blindness become more important because short moves by the enemy may have decisive effects on the outcome of the battle. Infantry in trucks is not suited to reconnaissance because it is too vulnerable and the mission involves fighting which cannot be done from unarmored vehicles.

Mechanized cavalry and the mechanized elements of horse cavalry are well suited to ground reconnaissance on and near the roads. Off the roads, and particularly in dense woods, which are closed to view from the air and inaccessible to vehicles, horse cavalry must be used. It is also needed to get exact detailed information of the location, flanks, and rear of an enemy disposing himself for battle, as well as of the exact configuration of the ground. In this service horse cavalry has become more the fingers than the eyes of the army, feeling out what the Air Corps and men in mechanized vehicles have seen. Those, and there are some who wish to reduce cavalry to a purely reconnaissance arm, are entirely wrong, unless reconnaissance is the only mission which cavalry can perform. Actually, while still important to cavalry, reconnaissance is no longer its primary mission.

Pursuit.—As with reconnaissance, cavalry was also once the only arm capable of conducting efficient pursuit of a defeated enemy. Now attack and bombardment aviation can assist. Infantry in trucks can take more chances in pursuing a defeated enemy than it can in opposing a fresh and undefeated one. Mechanized cavalry can pursue on and near the roads and is valuable in pursuing an enemy retreating in trucks. However, an alert enemy, even though defeated, will take every opportunity to destroy the roads, bridges, and other avenues of pursuit, even laying waste to the entire country in his rear. Here horse cavalry, which is independent of such means and can cross almost all obstacles, is still supreme. The combination of air attack to increase the enemy's casualties, mechanized cavalry, if roads are available, to further harass and disorganize him; and horse cavalry and other arms, as they arrive, to destroy him will be a powerful team to insure the victory of destruction.

Covering missions.—Covering missions include a variety of important duties, such as security for the main army during concentration, at a halt and on the march, preventing ground reconnaissance by the enemy, seizing and holding important terrain pending the arrival of other troops, covering withdrawals of our troops, fighting delaying actions against the enemy, and providing liaison between large units of our Army.

While only the front of the army need be covered initially, as soon as movement starts, its flanks and rear, in these days of rapidly moving motorized and mechanized threats, become extremely dangerous and therefore almost as important as the front.

The Air Corps can assist the ground troops in covering missions by causing enemy casualties and by indicating the direction from which his advance will be made. But it cannot actually execute covering missions satisfactorily because it cannot hold ground. The necessity for covering far from ceasing in darkness and bad weather, becomes more important, since the enemy will take advantage of inactivity in the air to make his advance.

Infantry in trucks is not entirely satisfactory for covering missions, due to its dependence on roads, its vulnerability, its inability to fight from its vehicles and the difficulty it will have in extricating itself quickly from combat.

Cavalry, as it always has been, is the ideal arm for executing these missions.

Mechanized cavalry, which can fight from its vehicles, will be of great value on and near the roads. It can execute covering missions for entirely motorized elements of the main force. But, horse cavalry is the ideal arm to execute covering missions for the army as a whole under all conditions of climate, weather and terrain. It can do so in time — constantly, and in space — anywhere, on the ground.

Participation in battle.—While cavalry must fight in carrying out its missions of reconnaissance, pursuit and covering, discussed above, it must also fight in coöperation with the other ground arms to further the accomplishment of the main mission, which is always the defeat of the enemy in battle. This form of cavalry combat will be more important in the future than at any time in the recent past.

It is readily admitted that cavalry has little or no value in trench warfare. But wherever there is movement the use of cavalry in large groups is vital. The whole idea of modern military doctrine, organization, and training is to restore movement to the battlefield. If this attempt is successful, it will largely eliminate those obstacles, particularly trenches and wire, which render cavalry, as such, useless in stabilized situations. With movement, comes a looser articulation between units, both large and small. Gaps between units appear. The flank and rear of enemy units become accessible. Opportunities for cavalry combat will be many.

Mechanized cavalry is well suited for attack on the enemy's sensitive points at some distance from the front. Horse cavalry is ideal for relatively close-in attacks on similar enemy objectives, especially in the area where motor vehicles are too vulnerable to enemy fire. Here the battlefield mobility of horse cavalry, which means its ability to cross streams, rough terrain, dense woods, and all types of close country faster than other troops, and the great flexibility of its fire power, may well be decisive.

Some people picture cavalry fighting only in the old boot-to-boot charge on horseback. Nothing could be further from the truth. Nowadays, whether cavalry attacks mounted or dismounted, it does so in open formations; several waves of men at distances of several hundred yards, with individuals in each wave at intervals of 5 yards or more apart. This formation reduces the effect of enemy fire and our attack is supported by all the modern means of combat, that is, attack and bombardment aviation, artillery (including antiaircraft and anti-mechanization units), smoke tanks or combat cars, machine guns, mortars, and antitank weapons.

In case anyone may think that the above discussion is purely theoretical, I should like to remind the committee that in Spain General Franco started out 2½ years ago with no horse cavalry at all. He now has, according to latest reports, over 50 horse squadrons. A successful commander does not add useless units to his army in the midst of war.

It is my fixed opinion that, although in some cavalry missions it may be better to use horse cavalry alone or mechanized cavalry alone, on the whole the best results can be accomplished by using them together.

Gentlemen, I have an abiding faith in the future of cavalry and am convinced that it will give a good account of itself in any war in which this Nation is involved provided it is given the proper strength, is properly organized and trained in peace and in time of war is assigned proper mission by the army commander.

Mr. SNYDER. Thank you very much, General Herr. You have made a very excellent presentation of your estimate.

General HERR. Thank you.*

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A CAVALRY EPISODE

Third Army Maneuvers

By MAJOR FENTON S. JACOBS, Cavalry

The spectacular operations of the Blue Cavalry, during the Third Army Reserve Maneuvers, last summer in the Pole Mountain Wyoming area (7 miles east of Laramie), has caused considerable pro and con discussion. The affair was comparatively small—a reinforced brigade (Red), opposed by a reinforced regiment (Blue). The 4th Cavalry marched from Fort Meade, South Dakota, and arrived just in time to participate in the maneuver. The regiment, less the 1st squadron with a platoon of machine guns and a section of scout cars, was attached to the Red Force; the 1st squadron reinforced, commanded by Major Arthur T. Lacey (now Lt. Col.) similarly was attached to the Blues.

The terrain in the Pole Mountain area is extremely rugged. Massive rock formations rise up abruptly like great monuments—as a trooper remarked: "Gosh, this country stands on end." The Van Horne Ridge, elevation 8,230 feet, extends from point B (on the sketch) to the northeast, while the Sherman Mountains, including Pole Mountain: about 10,000 feet elevation, extends from Cheyenne Pass, point D, to the southeast. The badly cut up valley between these formations averages about 8,000 feet above sea level, with numerous patches of woods and boulder masses.

Having been asked for my comments, as Blue Cavalry Umpire, I will confine my remarks to the operations only of the Blue Cavalry on the last day of the maneuvers, August 11, 1938; and I also shall make a few observations on maneuvers in general.

The situation at Pole Mountain, briefly, was as follows: The Red Force marching from Laramie, Wyoming, on August 8th had driven the Blue Force, defending Cheyenne, to the southeast corner of the Fort Frances E. Warren, Wyoming, Target and Maneuver Reservation (Pole Mountain reservation). On the night of the 10th, the remainder of the Blue Division, theoretically approaching from the northeast was injected into the problem, thus forcing a night withdrawal by the Red force. Contact was lost. At daylight August 11th, the Blue Cavalry, preceding the Blue force along Happy Jack Road, regained contact and developed the situation which disclosed that the Reds had taken up a strong defensive position extending from Pole Mountain northward, about four miles, to Eagle Rock. Blue scout cars and patrols were operating on the north flank.

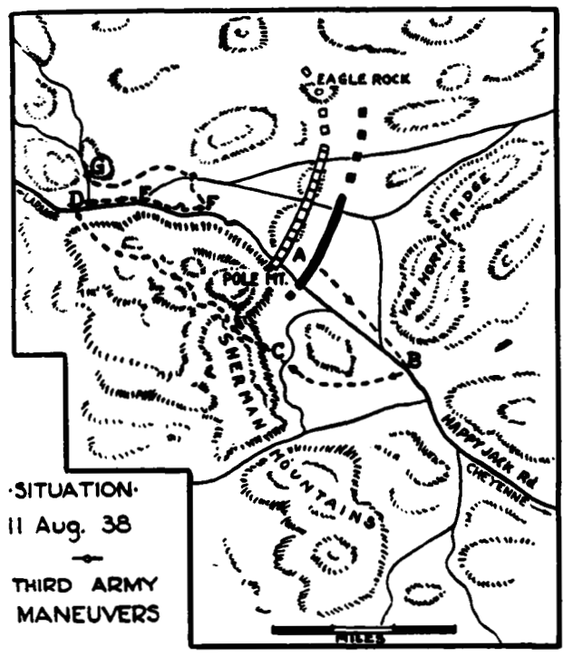
When the Blue Infantry arrived at point A, the Blue Cavalry in vicinity of Happy Jack Road (south flank) was relieved and rapidly withdrew to the southeast, about two miles, to point B, where orders were received at 10:00 AM to encircle the Red south flank and disrupt Red communications. Red cavalry was protecting the Red north flank.

The Blue squadron, less detachments, followed a stream line to the southwest, under cover, and reached point C at 11:00 AM, where it watered and dropped cantle-rolls. Then the steep climb over the Sherman Mountain Range was begun. The horses, being in splendid condition stood the effort and altitude remarkably well. The progress of the advance guard indicated a route and the squadron arrived at Cheyenne Pass, point D, at 12:30 PM; *unobserved* by Red observation planes (as their reports later indicated), which constantly were in view of the area.

After a half-hour's halt at Cheyenne Pass, assuming that the Red lines of communication were being cut, the squadron moved eastward down Happy Jack Road, directly in rear of the Red front lines. At point E, the Blue squadron encountered an outpost of a platoon of Red infantry and a section of machine guns, which, after a brief skirmish was defeated. The squadron then continued at a gallop and captured an Engineer detachment while it was at mess. It then, unopposed, barged straight into the Red Force Command Post point F where the Red commander, completely surprised, was made captive—in the presence of the Eighth Corps Area Commander. Still unopposed, the squadron charged a nearby battery of field artillery and later drew the Red reserve to the west denying its use to the Reds for several hours. The Blue squadron finally withdrew to a high point G, where it remained in observation of the Red rear until 4:00 PM, at which time the maneuver was terminated.

Some claim that this squadron, in real warfare, would not have survived this operation. In my opinion, it would have lost about one platoon in its various skirmishes. Be that as it may, the fact remains that what this squadron accomplished in negotiating this difficult terrain, a regiment or regiments of horse cavalry could as well have done. This potential threat to the Red line of communication obviously made the whole Red Force jittery and rear-conscious. At critique, the Red commander pertinently and honestly admitted that for him, throughout the entire maneuver, the Blue cavalry was (in his own words) "a pain in the neck."

In this instance, one is reminded of the harassed Russian Commander Samsonov in 1914. The German 1st Cavalry



Pole Mt. Reservation.

Division had caused him to move his CP so often that finally he lost control of his command, walked into the bushes and committed suicide.

And again, we might remember the words of Marshal von Hindenburg in his memoirs relative to the battle of Amiens, France, August 8, 1918: "It was reported that masses of British cavalry (only a few squadrons) were found already far in rear of our front line of infantry. On the front everyone became anxious. Positions were abandoned before which strong enemy attacks had just been repulsed. Liaisons, that had been lost were sought with the rear. In this situation, the imagination builds phantoms and one sees in them very real dangers."

Incidentally, it was the Battle of Amiens which produced from the Kaiser an order to Secretary of State von Hintze to open peace negotiations. It was this battle which caused von Ludendorff to tender his resignation to von Hindenburg, and to write later in his memoirs that "8th of August was the black day of the German Army in the history of this war."

From a cavalryman's viewpoint, the outstanding lesson taught at Pole Mountain was that no commander can safely anchor his unguarded flank to whatever in his mind is an impassable mountain; not while horse cavalry is present and is at liberty to maneuver. If a mechanized squadron could have executed this operation the noise of the motors would, unquestionably, have disclosed its presence, thus preventing the surprise that was effected by the Blue horse squadron.

As for maneuvers in general, I believe that to produce reality, assumptions should be held to the minimum. To assume that a machine gun is either .30 or .50 caliber is not only confusing but may lead to incorrect training in the employment of weapons. In war, we know that a unit rarely is up to Tables of Organization strength, either in men or weapons, so why not play the maneuver "as is?" For garrison training, the combining of peace strength units can give the desired war strength perspective. Moreover, in future maneuvers, it would seem sound to give more emphasis to night marches and to camouflage. There is another point which I wish to mention, with my fingers crossed as it were, often in an effort to "save the horses" in peace time maneuvers there is the danger of giving the impression to other arms that cavalry is fragile, timid, or is nonaggressive. Too often maneuver reports contain the criticism of "lack of reconnaissance," "lack of aggressiveness." Maneuvers afford cavalry an excellent opportunity to stimulate *esprit de corps*, and to provide visible evidence for those who have been influenced by peace-time motor propaganda that cavalry, particularly horse cavalry, still is an essential fighting element of the Army Combat Team. When horse cavalry reputation is at stake there should be no holding back. A cavalry which enters a field maneuver of the combined arms, with old or poorly conditioned horses, or with a commander who is unwilling or afraid to extend his command in the execution of cavalry missions, will surely do cavalry more harm than enemy bullets. But, such could never be said of the Blue cavalry at Pole Mountain, which I personally observed, and wish to commend for its exemplification of cavalry historical traditions.

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Report of Lieutenant Colonel O'Connor, Cavalry—Umpire Staff

The Blue Squadron, moving by perfect cover and concealment through the woods, climbed over the top of Pole Mountain, descending through heavy woods in rear of the Red position. At the end of this descent, it encountered, largely by accident, the Red Command Post; immediately attacked, and would have captured or killed the personnel thereat, including the commander and his staff. It then moved further to the rear, utilizing perfect concealment through the woods and very rugged country, with the purpose of blocking the pass which the Red position was defending and cutting off the Red line of communications. In this movement the Blue Cavalry discovered the batteries of the Red artillery in position in open places in very rolling terrain, their guns trained to the front. Cavalry machine guns were placed covering the batteries, who did not suspect the presence of the Blue cavalry until fire was opened upon them and who had no protection other than their field pieces. Ranges were within 200 yards, and the obvious outcome would have been inevitable. The squadron then continued on its purpose of blocking the pass and cutting off Red communication to the rear.

It does not take much imagination to visualize the effect on the Red defense this action in their rear would cause: with the command post silent and calls on the artillery for support futile, the Blue attack would have had easy going.

What about all-around defense? Practically it was here at best only an idea. Where was the Red cavalry? It had been assigned a mission well out on the other flank where an attack was feared, with only scout cars patrolling the Red right on roads—the impassably rugged Pole Mountain was considered adequate safeguard on that flank.

Now there were several reasons (or so it was alleged) why this action of the Blue squadron was unreal: there would have been all-around defense; there would be better aerial observation to discover the movement; the cavalry leader would not have taken this hazardous movement had bullets been flying; the artillery would have had local small arms protection. But the fact remains that the cavalry encountered no fire of any consequence in executing this action; and its extrication at any time could have been effected were it necessary. No action of any other troops could have so excellently assisted the Blue attacking infantry. When it is recalled that cavalry carries as much fire power, man for man, as the infantry, it may be realized that this force of some 160 cavalrymen, with some 12 machine guns, in the rear of the enemy position was more than a serious menace, it was decisive. This sort of thing happens so frequently and such opportunities are so frequently presented in maneuvers—of trained troops—that the question is not malapropos: What is to prevent their occurrence in war?

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Mechanized cavalry, horse cavalry, and infantry tanks were all brought into play in rôles deemed sound and suitable. They are all deemed essential to a modern army. Combat cars and tanks do not replace horse cavalry rather introduce new efficient approaches for the solution of similar problems; the limitations of one, and each has limitations, are compensated for by the other.

During the concentration of the Army on the battlefield, the mechanized cavalry and horse cavalry operated together to cover and screen the advance of the army—the horse cavalry on terrain difficult and impossible for mechanized cavalry, which was quickly moved over suitable terrain to support the horse units or to meet the enemy's mechanized cavalry. As the battle progressed, the mechanized cavalry entered the main fight, first on the west and then on the east flank by making a rapid night swing around the rear of the army. Bear in mind the NOLIN RIVER on our west flank, terrain difficult for mechanized cavalry, but practicable for horse cavalry. In the same way the infantry tanks engaged in the battle with the infantry until the NOLIN RIVER blocked them when they were thrown east around this obstacle and joined mechanized cavalry in the last stages of the fight. These employments picture the value of these different units. They are all essential and each has its part to play.

—MAJOR GENERAL HUGH A. DRUM, U.S.A.
Comments on Second Army CPX.

Sidelights on Organization

By CAPTAIN W. W. YALE, Cavalry

Merely because we can now separate cavalrymen by drawing a distinction between the reek of the stable and that of the garage it is the fashion to consider the two odors in the light of a division of force. A bit of reflection, however, will serve to recall that it has never been possible to consider cavalrymen as all-purpose propositions. In the old days it was suicidal to ask a dragoon if he belonged to the umpteenth hussars, and even in 1915, when the last Frenchman had thrown away his cuirass and the molds of Cavalrymen reached a new peak of uniformity, there was still the sharp line of demarcation between the "Independent Cavalry" and the cavalry which was used in close support of Infantry Divisions and Corps.

This typing of cavalry in accordance with whether it is intended to support infantry directly in small units or to support the infantry indirectly by operating strategically in large masses is still with us, complicated by the appearance of mechanization. Since Tables of Organization already recognize the need for more than one kind of cavalry, it seems rather odd that a tendency exists for officers to suggest a new cavalry regimental or divisional organization without giving some explanation of the purpose for which their brain child is designed.

The organization question is one of the most important confronting us today. Upon the correct answer perhaps depends the decision of future campaigns. There is a great deal of sound thought being devoted to it, yet there has been little organization of ideas on organization among the various field organizations, so to speak, where such ideas are likely to have the most merit.

For example, not long ago a questionnaire was sent to various cavalry regiments to get a consolidation of thought on the set-up of a new division. Also, tests were conducted in the 1st Cavalry Division recently with different tentative organizations, actually on the ground, towards the same end. Both moves resulted in an unbelievable mixture of opinions, practically one per individual. If any classification were possible it might have resulted from the fact that officers serving with small units in small posts tended to decentralize, that is, to equip troops and squadrons with special tools and weapons whereas their confreres in large posts tended to eliminate the specialties from the lower echelons and to consolidate them in the higher.

This diversity might have been lessened by assigning a mission for would be organizers. What are we organizing for? What is this new division to do and how is it going to assist the infantry?

We must never forget that cavalry is a supporting arm of infantry. We must keep on recognizing that assistance may be given either by having small units of cavalry spread through the army as organic parts of Infantry Divisions and Corps, or by massing large bodies of cavalry which are intended to perform mobile strategic missions which benefit the infantry indirectly. Or better, by doing both. Then when we speak of cavalry squadrons we can realize the obvious, namely, that a squadron forming part of a Cavalry Division will have a lot of gadgets and services available to it from nearby troops that the squadron forming part of an Infantry Division will need but not have available—unless we organize it with the gadgets as permanent fixtures.

Let us consider the broader aspects of the organization question in the light of "Direct Support" Cavalry and "General Support" Cavalry by shelving the differences between the horse and the machine for the moment and thinking of them in the same terms. For horse cavalry and mechanized cavalry are alike in their need for flexibility, in their need for fire support, in their need for superior leadership and control, and, finally, in their need for one another. Flexibility, because it applies to all these things, perhaps being the most important.

II

Here we might borrow an idea from Ernest Hemingway and appoint a Poor Old Lady to assist us by asking what we mean by this and that. "For instance," says the P.O.L., "what is this business of flexibility? Is it anything like the cliché about 'fire superiority' that everyone talks about but can't define?"

Well, you say to the P.O.L., yes and again no. Let us take first the flexibility of rifle troops. What is flexible to Smith is not at all flexible to Jones. It is a matter of degree, yet the thing itself is not so hard to define because the flexibility of a unit come right down to a question of close order drill. Your troop may be marching along a road and by doing a column of platoons, first platoon twos right gallop!, may execute a very nice pistol attack to the east. Or by making some passes in the air you can get your squadron into column of troops, with raised pistol facing south, north or north by west. This makes your outfit flexible—maybe. On the other hand, to do this, I may have to say fall out and fall in again over there, which may make my crowd not at all flexible.

However, if you have to sit down and write a field order with two annexes to get your outfit into attack formation, then perhaps I can beat you to it after all and outdo you in flexibility. Thus you may be flexible, but not flexible enough.

When General Herr introduced Formations A, B, and C at Fort Bliss in 1936 his purpose was to add flexibility to the regiments. These formations were assumed during that most important of all phases of cavalry action, the development, a phase of action usually ignored by the mental

giants who consider trucked infantry a suitable replacement for cavalry.

The development, or the breaking from route column to semi-deployed formations upon which ultimate attack is based, is the phase of maneuver over which the leader exercises the greatest influence. Here he disposes his assault troops and his fire power in positions to facilitate the final jump-off. Here he balances his power to insure striking a decisive blow at the enemy's weak point. Here, by flexible handling of his troops, he guards against surprise and, at the same time favors surprise and quick action in his own attack by eliminating awkward methods of control.

The development is almost always mounted or mechanized and is the great test of the cavalry leader. It is the application of battlefield mobility which at once sets cavalry in a class by itself—in a field impossible to trucked infantry which, once entrucked, are an invitation to disaster from both horse and mechanized cavalry and once detrucked are infantry.

Following development comes battle, perhaps mounted, perhaps dismounted. But control over battle is a matter of small units in which the leader of the whole force must stand by until the situation unfolds and reserves must be committed. Leadership, then, is at peak importance just prior to battle and involves preliminary disposition of force. Since organization seeks mainly to simplify the problems of the leader we must look to the development phase as giving the surest clue to proper organization.

Formations A, B, and C are simply regimental drill formations such as line of squadrons in column of platoons, assumed when maneuvering near the enemy and which serve a double purpose. By semi-deployment they render a unit relatively invulnerable to air attacks or artillery fire. By permitting any suitable attack formation to be assumed quickly from any other they insure flexibility in the regiment and minimize the embarrassment caused by the enemy not being where he was reported to be, or not staying where he was, or by the enemy making a surprise attack himself. Of course you cannot take up formation A in a cornfield, yet it is almost certain that a regiment trained to the formation ABC idea will never be caught in a cornfield. But if it is, it can soon get out.

At this point our POL appears to be more than ever concerned about flexibility. She thinks that there is a time and place for everything and to worry about having to barge off in every direction at the wink of an eye is nonsense pure and simple. It just isn't done.

Well, we can answer the POL and everyone else by saying that if any book of military history is dropped on the floor, it will open to a place where someone is being surprised or is miscalculating something. It might be that merry-go-round of divisions at Lodz in 1914, or it might be Guadalajara in 1937. Things never have gone according to schedule and in these days of increased burdens upon the commanders there is no reason to expect improvement. Quite the contrary. So if the cavalryman is to take pride in his mobility he must, at the same time, recognize that his horse or his combat car will get him into trouble just that much more quickly if he doesn't watch out. The winner and new champion is usually the man who made mistakes but recovered from them by using flexible troops and methods to re-form and get going again.

Our POL brightens up at the word Guadalajara. It develops that she was there and that there was mud, sure enough, and some conflict of orders. But she thinks that if the Italians had been able to jump into Formation B and follow the leader that they might have been able to save a truck or two. We cannot help but agree and reflect that where there is no flexibility there is no organization; where there is poor organization there is poor control; and where there is poor control there is a great deal of trouble.

Now, getting back to our cavalry types, where do we apply flexibility to "direct-support cavalry" and where to "general-support cavalry"?

A squadron which is operating in close or direct support of infantry and as an organic part of the infantry force generally has missions greatly restricted from the wide field open to Cavalry masses. It serves its infantry by reconnaissance, by counter-reconnaissance and delay. Beyond these functions it rarely goes. If the squadron is to continue to function efficiently, it can best do so by avoiding combat wherever possible, except, perhaps, in the defensive measures and flank thrusts used in delaying action.

To fulfill its usual missions, then, close-support cavalry will operate mostly as a group of small units, following the tactics laid down for corresponding missions. It will rarely work as a compact unit but will usually decentralize its control. It will work habitually with mechanized reconnaissance agencies and with Air Corps. It will be habitually tied to troops having an inferior mobility even though it may operate at some distance from them in the initial stages of the operation.

In contrast, the squadron within the Cavalry Division is simply a cog in a machine containing many similar cogs. It may occasionally perform some individual task such as advance guard or reconnaissance detachment, but in the main its commander takes his place in a formation of higher units. The idea of our troops and our squadrons "acting alone" as was done during some phases of the Punitive Expedition has no place in the operations of Cavalry Brigades, Divisions and Corps. In these higher units will be found artillery, fast tanks and special arms and services which can be made available, by reason of their road and coss country mobility to assist the assault troops when necessary.

As far as the rifle units themselves are concerned, both the squadron-within-the-division and the squadron-supporting-infantry need to be flexible. But in the first case a higher degree of flexibility is required. Where, with Infantry, the control of cavalry units is decentralized and the line of action comparatively clear, within the Cavalry Division the squadron commander rarely knows what is going on. He does not need to know. But he must be prepared to move on signal to a new locality, with little or no time to make troop dispositions other than those accomplished by signals of his own. It is highly important that the squadron be able to shift formation quickly and to keep within the space limits imposed by adjacent units, at least until assembly positions are reached which mark a new phase of action.

Of course, as regards flexibility, the organization of rifle units is not particularly important. Whether there are two, three or four squads to the platoon; two, three or four platoons to the troop; or two, three or four troops to the squadron makes little difference because any combination of these figures can be put into close order drill, taught approach formations and rapid changes of formation without particular difficulty.

Unfortunately, no information, either for attack or defense is worth a hoot without fire support. Nor is any weapon used for fire support purposes such as the machine gun or 75-mm. howitzer particularly useful when it is not firing. So we must enlarge our definition of flexibility to say that not only must cavalry troops be able to shift quickly to meet emergencies but that their leader must have supporting weapons so disposed that he can coördinate and control them to make their support effective.

How shall we provide these supporting services for the Cavalry Division and for the cavalry in direct support of infantry? How far down among the troops shall we distribute them to give maximum support and yet minimize the troubles of that poor devil, the troop leader, who might well be fresh from civil life?

Here is the crux of the organization problem. What do you think?

III

Our Poor Old Lady, during her sojourn in Spain, was distressed to discover that fire power on the defense was, if anything, stronger than when she was a girl on the Western Front. Worse yet, nothing seemed to have been learned about the use of fire power in support of the attack, and this, no doubt was (and is) why nobody appeared able to attack, or at least to attack successfully.

To the POL who doesn't know much about these things, artillery and machine guns are just about the same proposition. The POL isn't so far off, at that, in some respects. But like many another, who considers himself a machine gun expert because he once did a blindfold strip-act, the POL stops when she says that both can fire but it is easier to carry machine guns around than it is 75-mm. howitzers.

Because they are hard to carry around, no one advocates equipping rifle troops with 75's. Yet, because they are easily packed, many people advocate equipping rifle troops with machine guns. They say that the fire power is always needed and that it should therefore be always available to the troop. This statement is very plausible, indeed. But we are back again to our differentiation between cavalry in direct support of infantry and forming an organic part of the Infantry Division, and cavalry operating in mass.

Which kind are you thinking about? Will you reconnoiter and delay in a series of small groups or will you fight more or less like the infantry would if they could go that fast?

We hear much about the massing of fire of artillery on the vital spot of the defender or on the most likely route of approach of the attacker. To accomplish this obviously desirable matter requires central control over the artillery, either by orders given on the spot or by prearranged plan to effect the massing of fire at a certain time. To long range, high angle fire artillery pieces, this is no particular trick.

Since the attack by envelopment was practically invented by the cavalry we have, since the beginning of time, required that the bulk of our force, and therefore the bulk of our fire, strike the enemy at a vital spot. This means massing of fire, not only by artillery, but by everything else, especially machine guns, that we can employ.

But the machine gun fire is a tailor-made proposition. There are large areas in the brush country of south Texas where you cannot use machine guns at all; on the mid-west plains, machine guns are at their deadliest. Wherever it may be the gun has to fit its cone of fire to the probable target and to the intervening ground. Especially in defense, all guns require careful coördinating. There may be only one or two sections needed here while two or more platoons may be needed there. In short, over a given strip of terrain, some spots will require more guns than others.

Rifle troops are not so restricted. Granted that we defend by garrisoning certain strong terrain features, there will still be large areas in which riflemen will have to be stationed and which are not suitable for machine guns. In other words, even in the most static situation, the passive defense, it is possible to have machine guns organized among such small rifle units that they will occupy ground unsuited to the guns. In this case guns would either be unused or detached to augment the defense in another locality.

If we turn to the opposite type of action—the development followed by a hasty attack—we have a condition which demands the maximum fire power available in the minimum of time. The problem is solved only when the largest force capable of executing a sudden mounted attack, say, the regiment, has its machine guns consolidated under regimental control. Consolidated guns get into action at once with the rifle squadrons maneuvering around them as a pivot. Without being consolidated they do not get into action at all and the attack is foredoomed to the fate history assigns to most *unsupported* mounted attacks.

The regimental mounted attack is of course an extreme case but one not uncommon in past campaigns, especially on terrain approximating our most probable theater of action. Although it may occur but rarely, the unit which is prepared for it is obviously prepared as well for any type of slower moving action, and for any distribution of fire power which less hasty actions might dictate.

Close consideration of all phases of fire support for large

forces or cavalry will show that while some situations will call for massed machine gun fire and others for the attachment of guns to rifle troops, or even platoons, it is evident that during the development phase or the initial stages of action, that consolidated guns afford a leader the best means of influencing the action. Prior to action he can decide what distribution of weapons will give maximum fire power to the main attack and the mobility of the weapons can be relied upon to effect timely distribution. In defense, it can scarcely be argued that central control over automatic weapons will not give maximum coördination.

This policy of separation of fire power is followed by the Infantry, and currently is probably going farther than the mobility of Infantry guns warrants. In the Cavalry Division, extensive experiments indicate that maximum fire-power control is furnished by organizing a regimental machine gun squadron containing all automatic weapons of the regiment which require a crew for their operation.

A great diversity of exercises has clearly demonstrated the superiority of this organization as opposed to others which place guns in lower units. There is no greater fallacy than the belief that in situations calling for massed guns, automatic weapons can be detached from lower units, consolidated under a leader and given a mission in the face of a mobile enemy.

The guiding factor is the availability of the guns for use. A given regiment may have fifty or a hundred machine guns assigned to it. Yet, if they are awkwardly organized, the difficulty of transmitting orders may result in only a few guns getting into action.

At the 1938 maneuvers of the Cavalry Division, two regimental organizations were demonstrated, one with a regimental machine gun troop and, in addition, a machine gun troop assigned to each of three rifle squadrons. The second organization provided for three rifle squadrons and a machine gun squadron of three machine gun troops. The demonstrations showed that in spite of the fact that there were more machine guns organically present in the first-named set-up, when it came to actual control, the machine gun squadron type got over twice as many guns into action in less time. Moreover, it displaced part of the squadron on a separate mission, re-assembled again and contacted its trains to effect ammunition supply.

The POL is right. There is a great similarity between machine guns and artillery when it comes to control. Both should be carefully coördinated for attack as well as for defense, so that the mass of the fire can be placed in the vital spot. Any commander should be reluctant to disperse his fire power beyond his control, which he does when he fails to consolidate his guns, at least in the development phase of the action.

The consolidation of fire power is a principle well known to infantrymen and long ignored by cavalrymen. Of course you can gather so many guns under one head that they cannot be controlled themselves, but you can handle twenty-four guns in the movements demanded during the mounted or mechanized development. If a greater number of guns is needed to serve a particular unit in deliberate action they should be organized as part of a higher echelon and distributed as the slower moving situations warrant. This suggests perhaps a regimental machine gun squadron for hasty action and a brigade machine gun squadron to reinforce the regimental guns when deliberation is permissible.

This is one way of taking advantage of the packed mobility of cavalry machine guns so that they *all* can get into action regardless of what type of maneuver is employed. It will work for hasty mounted attacks where fire support is of paramount importance and for other actions as well.

But what about the cavalry unit which is in the Infantry Division? Here indeed is a different problem. Remembering that we now have a force working principally on reconnaissance, counter-reconnaissance and delay, a force usually split up in smaller groups with control decentralized, it seems logical to infer that these groups will have fire-support problems of their own. Because they will operate at distances greater than those used in combat by other cavalry troops it will be correspondingly harder to distribute weapons to them under all conditions. So it is obvious that this type of Cavalry must organize its weapons decentralized. The rifle troop ought to have organic machine guns under its control. Perhaps experiment would show that decentralization might go even farther.

In performing close-in reconnaissance for Infantry Divisions the cavalry will not often resort to combat as a unit to gain its information. On the other hand, the large cavalry forces must always expect to fight for information or to deny it to the enemy. So in considering reconnaissance and counter reconnaissance of large cavalry commands we may expect that the same requirements for organization will obtain as for other missions.

Thus to organize a unit for inclusion into an Infantry Division we must plan on distributing weapons rather than on consolidating them. Further, we must furnish reconnaissance, signal and other agencies which are commonly accepted as divisional tools in order that our small unit may operate over the wide terrain demanded by its habitual missions.

At the present time the question of fire support shares the peak of importance with that of getting a balance between horse and mechanized cavalry. To solve the problem we must answer this question in the affirmative: "Have we placed our automatic weapons where all, or nearly all, of them can be brought into action to support all types of cavalry action so that the vital point can be adequately covered by fire?"

IV

Our Poor Old Lady wept bitterly over the Italian troubles near Guadalajara. She insists that motorization and mechanization did not get a square deal. Years ago she was sore at Sordet and Von Moltke and said then that by giving either side Jeb Stuart and Nathan Forrest the show could have been finished in 1914, with the star of cavalry very much in the ascendant. There is no one to dispute this so perahps there's something to what she says today. Certain it is that mechanization is even more dependent upon good leadership, organization and control than horse cavalry is, was, and ever shall be.

We have been told that (1) mechanization is a replacement for horse cavalry (2) an amplification of horse cavalry (3) a costly and worthless experiment. Most of our written information and propaganda comes from Europe, where even a most casual perusal of organization tables will convince you that their cavalrymen and in some instances, their General Staffs have had a foot off-base. As General Hawkins pointed out recently, you cannot combine fast tanks, horse cavalry, cyclist battalions and trucked infantry and get anything short of chaos. The commander of such a force should receive commiserating glances from the ghosts of all unsuccessful generals since the year one.

The truth is that Europe knows little of cavalry. No exaggeration is inteded by the statement that the average Riley graduate with a subsequent year or two at Bliss or Knox or their equivalent, is far more competent to express an opinion than, for example, Captain Liddell-Hart. European general knowledge of cavalry faded with Murat and Napoleon—things have changed quite a bit since then. Their leaders who really did get results, such as Allenby and Jack Seeley, now no better than forgotten die-hards, are the exceptions proving the rule.

In 1914 the contrast between the American Cavalryman and his European counterpart approximated the difference between the trench-helmeted Tommy and one of Wellington's breast-plated hearties. The world's infantry and the American Cavalry had long since abandoned the hollow square and the closed-rank charge. Not so the Uhlan and the French lancer regiments. They were meat for machine guns then; they have been groping ever since, swinging from horse to machine, then back to horse or to a heterogeneous collection of bastard troops defying description.

It has been said that the old time Cavalryman could never be classified with a single label. The early dragoons were a sort of mounted infantry, using the horse solely for transportation purposes, like trucked Infantry now proposes to use trucks. It was then found that this scheme did not work so well, whereupon the dragoons graduated into the "heavy cavalry" of the eighteenth and early nineteenth centuries, burly men on massive horses, crushing opposition by simple steam-roller measures. They were, in effect, animated tanks, so heavy that lighter weight cavalry, or Hussar regiments were formed to work in conjunction with the dragoons and to perform the reconnaissance and other mobile missions of more modern Cavalry.

Out of the "heavy" and "light" categories emerged the "light dragoon," who was supposed to combine the qualities of his predecessors and to be an all-purpose trooper. The World War, however, with its great influx of automatic arms demonstrated the need for again typing cavalry according to its manner of serving infantry, as has been discussed. Now, mechanization promises to return us to a modification of the dragoon and hussar days.

American thought, already well advanced compared to European, has had time to digest mechanized Cavalry in a sane way. The force is being developed as units capable of performing traditional Cavalry rôles by the combination of fire power, mobility and shock. Wisely, the organization has been kept homogeneous and a goal set of simplifying the problems of leadership. It is recognized that as long as men dare to dig in for a last ditch defense, or as long as ground won is to be held, the horse cannot be replaced by the combat car any more than the infantryman can be replaced by tanks. It is also recognized that the mechanized units can reach out to be on the spot in many cases where horse cavalry has hitherto been only an unfilled need. Again, we grant the possibility of operating on terrain where the supply problem and the rough ground will eliminate the machine entirely.

We are coming to a crystallization of thought in which mechanized cavalry appears as the dragoons of old. There is, to a degree, a restoration of the shock characteristic, so long missing from cavalry ranks. But rather than a shackling of mobility through weight we see a great extension of mobility through speed and radius of operation. Fire power, too, is enormously increased.

So we have a new classification of heavy and light cavalry. Both can perform many tasks equally well. Each can do certain things that the other cannot do.

It seems fairly apparent that the two should work closely together provided that we do not mix small mechanized units and small horsed units, a mixture that savors of Europe by thoroughly violating the principle of organization already discussed in relation to machine guns.

But to correlate the horse and the machine we must stop thinking along divergent lines. Just now we are wasting much time and thought by considering mechanization from the enemy standpoint rather than being guided by a consideration of the horse and the machine in their relation to one another. This shows most glaringly in the stupid and rather comic efforts to equip horse cavalry so that it will be invulnerable to mechanization, such as the recent inclusion of the fifty-caliber machine gun troop in the cavalry regiment, horsed.

The protection of horse cavalry is of course a laudable objective provided that we do not, at the same time, so organize these protective agencies as to cripple the functioning of the units along normal lines. Present efforts, unfortunately, not only interfere with the smooth control of commanders but actually are unsuited to execute the missions for which they are designed.

Numerous exercises at Fort Bliss in which the T/11 armored car, a vehicle of inferior cross country mobility to the combat car, acted as a harrassing or bulk threat to horsed troops showed that packed weapons, regardless of their accuracy or striking power, are a futile reply to mechanization when used by maneuvering troops.

The exercises fully bore out experiences elsewhere which have been expressed in the anti-mechanization principles now in force at the General Service Schools—

"anti-mechanization agencies must be of greater mobility than that of the troops supported and at least of equal mobility to the vehicles they are designed to neutralize."

Once a packed weapon is emplaced on the ground, it surrenders mobility to enemy vehicles which can refuse an initial objective to maneuver for less costly approaches. There have been attempts to solve the problem by placing a cordon of anti-mechanization weapons about a moving body of troops, but this brings up the fatal objections of any uncoördinated tactical effort—it is hopeless in its absolute lack of weapon control and in its inability to mass fire at critical points. Nor is it practicable for mounted troopers to stand by while machine gunners fight off a mechanized attack.

The simple truth is that the best defense against mechanization is mechanization itself. We might say that we could place a corps of anti-mechanized weapons upon stripped down vehicles with the idea of providing cavalry units with a share of devices having equal mobility to the threat. But why do this when we already have mechanized cavalry? Why not work the horse and machine under such control as will permit each to take advantage of its characteristics, yet with each supporting the other? If the enemy has mechanization can we afford to ignore it by despatching our own mechanization off on individual missions? Rarely.

All of this talk of operating mechanized cavalry a hundred miles or more ahead of an army may apply for the initial day or two of hostilities. But it does not take armies long to meet. The radius of action of all forces, mobile or otherwise, becomes sharply curtailed. Aside from raids which are of doubtful value, the longest jump a mobile force can make is to move from one flank to another behind the lines, a move which, because of traffic difficulties might well be matched by rail movement.

Once contact has been gained, the mobility characteristics of cavalry, both horse and mechanized become matters of great speed over relatively short distances. In other words, mechanization has the battlefield mobility of the horse, plus. Its radius of action will be greater, but not much greater than that of horse cavalry.

Mechanization can operate close enough to horse cavalry to eliminate in great measure the threat of hostile mechanization to the latter. Although its type missions may call for an operation at some distance from horse cavalry with which it may be coöperating, its great mobility permits it to extend greatly our former ideas of what "supporting distance" may be. The effect of such support may well be the elimination of most, if not all, of the heavy, cumbersome, awkwardly controlled anti-mechanized weapons now assigned to small horse cavalry units.

Horse cavalry should operate close enough to mechanized cavalry to execute missions requiring the power of individual troopers and which may have proven impracticable for the mechanized troops.

Both horse and mechanized units should remain within supporting distance because of the enormous and decisive striking power produced on the occasion when it is practicable for the two to operate on the same maneuver. For example, that elusive goal of the generalissimos of history, the wide envelopment, should prove relatively easy for a corps of the new heavy and light cavalry.

What is the answer to this combination from the point of view of organization?

Is it a mechanized squadron within a cavalry regiment? No. A thousand times no. This small force of vehicles has no mass, no shock power. The troopers lack mass as well. The mechanized troops could not take advantage of their inherent mobility without leaving behind a weak force unable to contain itself. All things being equal, such a force might conceivably be defeated by an all-horse or all mechanized regiment intelligently handled as a unit.

The same line of reasoning can be carried on until it becomes quite plain that we must deal in large numbers. At the least we should have brigades, all-horse or all mechanized, and probably increase this to divisions within corps.

To deal in large numbers is to ignore the necessity of cavalry being present within Infantry Divisions as has been discussed under the organization of fire power. For these squadrons, regiments or brigades with specialized missions of reconnaissance, counter-reconnaissance and delay, we must be most careful in stepping from the horse to the combat car. There is no argument, of course, for the use of mechanized reconnaissance vehicles, because these are already of proved value as well as being horse-savers, but the conduct of the specialized missions, with decentralized groups operating as we have already seen, is at present, except as stated, solely the function of the horse. The inability of the mechanized troops to hold ground, the inadvisability of tying them to a modified infantry mobility and the advisability of operating them in mass appear to be sound theoretical reasons for keeping them out of the Infantry Division and Corps. In practice, the Proposed Infantry Division tests conducted last year convinced unofficial cavalry observers that the motorizing or mechanizing of a special reconnaissance unit was a mistake.

So for the present let us keep the machine out of the close-support cavalry. There is plenty to do in working out practical methods of controlling both types of cavalry in the larger, general-support cavalry missions.

Horse cavalry, of course, cannot give up all anti-mechanization measures. But if these were confined to bivouac, or halt protection the horse cavalry leader would be freed from a large measure of the mental hazard of control on the move as well as freeing him physically from the presence of a mass of packed weapons within his approach and march formations. Horse cavalry within a Corps containing one or more mechanized divisions certainly should feel free to maneuver in the presence of a threat from hostile mechanization.

To sum up, let us organize so as to utilize to the fullest extent the mobility inherent to the packed weapon and the combat car. In the first case, we can make cavalry units homogeneous to a degree not possible in the infantry and feel confident that we can distribute the weapons as needed when the time comes. In the second, we can count on having horse and mechanized cavalry in close support of one another and yet rely upon the machine to permit the meaning of "close support" to be extended far beyond what we now consider it.

Both cases illustrate the principle of mass. The combat car strikes in force at distant objectives, yet can protect the horse elements. The latter must be available to mechanization in order to execute the countless missions requiring massed individual troopers for assault. For both horse and machine, fire power must be massed on the critical point. Finally, units which are all-horse, all-mechanized and which separate fire power and movement to the greatest degree are the ones which are the easiest to control.

As has been said, after the command has left the march formation and breaks into small columns for the approach or development, the leader of cavalry troops gets his severest test. The test of the leader is the test of good organization. If a command can employ its mobility to the utmost, if it is capable of shifting formation quickly under protection of the bulk of its fire power, and is capable of being handled by an emergency officer, then everybody, including the Poor Old Lady, should be happy.

All of these things are not for theorizers. In the end, the problem cannot be solved without obtaining the use of several million acres, putting the troops thereon and going through tactical exercises without benefit of rehearsal or prearrangement. All good cavalrymen should work towards the day when the Cavalry Corps of heavy and light, dragoon and hussar, combat car and horse is ready to show the world a new and powerful force. As always, the last word in advancement, the American Cavalry.

☆ ☆ ☆

We seem to have done all we can think of to reduce the army to a state of semi-impotence. We dispensed with the loyal services of famous Irish regiments, whose colors prove the contributions they made to the growth of the British Empire. With the regular battalions went time-honored militia formations, and Ireland was not allowed a volunteer or territorial force, a prohibition which is simply grotesque. This was a grievous loss to the army, *more so almost than the disappearance of famous cavalry regiments* by linking or amalgamating with others and reducing the residue to temporary impotence by what looked like a violent transformation from their natural method of locomotion to one that even now has not been tried out with anything approaching appreciable result.

—*The United Services Review*, London.

May I Say a Word for the Horse?

By One Who Rides When He Must

Not long ago, a newspaper editorial made some such casual statement as that "Practically all military experts agree that the horse is obsolete." One need not begin the usual profound argument on this, beginning with a demand for definition of terms like, "What is an expert?" But it is necessary to point out that the expression quoted above is a marked symptom of the current disease—wishful thinking.

It is certainly a reproach to a mechanized civilization that Old Dobbin is still amongst us. It is a great pity, from a good many standpoints, that the horse is not obsolete, and one can understand and sympathize with the irritation the sight of him inspires in the engineer and the engineer's fans—all of us in the latter classification. We have all been benefited by modern improvements in health, education, housing, transportation, communication, leisure, and amusement to such an extent that we have conditioned our stimuli to the anticipation of even greater gifts on the morrow. That anachronism, the horse, faintly recalls to us the admonition, "Remember, man, that thou art dust. . . ."

Well, you say, the horse is all right in his place. Let the rich ride horses in shows, at polo, in the parks; let the middle classes play at dude ranching. But surely, when the last fire-department team of Dan, Dan, and Dan is relegated to the pasture and replaced by a ripsnorting mechanism that will cut their time to a fire to a mere fraction, it is incumbent on the Army, of all classes of people, to give up its Indian-fighting complex and plan to go to war Twentieth Century style. What is the matter with you fellows? Is it nostalgia for the Good Old Days, or that you're afraid you won't have any polo to play, or that you think horses are romantic, or you're just dead between the ears, or what?

A soldier of my acquaintance answers—"Soldiers are always being accused of stodginess and lack of imagination. If being stodgy implies that conservatism that makes one look before he leaps, then let's plead guilty. Lack of imagination? We'll fight that charge. It is one that rests with more justice on the other side."

Let's take a look at the horse, no new model of which will be produced this year. (No new model of John Soldier will be presented, either.) From a perch atop his quarter-deck, you can see a lot more of the country than you can from the ground, and if you're interested, just work out the distance the horizon recedes when you mount a tall chair. The horse is a narrow beast. He can pass between tall saplings off the road. It is true that a tank will make short work of the saplings. But even if you don't mind trampling the saplings and creating a disturbance for the enemy to see, either directly or in air photos, the tank has to slow down to do it. If it does slow down, what price motor speed compared to the horse? If it doesn't slow down, that tank will be a wreck. Don't send any of your 60-mile tanks against underbrush they'd easily overcome at slower speeds. The horse has good axle clearance, and no high centers in the road ever disturb him. He has a very short wheelbase, and can change direction on a dime and give nine cents change, where mechanical vehicles can't turn on a thousand dollars in reichsmarks.

Like his pal of several thousand years companionship—John—the horse has reserve fuel tanks where you'd never suspect them and can always move a half mile farther unless rigor mortis has set in. He will back without grinding gears, and whether night, fog, dust, or noise assail his driver and himself, he will never dodge any bridges and jump into rivers. He does this without lights, too. Furthermore, the horse is one of the quietest of animals. He neither barks, snarls, nor crows, and his whinny is very rare. In emergency—and any time the rider considers it to be so, that's an emergency with the horse—he will swim, and the last motorcycle to attempt this has not yet been dredged up to find out what made it go down.

The horse has three speeds, walk, 4 miles an hour; trot, 8 miles an hour; gallop, 12 miles an hour. Most models are equipped with an overdrive, the extended gallop, 16 miles an hour or higher. These speeds are pretty slow, but they are convenient to figure. They're very nice to be able to count on—and I mean definitely. And the trouble with the last war, as somebody has said—I guess he wasn't an expert—is that the difficulty on the battlefield lay, not in failure to go thirty miles an hour, but failure to go 2½ miles an hour.

One soldier—one piece of transportation. That has its advantages, too. You may get a lot of soldiers into three trucks, but suppose you want them at seven places? You can't send a messenger from one to the other without tying up the arrangements for movement between other points.

A great many mounted men can be controlled by voice.

HORSE, M-39. Equipped with self-contained direction finder.

and whistles or bugle calls will enable the control of even more. They may be started, stopped, turned, or their formation changed, in the dark—even in the midst of a forest, or while moving faster than a man can run. The principal handicap to even weak attempts at this with motor vehicles is that you can't drive a motor vehicle and watch for signals at the same time. (You can't hear any signals at all.) But a horse will continue the general direction at which you last aimed him, meanwhile avoiding trees and other impediments, and surmounting obstacles impassable to vehicles.

Great Britain has been engaged in de-horsing her armed forces. Why? It is said that there is a shortage of horses in the country; that obtaining them and their replacements in war from the Dominions would entail the use of too many ships. The implication is that ship bottoms will be needed for food; that acreage which produces fodder will likewise be needed for food.

The Poles are not de-horsing. The greatest horse country of Europe, with vast forests and muddy bogs to traverse, maintains, according to Hanson W. Baldwin, military expert of the *New York Times*, forty regiments of cavalry.

The Russians are not de-horsing. They have, it is said, the largest number of mechanized units in the world. They also have, according to The CAVALRY JOURNAL, the greatest number of horse-mounted men under arms anywhere, and reports credit them with more mounted men than the continental U. S. has combat soldiers.

The Japanese are not de-horsing. A press dispatch of 1937: "The prolonged rainy season having bogged down a large part of the highly mechanized Japanese forces, General Terauchi called on his cavalry. . . . An estimated 20,000 horsemen who thundered across pontoon bridges. . . . A few days later, with dry roads, the mechanized force . . . opened another wide breach in the Chinese lines. . . ."

Brigadier General Henry J. Reilly, of the famous Rainbow Division, has written, "Cavalry is NOT a thing of the past. Neither has it got to go to gasoline and oil to exist." General Reilly, who has spent most of 1938 in Spain, was writing from Zaragoza, and said that he had had a talk with General Monasterio, cavalry leader of the Insurgents, who told him that early in the war, no division commander wanted to be bothered with cavalry. Now, he said, they all want it.

The Italian campaign in Ethiopia was a victory for animal transportation—horse, mule, and camel, which sat around Addis Abbaba waiting for the big shots to arrive with the motors.

The horse must go. Yet Lieutenant Colonel Lancelle, German Field Artillery, writing in the *Militär-Wochenblatt* for August 5, 1938, says: "In 1918 . . . the artillery had lost its mobility—which, as some are inclined to believe, was due not so much to the shortage and poor condition of the horses as to the lack of care and interest in their welfare, and the ignorance displayed in the handling of the teams. During the World War an officer learned to fire within a very short space of time. Expert care and training of the horses, as well as the knowledge of what to expect of them, usually calls for life-long experience, intensive work, self-control and self-training. With the motorization of the staffs, the inability to judge the capacity of the horse and the disregard for his welfare have become even more widespread than they were during the World War." This from a senior officer of an army in which the high command rides in automobiles, but the guns of the division are still drawn by horses.

The horse must go. And how he went in the Ethiopian campaign! In December, 1935, the Italian forces had 78,000 animals in use there, according to the *British Journal of the Royal Army Medical Corps*, August, 1938.

The horse must go. "Some of the horses of the 2d Australian Light Horse Brigade and the 7th Mounted Brigade had not had a drink for *84 hours*."—*The British Cavalry Journal*, October, 1929. Try that on your V-8.

Or try anything on your V-2 of say, 1905, against a 1939 model. The Chileans, at Madison Square Garden, just got through exhibiting a master timbertopper, 27 years old, the Irish a 26-year-old; and *Dakota* and *Ugly*, great U. S. Army jumpers, are 12 and 17, respectively. *Kismet*, a 33-year-old jumper, performed at Fort Myer, according to the papers, on March 15 of this year. The equine power plant improves with age.

In fact, there are many mounts today whose ability to put out top performance has outlasted that of the riders who trained them and grew up with them.

Before we pass a resolution repealing the horse, let us consider his chassis, perfectly streamlined by nature, equipped with silent springs and one-shot lubrication, guaranteed to last for a lifetime. Most remarkable of all, the horse, with few protruding fenders, will straighten out his own dents if given a little time. But since few people have ever successfully house-broken a horse, no doubt the horse must go.

Thank God he hasn't gone yet.

The Phillips Military Saddle

By Colonel Albert E. Phillips, Retired

The Phillips Military Saddle was fully described in my article published in the May-June, 1935, issue of THE CAVALRY JOURNAL under the caption "The Phillips Cross Country Saddle," as it was then called. As this new saddle was designed as a modern *forward-seat* saddle, I shall discuss in this article, among other points, the saddle in its relation to the "forward seat."

Knowing full well the aversion to a change in riding methods, it was with some reluctance that I acceded to the requests of many of our accomplished horsemen to design a saddle which would enable the American Officer to easily acquire that "form" and seat so essential in military riding—namely, the modern forward seat.

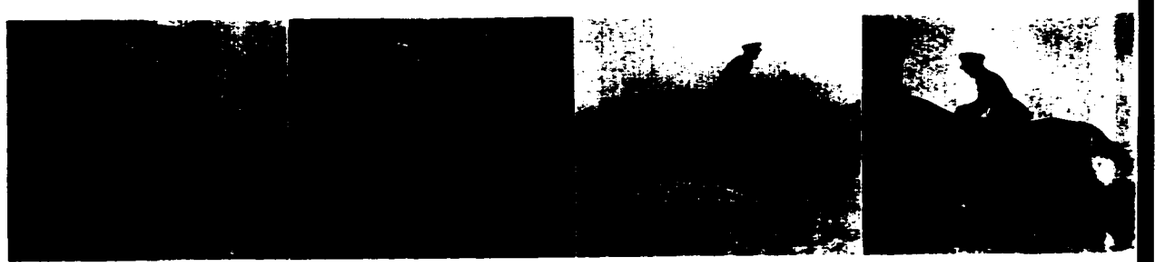
For several years our riding instructors, too, had asked for a saddle that would make it possible for the students to easily assume the type of seat they were being taught, as many were the faults found in existing type of saddles: some were too short; others were too flat; some were too wide where the rider's legs passed over the seat; or the throat was convex when it should be concave. And the truth of the matter was, there were grounds for these complaints.

It has only been for the past few years that we have really begun to appreciate the many advantages of the "forward seat." The Italians were the first to adopt the forward-seat position for the rider, it differing from the French position in that in the latter there is a tendency toward riding with the weight somewhat to the rear and to keeping the horse closely collected and flexed. However, as Cavalry became more mobile, the French also gradually moved the seat forward.

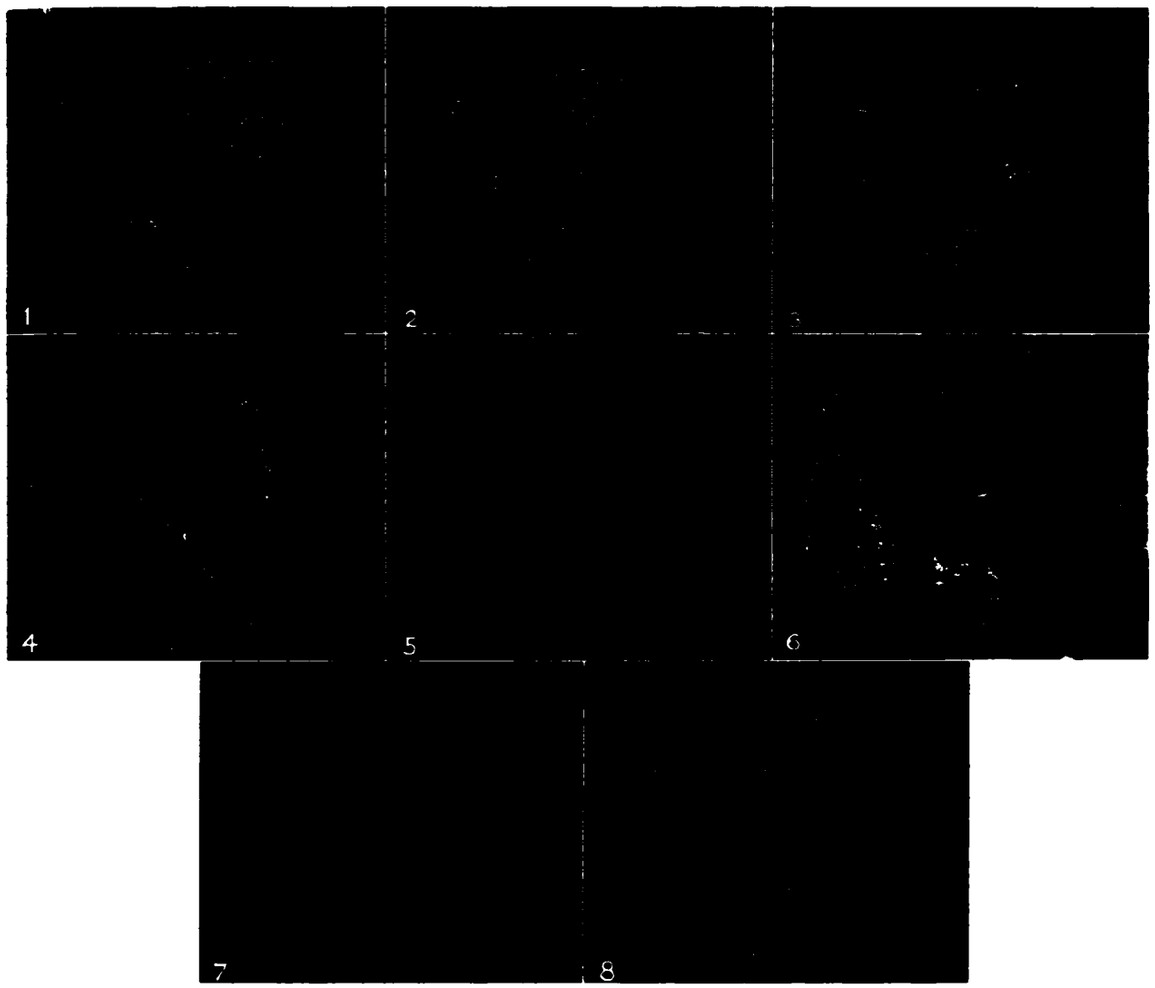
The modern "forward seat" is readily attainable, and naturally a rider is assisted in assuming it with a saddle especially designed for it. Some may ask: Why the "forward seat?" The answer is briefly: The "forward seat" is both technically and scientifically correct for all types of military riding, from ordinary marching to cross-country work, and it is the most secure position for the rider and the easiest for the horse. For High School work, however, and for polo, other "seats" perhaps may be found more desirable, depending upon the whim of the rider.

Let us bear in mind that the horse carries approximately five-ninths (5/9) of his own weight upon his forehand and that this natural balance should be disturbed as little as possible. In military riding, the first consideration of a "seat" should be one which places the rider in a position favorable to the horse. By so doing, the rider will be compensated by getting out of the horse all that it is capable of giving with the least effort. And the horse is capable of giving his utmost when a preponderance of the rider's weight is carried forward of the horse's center of motion, so that the horse's loins and propelling members (hindquarters) will be free and unhampered! But in addition to the rider's weight being correctly positioned, it is important that the horse be permitted to travel much as in nature, with a normal or fairly low carriage of head for all cross-country work where speed and ability to negotiate obstacles are required. The same principle applies to ordinary marching. By these methods we tend to maintain the natural balance of the horse. Just how far forward the rider's weight should be carried depends entirely, of course, upon the gait of the horse.

Lt. Colonel Harry D. Chamberlin, one of the Army's



1—Seat all wrong. Rider slouched on cantle, and stirrups too short. Weight too far back on the horse. Unfortunately, quite a common sight. 2—Correct seat at posting trot. Stirrups at correct length for cross-country riding and hunting. Should be about two inches longer for the military seat. 3—Incorrect seat at gallop. Rider's loins convex to the rear, buttocks under him and crotch too far forward. Seat lacks grace and security. 4—Correct "forward seat" at gallop, with stirrups shortened for hunting and cross-country work. Buttocks to the rear, but with weight inside of base of support; no weight on cantle.



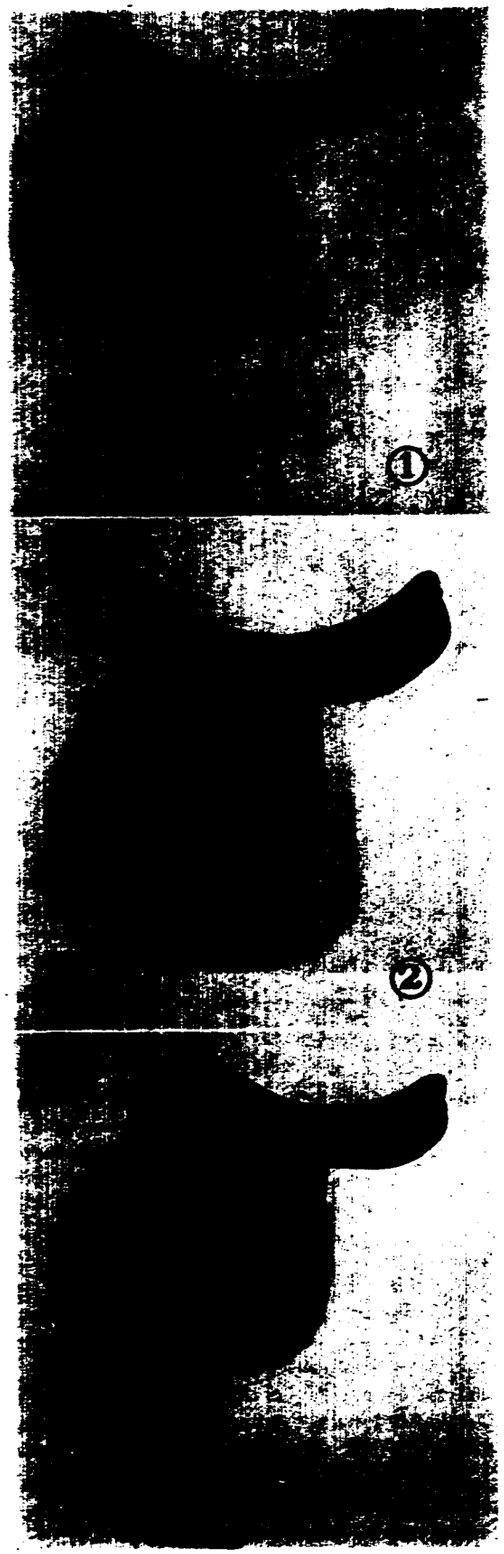
1—As a training saddle. 2—As a field saddle. 3—Training saddle, small man. 4—Field saddle, small man. 5—Training saddle, medium man. 6—Field saddle, medium man with field officers equipment. 7—Training saddle, tall man. 8—Field saddle, tall man.

most distinguished horsemen, in discussing the "forward seat," states:

"One of the greatest errors which prevents the rider's assuming a correct forward seat, and which leads to the grotesque positions often seen, results from two things; first, saddle seats are frequently too short for the riders; and, second, the rider endeavors to push his crotch and buttocks too far forward in the saddle. The crotch should be in the throat or deepest part of the saddle, and the fleshy part of the buttocks should be kept well to rear, but due to the rider's constant forward inclination of the body from the hips there should be practically no weight on the cantle. Assuming a proper seat on the other hand necessitates a properly made saddle with the throat or deepest part of the seat a little in front of the center. The forward seat is easy to acquire, although one unaccustomed to it will at first become tired in the loins. After having acquired it through practice, however, both the rider and his horse will outlast the man who leans backward, and the horse which carries the rider's weight on his loin."

The "forward seat" is uncomfortable to assume with a saddle not designed for it; that is, with a saddle that slopes downward towards the cantle. The majority of saddles we have are of this latter type—with the low point of the seat in rear of the central part of it and the stirrup loops too far toward the rear; and to make matters worse, most of these saddles are placed so far forward upon the horse as to raise the pommel higher than the cantle. With a saddle not designed for the "forward seat" and with pommel higher than cantle, it is practically impossible to even assume the forward-seat position, let alone riding it with any degree of comfort.

Nor is comfortable riding assured by the use of a for-



ward-seat saddle *if it is improperly positioned;* for even with a forward-seat saddle, if it is placed upon the horse in a too forward position, with the pommel higher than the cantle, the rider will be riding the cantle and reaching for his stirrups and to that extent be uncomfortable, as the stirrups of forward-seat saddles are necessarily positioned further forward. ***But with a correctly designed forward-seat saddle, properly positioned upon the horse,*** that is, with the bearing of the saddle approximately level, the rider can quickly adopt the forward-seat position and thus ride with ease and comfort, grace and security, and in balance with the horse.

(NOTE: Before deciding upon the location of the stirrup loops, I contacted the service boards and also several of our able riders, and all were in agreement that the front edge of the stirrup loops should be placed three inches from the front edge of the saddle.)

Let us now discuss briefly the "low point" of the seat of the saddle. The majority of military riding saddles were so constructed as to have the low point in the central part of the seat, but in some cases this low point has inadvertently been moved backward or forward, depending upon how the saddle was broken in. It is obvious that if the pommel is raised, as occurs when the saddle is placed too far forward, the low point will be in rear of the center of the seat.

Many riders place their saddles too far forward. A glance at the illustrations in our CAVALRY JOURNAL and other riding magazines will bear out this statement. In discussing this matter with an officer, he stated that he had been instructed to place his saddle as far forward as he could put it. I am sure that what his instructor meant to convey was that the saddle should be placed *well forward.* There is a proper place for a saddle. If it is placed too far forward, its bearing will be under the pommel and cantle, resulting in possible injuries to the horse at these points of support. A saddle too far forward will also interfere with the movements of the horse's shoulder blades and possibly bruise the broad, back muscle over the withers and its connections with the shoulder blades, as well as cause injuries to his loin. Although it has been stressed that the saddle should be well forward, its bearing must be *on a level,* even though it necessitates moving the saddle slightly rearward. The Phillips Military Saddles now being produced will have the low point approximately one inch forward of the center of the seat. Some other minor improvements in the saddle are being made as a result of the recent six-months' durability test.

The Phillips Military Saddle and its accessories were officially approved for adoption by the War Department January 25, 1937, and designated Model 1936. However,

1—As a field saddle, showing cantle roll support attached. 2—The correct positioning. Note that cantle is higher than pommel, as it should be. 3—An incorrect positioning. Note that pommel is higher than cantle. In this position it would be difficult for the rider to adopt the "forward seat," and if he rides the cantle he will have difficulty in reaching the stirrups and knee rolls.

this saddle was actually produced in 1934 under the name of the Phillips Cross-Country Saddle, official photographs of same being taken November 6, 1934. After completing this saddle I assisted in the design of a training saddle, M. 1935, and a field saddle, M. 1935. These three saddles were submitted to both the Cavalry Board and the Field Artillery Board for test and, after having undergone very strenuous test, the Phillips Military Saddle was recommended for adoption by both boards. Recently the 1st Cavalry Division Board also tested the Phillips Military Saddle and likewise recommended its adoption, thus gaining the unanimous approval of the three leading testing agencies for this saddle.

The Phillips Military Saddle Equipped for the Field: In a previous article I mentioned the many advantages for both rider and horse of having one saddle only for daily riding and for the field; but the greatest value of the Phillips Military Saddle, as I see it, is as a *field saddle,* for it is in the field where the horse must be given fullest consideration. The elimination of extended side bars, which unduly bear upon the horse's loins, is of primary importance. We have all seen many horses disabled by extended side bars of field saddles. We have likewise seen many horses disabled by saddles which have narrow pommel arches, and by saddles which have uncomfortable seats. Such injuries are caused by poorly designed saddles. But many injuries, too, are caused by faulty saddling and riding. No matter how perfectly a saddle may be designed, if it is not properly positioned upon the horse and correctly ridden, injuries will occur. In the design of the Phillips Military Saddle, every projection of other saddles which rubbed either rider or horse was eliminated. I wish to emphasize one important point in riding this saddle in the field: Forward-seat saddles are designed to facilitate easy riding, whether in a "forward seat" or an upright position, assuming of course that the saddle is on a level bearing surface. However, a forward-seat saddle will be somewhat awkward and perhaps uncomfortable for the rider who in the field habitually rides the cantle, and especially so if the pommel is higher than the cantle, as in that case he will be reaching for the stirrups.

In addition to meeting the demands of the three testing boards, we have met the expectations of the Army's leading horsemen, many of whom have written in highest praise of the merits of this saddle. In conclusion, may I quote Major Wm. B. Bradford of the Cavalry Division and former Olympic Team Captain, who wrote: "The saddle was used during both the Provisional Cavalry Division Maneuvers at Balmorhea and the Third Army Maneuvers in the vicinity of Fort Bliss. It has also been ridden for polo, hacking and jumping, and has given satisfaction in every phase of its use. I think it is a splendid piece of work that is sure to win approbation of the horsemen of the Army."—It is my ardent hope that the Phillips Military Saddle will prove a satisfaction likewise to each and all of our Army riders.

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CORRECTION

Revised Tables of Organization for the Cavalry Horse Regiment

Manning Charts of the revised tables of organization for the cavalry horse regiment appeared in the January-February issue of The CAVALRY JOURNAL. Three corrections should be made:

Page 60—Machine Gun Troop; Troop Headquarters, the second saddler shown at the head of the ammunition section should be the ammunition corporal.

Page 62—Headquarters and Service Troop; Forward Echelon, in the Scout Car Platoon, one of the platoon sergeants shown should be the platoon commander.

Page 63—Rear Echelon; the administration platoon should be the transportation platoon.

REVISED TABLE OF ORGANIZATION

HEADQUARTERS AND HEADQUARTERS TROOP, CAVALRY DIVISION, HORSE

REAR ECHELON

GENERAL STAFF CAR

C 1 GSO
4 Bn
(6 Bn,W)
Station Wagon

MILITARY POLICE SECTION

MP MP MP MP MP
Motorcycles

MP
2 SpPrO
2 MP
5 MP Cpl
Truck

MP Pro Mar
Pro
2 MP Sgt
Passenger Car

SERVICE GROUP

Kitchen: C MS; Ck Ck; Ck Ck
Combat: C (Lt,W); Sup.Sgt; Fl.Sgt
Trucks

TROOP HEADQUARTERS

Mec Mot Sgt; Mec
Truck

Mec
C Capt
1st Sgt
2 Bug
Cl
Station Wagon

SPECIAL STAFF, POSTAL DET. & BN. HD. SP. TRS.
(Moves by echelon)

C 18 Bn (28 Bn,W) — Trucks
C 19 Bn (28 Bn,W) — Trucks
C 5 SpSt0 (7 SpO,W) — Station Wagons
C 4 SpSt0 (7 SpO,W) — Station Wagons

FORWARD ECHELON

SCOUT CAR SECTION

D CC; G R — S — D Lt; G R

COMMAND SCOUT CARS

S — D St; G R — D 2dLt Bn (3dLtBn); G R — D 2dLt Bn (3dLtBn); G R

COMMANDING GENERAL'S GROUP

C GSO; GSO GSO; GSO — Passenger Cars
C CG; CS A; A
C CWO (1 GSO,W) 3 Bn (5 Bn,W)
C SigO (1 GSO,W) 2Bn AirO (4 Bn,W) — Station Wagons

SERVICE GROUP

Kitchen: C MS; Ck Ck; Ck Ck
Combat: C Lt; Fl.Sgt
Trucks

Horse Group

M (GS)		Cpl Sad	Sgt Hrs
M (GS)		M (CG)	
M (GS)		M (A)	
M (GS)		M (A)	
M(W) (GS,W)		M (CS)	
M(W) (GS,W)		M (GS)	

LEGEND

CG = Commanding General	MP = Military Police	G = Gunner	Sig = Signal
CS = Chief of Staff	Sgt = Sergeant	AG = Asst. gunner	CW = Chemical Warfare
GS = General Staff	Cpl = Corporal	Hrs = Horseshoer	Tr = Troop
Ex = Executive	MS = Mess Sergeant	Sad = Saddler	SpTr = Special Troops
CO = Car commander	SS = Supply Sergeant	Bug = Bugler	SpSt = Special Staff
O = Officer	Bn = Enlisted man	St = Stenographer	Pl = Platoon
Pro = Provost	C = Chauffeur	Mec = Mechanic	MC = Message center
Mar = Marshal	M = Messenger	Ck = Cook or cooking	Op = Operator or operations
Adjt = Adjutant	D = Driver	R = Radio	Int = Intelligence
Maj = Major	S = Scout	Sup = Supply	Ra = Rations
Capt = Captain	Arm = Armorer	Sta = Stable	Mot = Motor
Lt = Lieutenant	Cl = Clerk	Com = Communications	P = Pack
A = Aide			(W) = War only

REVISED TABLE OF ORGANIZATION

RECONNAISSANCE SQUADRON, MECHANIZED CAVALRY DIVISION, HORSE

SQUADRON HEADQUARTERS (WAR ONLY)

S S S S Cpl — Motorcycles
M — Com Sgt
C Adjt; Sgt-Maj; Cpl-Bug; Cl — Station Wagon
Scout Cars: D Com.O; R MC; Cpl Sgt
Scout Cars: D Int-Op O; R Int-Op; Cpl Sgt
D Maj; R; Cpl Cl

RECONNAISSANCE TROOP (ONE IN PEACE, TWO IN WAR)

RECONNAISSANCE PLATOON

(Four in Troop)

D Sgt; G R; AG(War) — S — D Lt; G R
D Cpl; G R; AG(War) — S — D Sgt; G R
Scout Cars

TROOP HEADQUARTERS

REAR ECHELON

Maintenance: Mec Mot Cpl; 2 Mec; Mec(War)
Kitchen: C MS; 3 Cks
Mec — Mot Sgt
Combat: C SS; 2 Arm — Trucks
Combat (W): C(W)
C 1st Sgt; 2 Bug; Cl — Station Wagon

FORWARD ECHELON

Scout Cars: D Lt; R; G R — D Capt; G Com; R Sgt
S Cpl — (War)
S — (War)
S — Motorcycles
S

REVISED TABLE OF ORGANIZATION

HEADQUARTERS AND HEADQUARTERS TROOP, CAVALRY BRIGADE, HORSE

REAR ECHELON

TROOP HEADQUARTERS

Horse Section

1st Sgt — Capt
Cl — Sta Sgt
Bug — Bug
Ck — Ck
Hrs — Ra
Sad — (Capt)
M

Motor Section

Mec — Maintenance: C Mot Sgt; Mec

STAFF AND SERVICE GROUP

Staff: C Adjt; Sgt-Maj; 2 Cl
Station Wagon
Kitchen: C MS; Ck Ck
Combat: C SS
Trucks

FORWARD ECHELON

COMMAND POST GROUP

Horse Section

Radio Squads: Op R Sgt; Op Op; D P; Op R Sgt; Op Op; D P
MC Cl MC Sgt; M M; M (CG); M (Ex); M (Int-Op-O); M (A); M (A)

Motor Section

M M — Command Post Car
C; Panel & Code Cpl; St R — Station Wagon

COMMANDER'S GROUP

Horse Section

S2,3 Cl — Com O; M M; M M
Ex CG; Int-Op-Sgt Int-Op-O; A A

Motor Section

Passenger: C — Car
Command: D Com Sgt; G R — Scout Car
D CC; G R — S — D Lt; G R — Scout Cars

FALSE LESSONS IN COMBAT AND MUSKETRY EXERCISES

By Brigadier General H. S. Hawkins, Retired

The following article was written at Fort McKinley, P. I., in the spring of 1928, after a conversation with General Wm. Lassiter on the points involved. General Lassiter asked me to put in writing for him some notes on the subject. I did so and gave the paper to him unsigned. He sent it to the War Department for comment. It was sent to the Infantry Board at Fort Benning, Georgia, and given consideration for six or eight months. What the result was or whether suitable modifications were ever made in the Training Regulations in regard to Combat Firing and Musketry I do not know. As I had not signed the paper, I did not receive any official copy of the report of the Infantry Board, although someone informally sent me a copy. This copy was loaned to someone to read and never returned, and is thus lost to me.

My original paper was shown to some officers at Fort McKinley who returned it with some arguments against the ideas contained in it. I showed the paper, with the arguments included, to General Lytle Brown whose short note in comment is given as follows:

(Note) "General Hawkins: It looks like you have the better of the argument. The question is one of balancing the advantage of fire power against the disadvantage of vulnerability.

If you seek fire power without regard to vulnerability then the losses will destroy the moral value of your force. A body of men will stand so much killing and no more (British at New Orleans, Union troops at Cold Harbor —narrow escape in the latter case.)

If you crowd men and guns in places where they are quite vulnerable they may have superior fire power at the beginning yet they will be defeated on account of their vulnerability.

Cover — producing a low vulnerability — has always been one of the governing features in tactics and cannot be neglected. For this reason I think that you have the best of the argument. (Signed) Lytle Brown."

After much study and reflection, and considerable experience in teaching these principles to troops for nearly ten years, I am still of the same opinion, and submit the article to readers of the CAVALRY JOURNAL with the added note that, so far, the lessons from the wars in Spain and China seem to support these views very substantially.

A combat exercise with ball cartridges, as practiced for the training of small units, involves musketry training which is designed to teach an effective collective fire.

In musketry exercises we do not concern ourselves with the tactical handling of these small units but merely practice fire problems in order to teach collective fire principles including fire discipline, fire control and fire distribution. In these exercises the number and distribution of hits on the targets which represent the enemy are taken to indicate excellence in this practice.

This training is supposed to fit in with tactical principles in combat exercises. In my opinion it does not fit.

We cannot disassociate fire problems wholly from tactical dispositions without teaching false lessons. Musketry exercises teach unit leaders to control fire while the men are out in the open with no cover. They do not teach the control of fire when men are properly taking cover. The methods of control while paying no attention to cover will not work when the unit must take cover.

The result is that we see combat exercises in which insufficient attention is paid to cover and the advance under cover, and too much attention is paid to firing and getting hits on targets at ranges that are too long. I object therefore to both musketry exercises and combat exercises with ball cartridges.

Furthermore, I object to the basic principle that our riflemen in the attacking echelons must fire at ranges greater than two or three hundred yards in order to advance. There are of course exceptions. But I believe that on almost any terrain over which attacks are made in the future the advancing riflemen will not be able to see farther than two or three hundred yards farther. The stationary supporting units may often take advantage of hills or slight elevations or houses, etc., to see and observe their fire at long ranges. Even the machine guns that are following their battalions in close support can usually find some fire positions from which to fire at ranges between 1,000 yards and about 500 or 600 yards. But the riflemen, moving by bounds, from cover to cover, will seldom be able to see and shoot at an enemy farther than 300 yards without exposing themselves unduly.

But even when they can see over the ground for long distances they should not be required to build up firing lines at ranges greater than 200 or 300 yards.

To begin at the beginning, the first objection I have to combat exercises with ball cartridges is that the targets are invariably placed in a manner that gives the soldier a very false impression of what he can expect to see of the enemy.

Even though targets were properly placed (which is in itself a very difficult thing on account of the labor and expense involved) combat exercises with ball ammunition now require firing lines to be built up in such a manner that the men can fire upon and hit the target. This causes them to expose themselves in a way that would be to such advantage to the enemy that the line would never move forward again.

Tactical exercises *without* ball ammunition and combat

exercises *with* ball ammunition teach opposing principles. We teach in one form of tactical exercises the moving forward of skirmish lines taking full advantage of cover by all possible means. This is done under the leadership of platoon and squad leaders. Team work and coöperation between these small units is shown by the avoidance of crowding upon each other and by the avoidance of any effort on the part of any unit to occupy a piece of ground which really should belong to another. Each unit must consider the units on its right and left and accept the ground which naturally falls to it, rather than impose itself upon the ground belonging to another unit. Otherwise, bunching, exposure and serious losses occur. All this is done in a tactical exercise, so that the soldiers finally arrive within a very short distance of the enemy line before exposing themselves, and then make a final rush with the bayonet. If one watches such an exercise he can see that it would be impossible for any unit the size of a squad or a platoon to build up a firing line that could see anything to shoot at and not have that firing line very much exposed itself. So, with one hand we teach the men to keep under cover to the very point of moving forward with the bayonet, and then, with the other hand, in these so-called combat exercises, we teach the men always to find a place where they can shoot at the enemy and therefore expose themselves. Thus the teaching is contradictory.

The whole theory of combat exercises is built upon a false idea that infantry advancing upon an enemy in position can outshoot the enemy, thus gaining what is called fire superiority; whereas, as a matter of fact, the enemy in position always has the advantage in that he has had time to hide his men, to dig at least hasty entrenchments, and to post his machine guns in fox holes or something better if the position has been occupied several days. The attacking infantry rarely sees the enemy and has no definite targets to shoot at. With the enemy the exact opposite is the case, because if the attacking force builds up firing lines, it can always be seen by a watchful enemy. Each firing position that the attackers take has to be selected hurriedly without any preliminary careful reconnaissance and naturally cannot be as good as the firing position of the enemy. The front lines must necessarily be thin, the deployment of force in depth being the only formation that troops can use to avoid annihilation by enemy machine guns, which makes it impossible to have a heavy firing line in front. So that to attempt to gain superiority of fire in this manner is futile. Superiority of fire, which is simply a fire which holds the enemy down so that moving troops can advance toward him, must be supplied by troops using what is called the "fire of position," principally with machine guns and artillery.

In a zone of action, on most kinds of terrain, the places where a fire position for a unit can be found and at the same time cover obtained are very few. It is from such places that supporting fire can be delivered and from such places only. These places are not going to be found by all units. Most units are going to find that cover is incompatible with fire. They should take the cover and make no attempt to fire.

The good fire positions should be quickly occupied by machine guns in order to let the riflemen continue their rôle of moving forward.

Cover for a few sharpshooters can frequently be found that enables them to fire with very little exposure. This kind of cover exists in spots, not in long lines for a whole unit to occupy. It is true that a man can often get cover by lying down perfectly flat. The moment he raises his head and props up his shoulders so as to enable him to fire he becomes very much exposed, except in these infrequently found spots where both cover and fire are possible.

Fire from these spots, to pick off machine gunners when they have been sighted, can be permitted at any reasonable ranges. The other men should not expose themselves to fire, because if they do, it is the enemy machine guns that will get *them*. Riflemen in the attack cannot compete with machine guns in the defense.

"Fire superiority" is a term that was created by the Germans some thirty or more years ago, when they deliberately filled up their firing lines in the attack to one man per yard in order to gain a heavy overwhelming rifle fire during the advance and just before the assault. The theory was that it was better to accept the losses that this crowded firing line would bring rather than to weaken the firing line and fail to obtain the necessary volume of fire, thus risking a repulse and subsequent losses that in the end would be greater than if a sufficiently strong firing line had been used in the beginning. But this was before the day of the machine gun.

With the development of the machine gun, firing lines had to be thinned out. It is no longer possible to gain that fire superiority with such thin lines, even if the theory were correct, which is very much doubted.

The principal obstacle to the attack is the machine gun, and the only hope of the attackers is to keep out of sight, at least when halted, and to gain superiority of fire over the hostile machine guns by artillery and our own machine guns firing from carefully selected positions that afford both cover and fire action. And while this is going on, the hostile machine gunners should feel the menace of constantly approaching riflemen who show themselves only for a few seconds at a time and then while moving.

It is entirely probable that the fire from a defensive position will be, more and more, from machine guns, and less and less from riflemen, who will be kept under cover to execute counter attacks when the attacking riflemen have gained the position or ground in near proximity to it.

The duel between opposing infantry riflemen in order to gain *fire superiority* has therefore disappeared except at very close ranges. The rôle of the modern rifleman in attack is to get forward under cover with the support of machine gun and artillery fire, and to leap upon the enemy at close quarters. He must be trained to advance from cover to cover and to withhold his fire until he can see the enemy at close range.

All of these remarks apply up to the time the attackers reach a point within 300 yards of the enemy. After that there may probably be more firing by the attackers preliminary to a rush, all depending upon the nature of the ground. But even within 300 yards it will be found often that the enemy has the advantage if we attempt to engage him in a fire fight; and if there is sufficient supporting fire from artillery and machine guns it would be better for the troops of the front line to rest under cover, if there is any, until the moment for the final assault. In other words, they should rest in the most forward cover they can find before this assault, and the distance of the assault will depend upon the distance of this final cover from the enemy's line.

The main training of infantry in attack should be to get forward by skillful movements, taking advantage of the ground, and then to leap upon the enemy for close combat. Halts during the advance should be made only when there is cover. Halts should never be made on ground exposed to observation and fire. The object should be to get forward, not to shoot. On flat, exposed ground, to halt is to fail. Halts are made only under cover and to gain breath, to escape from a burst of annihilating fire, to rectify alignments and intervals, to reëstablish coöperation between units and to regain order and control. For this purpose, all movement forward should be on the principle of movement by bounds.

Fire is resorted to only when the enemy is not entrenched but exposed like the attackers themselves, and then only at very close ranges, to resist counter attacks or in actual close combat. Sometimes fire will be required when the infantry rifle units have gotten so close to the enemy that the covering fire of the machine guns and artillery is masked and must lift to be placed on enemy rear echelons; then, at very close distance, rifle units may resort to their own fire.

Under such circumstances it is practically impossible for platoon commanders and squad leaders to give directions and instructions regarding fire distribution although they may perhaps point out important targets, like machine guns.

NOTE: If the enemy exposes himself and presents a good target, it is not intended to prohibit riflemen from firing at him, provided they themselves are in good cover and not exposed by so doing. But even in this case, which is rare, it is not wise to fire at ranges greater than battle-sight range or to try to build up a firing line with all men of the unit upon it. Occasionally a few sharpshooters may fire at close ranges—that is all, until the assault, or unless the unit finds itself in an exposed place without cover near enough to reach it, like a wide plain. Then it may as well defend itself by firing as to lie there being shot at without replying. But this should not be contemplated in training. It would be a bad situation into which the rifle units should not have gotten. Infantry should not be forced on to open plains where there is no cover, unless the enemy is running or very inferior in some way, or unless preceding the infantry there is cavalry or tanks, or unless the supporting artillery fire is so unusually strong as to overwhelm the enemy during the advance.

In all these cases the infantry should keep moving and should not halt without cover. The cover may be slight. A slight fold in the ground scarcely observable at a distance may afford protection from aimed fire of small arms. Grass and bushes may at least screen the riflemen from view. But the attempt to build up firing lines generally takes the men out from even this slight cover.

Small open spaces without cover should be crossed at the run. No halting in them to fire should be permitted. All of our Combat Exercises with ball cartridges violate these principles, because the men must come out of cover to see and fire upon the targets, and we always see them throwing themselves down on open exposed ground in order to fire and get hits.

The question is sometimes asked—What are you going to do if the zone of action assigned your unit is a wide open plain with no cover? The answer is as follows: There usually is some cover if you are skillful enough to see it and to use it. If there be absolutely no cover, then units on the right and left where the going is better should work forward and relieve your situation before you advance out of your cover. Or, if this is impossible, then a concentration of artillery fire should be called for for the particular benefit of your unit. Or, in the case of a large unit, cavalry should be used to attack over the wide plain in front of you followed closely by infantry. Or tanks, if the objective is not very far away, should be used instead of cavalry. Without any of these auxiliaries you should not attempt to attack over such ground. If you are forced to it, it means great loss and probable failure.

Thus, combat exercises with ball cartridges, if had at all, should be had under these principles and firing never required at distances greater than 300 yards except by a few sharpshooters and then only when in excellent cover.

It should be remembered that we are considering in this discussion the attack against an enemy in position and the value of combat exercises with ball ammunition, with the enemy represented by targets. It is not intended to convey the impression that infantry rifle units do not fire in any attack. As already pointed out they do fire at very close range. And in other kinds of fighting, such as meeting engagements, infantry in attack will probably fire at ranges longer than 300 yards.

But a meeting engagement soon resolves itself into a situation with one side holding a position and the other advancing to attack. As soon as this occurs the attackers should bring all the machine gun and artillery fire to bear that is possible, and the rifle units should then commence getting forward under cover, taking advantage of every fold in the ground, every tree, bush, rock, building and any other obstacle to the enemy's observation and fire. They should withhold their fire until the last possible moment and avoid the attempt to build up firing lines

at ranges over 300 yards. The stationary units supporting the attack by fire, viz: the machine guns and artillery, and sometimes rifle units using the "fire of position," should pour in a tremendous fire.

Our combat exercises do not teach this. They teach the building up of firing positions at ranges that are too long, cause too much exposure, *put too much emphasis on the number of hits on the targets and a corresponding neglect in the art of advancing under cover*, give a false impression as to the visibility of the enemy, neglect the great principle "never deploy or disperse a unit beyond the limits of control by the leader," and violate other tactical principles, all in the interest of getting hits on the targets that in war we shall not see.

For these reasons I would abolish these exercises. Teach the men to pull a trigger properly at known distances. Teach the art of advancing under cover without bunching, avoiding halts on open ground, movement by bounds, keeping only a general alignment on other units, avoiding too much dispersion of the platoon, and many other practical principles for the advance under cover. The actual movement forward should be done by individuals advancing from cover to cover and without exposing themselves for more than five seconds at one time. No advances by rushes except where an open space which can be crossed by a single rush lies in front of a whole squad or platoon. Cause platoon and squad leaders to have much practice in this very interesting work. Attempt no "fire distribution" in the attack and teach men to shoot at close ranges at what they can see. No sight settings other than the battle-sight should be permitted excepting the 300 yard which can be used as a permanent setting.

I am referring to the *attack*—not the *defense*. In defense, rifle units will have more opportunity for fire at medium and close ranges and for fire distribution. Therefore, our target practice up to 600 yards should continue, and fire distribution taught in defensive positions. But the attack is another matter and resolves into two grand and simple principles: *Fire from troops and weapons in position to support the advancing rifle units. Advance rifle units without firing and with skillful use of cover.*

Under these two principles, when firing with battle-sights becomes necessary it will take care of itself.

I would not object to combat exercises with ball cartridges if they were controlled by these principles. But they never are. Unit commanders are too anxious to get hits because of the way the regulations are written. And even though this were not so, the difficulties of getting up a natural situation and solving it correctly on the ground available on most of our reservations are almost insurmountable. The direction of fire must always be just along a certain line in order not to endanger the garrison and the neighboring inhabitants. Unsuitable terrain must be used. For one thing or another the problems always teach false lessons. Tactical exercises with blank cartridges have not the same limitations and should be substituted.

Finally, I believe in teaching range estimation and target designation. Fire discipline and fire control can be well taught with blank cartridges while properly performing a tactical exercise on any reservation or right in the post and among the buildings which give good training in village fighting. But I do not believe in fire distribution or any complex form of control that will cause extra loss in platoon commanders and noncommissioned officers. Nor do I believe in causing unnecessary losses to the men by building up firing lines at ranges greater than 300 yards. And I do not believe in the wide dispersion in depth now practiced in handling infantry platoons, thus making the platoon leaders' job more difficult and causing greater losses of these valuable young officers than is suffered in proportion by any other military grade.

For training purposes I do not believe that we begin to realize the usefulness of blank cartridges for tactical exercises. They give to the men all the sensations of having men firing around them and the practice of avoiding accidents to each other, enable the instructor to know what his men are doing, can be used on any terrain and in any direction, give more variety to tactical exercises involving firing, and finally preclude the tendency to make men expose themselves to get hits on targets at too long ranges.

I have selected 300 yards as about the right range for riflemen to open fire because at that range our men can see and pick off an enemy who may be firing at them. The supporting fire must slacken or be lifted as the troops advance from such a range. The front line riflemen must now fight it out and the assault begun at once or delayed if the cover is excellent, some units firing to support the advance of others.

Fire distribution is one of the false theories we have indulged in for many years. A platoon or squad that sees a small exposed group of the enemy should concentrate its fire on that group and not try to disperse its fire along a line of bushes or other cover where it thinks the enemy may be. That is wasting fire. Destroy by concentration of fire the enemy you can see and he will soon duck under cover and perhaps fail to expose himself thereafter sufficiently to shoot at you. In our combat or musketry exercises we expose a few targets and then forbid the men, excepting a very few, to shoot at them. The targets cannot fall and disappear as a hit enemy would (at least not without very expensive and complex and impractical arrangements), so for fear of filling them with an unnecessary lot of bullet holes we only permit a few men to fire on them while the balance of the squad must shoot at the bushes where the enemy may be. In real combat the result would be that the exposed men would often get off scot free and no one who isn't exposed would be hit either. Very few hits are obtained on unseen targets unless you know precisely where each target is. Every hunter knows that to kill a duck you must select one and aim at him and not fire blindly into the flock. The theory that to hold down the enemy fire you must cover his whole supposed but not known line will not hold water. When the hostile soldiers find out that you are not concentrating on every group that exposes itself they will not be disturbed

and will wait for you to expose yourself and then concentrate their fire on you until you are down and then wait for another group to expose itself. The attempt to effect fire distribution causes noncommissioned officers to expose themselves too much. Since in any event fire should not be opened by riflemen (except a few sharpshooters at exposed machine guns) at ranges greater than 300 yards, fire distribution would not apply in any case until very close to the enemy, and then our men can see any enemy who exposes himself to fire and should aim and shoot him.

Fire distribution at targets accomplishes its purpose of getting a few hits on all the targets instead of many hits on a few, but at live men it is an entirely different proposition, and this shows again how seriously inanimate targets misrepresent a live enemy. Machine guns and artillery should practice fire distribution and use it in battle. These weapons, also, have frequently to comb a line of bushes or the edge of a wood, or tall grass, where an enemy machine gun lies hidden. A platoon of riflemen may exceptionally have to do this, but in that case it is better to order simply, "fire at edge of that wood," or, "at that clump of bushes," without attempting to designate in miles the width of the target or use any of the elaborate methods suggested in Musketry Regulations. The men themselves will, naturally and even unavoidably, distribute their fire sufficiently. It must be remembered that the men are now close to the enemy and probably under hot fire, and platoon commanders and squad leaders cannot expose themselves to crawl here and there to direct the fire of individuals as we see in Musketry practice.

The teaching of all these principles is simple and direct. They vary from what is now taught only slightly, but the differences are all important. They are as follows:

1. More practice in the advance under cover.
2. No halting in open, exposed places.
3. No firing, generally, until very close to the enemy.
4. No attempt at fire distribution. Concentrate fire.
5. Less dispersion in the platoon, but never any bunching. This would probably involve a smaller platoon and a difference in the method of deployment in depth.
6. More study of supporting fire by machine guns and of the means of getting them forward under cover, and more practice in quickly improvising covered emplacements for the guns in each successive firing position.

NOTE: Low, light carriages with small wheels (perhaps wire wheels with rubber tires) that can be dragged along by men with ropes 20 or 30 feet long so that the men can keep under cover. Some machine gun units held back to provide overhead fire if terrain permits.

The machine guns giving close support must learn to keep under cover, move by bounds, cooperate with the advancing riflemen by keeping slightly in rear, on flanks, and in gaps, just as the regulations now prescribe, but more practice with rifle companies, all using blank cartridges.

If the terrain is so thick with bushes, trees, hills, villages, that machine guns in close support cannot be used, then the riflemen will have to depend on their own fire; but in this case they cannot see to fire at ranges greater than about 300 yards, so that it comes to the same thing as the advance without firing to the 300 yard point previously advocated.

These principles are at variance with TR 420-85, 13-(3), (4), (5). I am in agreement with TR 420-115, 5 b (1). This sub-paragraph states, "To engage in a fire fight at 800, or even 600 yards, gives the defender a decided advantage." But many of our musketry exercises require firing at 600 yards or more.

I am not in agreement with those paragraphs of TR 420-110 which violate the principles set forth above.

I am in complete disagreement with TR 145-5—Pars. 30, 35, 49, 51, 53, 54, 55, because I regard them as unnecessary and impractical and too much emphasis is laid upon the number of hits on targets, men are permitted to fire without taking proper advantage of cover and at ranges that are too long.

Firing without cover and firing with cover are very different problems. There is no good to be gained in teaching something which cannot be done when you combine it with other principles in tactical exercises.

The soldier can absorb only a few practical principles. He can understand the firing on "A" ranges to teach him to shoot. He can understand the practical tactical exercise in which he is taught to advance under cover and to shoot only at what he can see at close ranges. But when you put in intermediate steps and teach him to halt and expose himself on open ground in order to get hits on targets, he will remember that lesson as associated with actual firing in combat formations, and this false lesson will stick in his mind when under the excitement of battle. He will not take cover, or at any rate not more than to throw himself down on the ground believing, like an ostrich, that he is covered when he is really in plain view. Furthermore, he is actually taught and required to do this by the regulations to which I object.

It will not be very long before the infantry and the cavalry are armed with self-loading rifles. This is being considered more seriously every day, especially in relation to defense against attack aviation. When it comes about, the infantry will no longer insist on firing at ranges greater than 300 yards in the attack.

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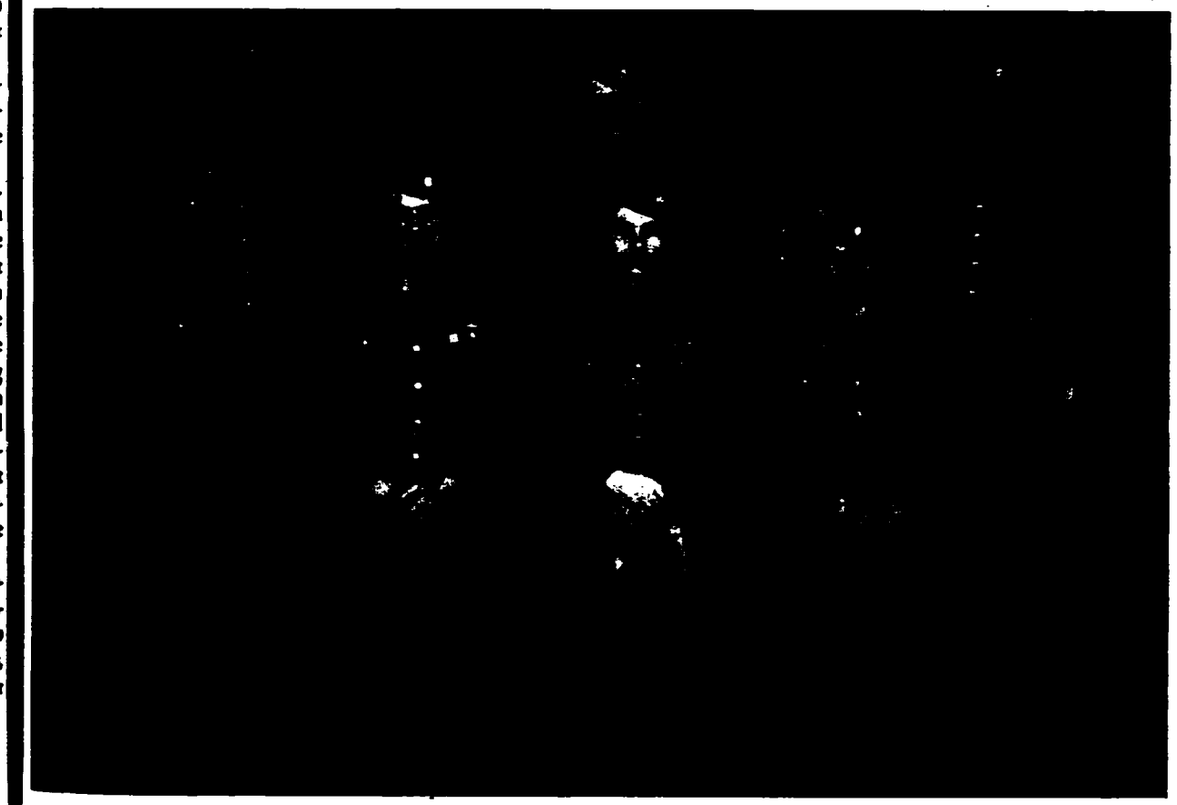
Special Activities

Third Cavalry Wins Rifle Shoot—First Cavalry, Pistol Shoot

By CAPTAIN P. M. MARTIN, *Cavalry*

During the month of February all Regular Army Cavalry Regiments participated in an inter-regimental small-bore rifle and pistol tournament. The matches were arranged by the Chief of Cavalry. Considerable interest was created. There was a series of three matches, held weekly, the scores being sent by radio to the Chief of Cavalry's office where they were consolidated and published by radio. The targets were sent to the Department of Weapons and Matériel at The Cavalry School, where they were officially scored, for the sake of uniformity.

Following are the final results with names of the members of the winning teams. The points were computed from the relative standing in each match. Where ties were encountered they were decided by aggregate score.



1st CAVALRY PISTOL TEAM

Left to right, sitting: Sergeant Kellerman, Troop A; Captain Evans; First Sergeant McGimpsey, Troop C. Standing: Staff Sergeant McGannon, Machine Gun Troop; Corporal Mitchell, Troop A; Sergeant Stewart, Headquarters Troop; Private Cornwell, Headquarters Troop; Private Miller, Service Troop.

THIRD CAVALRY SMALL-BORE RIFLE TEAM, WINNER OF THE CAVALRY SMALL-BORE RIFLE CHAMPIONSHIP

Left to right, standing: **Corporal Curtis T. Mimna, Machine Gun Troop; Private Avery M. Greer, Troop F; Sergeant Edward G. Krebs, Machine Gun Troop; Corporal Stanley J. Olender, Machine Gun Troop; Private James P. Mills, new shot, Troop E.** ***Sitting:*** **Sergeant Albert Martina, Troop E; Sergeant Edward Yeszerski, Machine Gun Troop; Private Warren G. Davis, Troop F.**

Absent members, 1st Squadron, Fort Ethan Allen Vermont: **First Sergeant Stanley Blazejevski, Troop A; Corporal Richard L. Hazel, Troop A; Private Francis E. Gormley, Troop A; Private Ernest C. De Mello, Troop A.**

3RD CAVALRY RIFLE TEAM

DeMello	Blazejevski	Greer	Mills
Gormley	Mimna	Krebs	Hazel
Olender	Davis	Yeszerski	Martina

1ST CAVALRY PISTOL TEAM

Kellerman	Cornwell	Miller	McGimpsey
Mitchell	McGannon	Stewart	

RIFLE CHAMPIONSHIP

Place	*Regiment*	*Points*
1	3rd Cavalry	6
2	13th "	8
3	6th "	12
4	14th "	15
5	2d "	15
6	11th "	15
7	1st "	19

PISTOL CHAMPIONSHIP

Place	*Regiment*	*Points*
1	1st Cavalry	6
2	14th "	7
3	13th "	10
4	3d "	11
5	2d "	12
6	11th "	17
7	7th "	23

It was obvious that some teams were not ready for these matches. One of the teams improved its score almost one hundred points each week. The purpose was to promote interest in competitive shooting in the Cavalry regiments. This end was attained to a very gratifying degree.

This spring, service rifle and pistol matches are to be held between Cavalry Regiments at certain selected stations. It is hoped that these competitions will be as successful as the small-bore were.

Notes On the M1 Rifle

By LIEUTENANT J. D. WILMETH, *Infantry*

Upon issue of the M1 rifle to your organization, opinions will be quickly formed. Your own opinion, publicly announced, will color the opinions of your men more than will that of anyone else. For the sake of your marksmanship season, and regardless of what opinion you may have of the M1, if you fail to openly endorse this rifle as the best of any military small-arm weapon, you have already created an alibi for those men in your company who lack determination.

It is natural that you will want to familiarize yourself with the piece prior to marksmanship season. Notice I say, and now emphasize, *familiarize*. It would be unfortunate to give the impression that this is an *experimental* weapon and that you are going to *experiment* with it.

Select your instructor group with a view to obtaining men who have not grown too old to accept a change and the initial hardship that a change always entails. Together with them study this rifle from butt plate to muzzle. Stress functioning! A thorough knowledeg of the working parts will reduce stoppages; for if stoppages occur too frequently, confidence in the piece will wane.

If it is at all possible, even with considerable hardship, to take yourself and instructors on the range prior to preliminary instruction with the company, do so. This will give your instructors and your instruction the lining of "personal reaction" that will enable you to apply to preliminaries those lessons learned on the range. Insist that your instructors bring all difficulties to you for discussion. Insist, and in strong terms, that they *do not* take any difficulties to the men! In the presence of the men they must have nothing but encouragement. They must evince a genuine satisfaction with the piece. A few malcontents can start an alibi order before the sight setting equipment has been taken out of the supply room.

Where a difference of opinion on any point arises among the instructors, talk over the matter with them, select the best thought, and then have all men understand that the opinion selected will be the instruction which the company will receive. Explain to your instructors the necessity for all of you to speak the same language. Instruction given to the men must be completely standardized in *every detail*. The ruin of the company will be insured when each instructor is teaching a different "system."

Live by the book! The M1 BFM was written after years of experience with this weapon by men who know weapons. Do not inject your own ideas before you have tried an approved solution. Take the manual as dogma, unless you can prove with evidence that will stand up in court that your individual deviation is the better. Avoid being a "now-the-book's-all-wrong-on-this-point" egoist. That attitude on your part or on the part of your instructors is not conducive to the confidence you must engender in your men in order to complete a successful season.

Sighting and Aiming Exercises

Sighting and aiming exercises are conducted in the same manner as with the 1903 rifle. The equipment you have on hand is usable as is, except the rifle rest boxes must be modified to hold the stock of the M1.

The new peep sight is larger than the old one and closer to the eye. For these reasons it is a little more difficult to keep it centered. For the preliminary work men must be cautioned to make a habit of consciously glancing at the alinement of peep sight-front sight.

The Belgian aiming device can be applied to the M1 without modification. It should be used frequently to check the alinement existing between sights.

It is well to spend most of the time in making triangles at a range of 300 yards. This will glaringly show errors of sighting, men take more interest in the long distance work, and range work calls for considerable firing at this yardage.

Position

The prone position is essentially the same as the old, but no elbow holes may be dug. Because of this lack of support the left elbow should be placed on the right side of a vertical plane through the piece. As there is no bolt to manipulate, it is unnecessary to push forward with the right elbow. It should have the more comfortable position, drawn back, and close in to the body. The more nearly vertical the arm is from shoulder to elbow, the better.

Kneeling is virtually the same, with these small differences. The elbow is not raised above the horizontal but is held at a more comfortable angle in order for the hand to get a proper grip on the pistol stock. The left knee is drawn a little closer to the body, and the upper body is advanced as far forward as possible so that the left arm pit is almost over the left knee. As no holes may be dug, it is advisable to wear a stiff sole on the right foot for support while sitting on the heel. In most cases sitting on the side of the right foot will throw the man's weight to the rear and result in overturning him during time fire.

Standing position has not been changed other than by dropping the right elbow slightly so that the pistol grip of the piece may be held properly. As only four shots are fired from this position do not devote time to it that could better be used on the kneeling, a comparatively strange position, from which sixteen timed rounds are fired.

Sitting position is not used.

Trigger Squeeze

The M1 has a far better trigger than has the old rifle. Its action is more velvety, less creepy. But the M1 *needs* a far better trigger. On time fire the tendency to jerk is all but overpowering. This fault is developed by rushing; it

can be overcome, in fact it will not be introduced, if you make a rule *never* to say "Speed up!" The birth of a jerk is mental. It arises from a feeling of rush. Most jerkers get their start on the practice field, where the fault is not so evident, and are not discovered until they reach the range. Too often then the jerk is neo-chronic. To reduce this jerk is a gigantic task, and one almost impossible of accomplishment on the range. Jerkers must be removed from the firing line and returned to dry work where they can be closely supervised. They must always squeeze—never jerk. In this way, and it is the only way, a proper habit is built. The more times men squeeze the farther they get from jerking. The old adage "Practice makes perfect" presupposes that the practice itself is correct. It can be antonymed to read "Wrong practice makes imperfect."

Often an instructor will unconsciously develop jerkers through a misunderstanding of "cadence firing," as the book terms it. This, at surface glance, seems to call for the regular occurrence of the explosion. If timed explosions are insisted upon the men will give them—but by jerking, the most natural way to correct what is believed to be at fault. Before time fire exercises are introduced the instructor should have an understanding with his men that cadence, first of all, is a *mental* process. If he will have the men repeat to themselves "slack up—squeeeeze! slack up—squeeeeeze!" in cadence, the explosions may not be exactly rhythmic but the score will be in tune. It follows from this that it is a great mistake to try to achieve cadence by whistle blasts at certain intervals, an unfortunate practice that has sprung up.

Often a jerk can be washed out by having the thumb lapped across the stock, having the man get a mental impression of trying to push down his thumb tip to meet his trigger-finger tip. If this impression can be left with the man he is cured, for it is impossible for him to jerk with his thumb. Also, the thumb-across-stock protects the lip from bruising, and a bruised lip may be a cause of jerking.

Miscellany

Once range practice is started do not remove the gas plug from the muzzle, because in replacing it the fit may be a little different from the time before. As this plug is the last part to come in contact with the bullet, its effect must be consant in order for the piece to be zeroed.

If chamber brushes are not available, buy some bore brushes. Swab out the chamber after each firing while it is hot. This will reduce stoppages almost 100%.

As two-thirds of your record firing is time fire, it is wise to use this same ratio in preliminary work and practice firing.

The most time saving order of firing record is to start at 500 yards. Here prone, slow is fired. Then move to 300 yards and fire prone, time. Then, at 300, fire kneeling, slow. Move to 200 yards and fire kneeling, time. Then standing, slow. Fired in this order the course will require an average of forty-five minutes per order. With no more than six orders, record practice can be completed in one morning—a decided improvement over the old course.

New men, I believe, are better with this rifle than with the old. In my company the M1 was fired for record for the first time this past summer. The scores of previously unqualified men averaged but one point lower than the scores of the previously qualified.

☆ ☆ ☆

A Target Range Trailer

By MAJOR CHARLES R. JOHNSON, Cavalry

The trailer which is described in this article was made for experimental use with an R.O.T.C. Unit on the target range. It has proved entirely successful.

Briefly, the idea is to construct a very rugged cleaning rack, tool bench and record desk, mounting it on a salvaged chassis. This body carries all necessary range equipment for six firing points and is covered by a tent fly while in use. While traveling, the tent uprights, which are hinged, drop forward letting the ridge pole, which is hinged to the uprights, fall into two chocks and the tent fly remains on the ridge, serving as a wagon cover. An important feature shown in the pictures is the reinforcing of the uprights at their bases to prevent sidesway when the tent is up. This was accomplished by attaching to the base of each upright two ells of strap iron 1½ x ¼. The hitch was purchased from a mail-order house. The trailer has spaces for cleaning six rifles.

The following equipment was carried:

- 12 Cleaning rods
- 6 Rifle rests for use at firing point
- 6 Horse covers for the firing points
- 6 Shooting coats
- 6 Shooting gloves
- 12 Folding stools (1 per coach and 1 per firer)
- 1 Spotting scope, complete with tripod. (35X)
- 4 Folding chairs (1 for telephone, 1 for scope, 1 for record desk, 1 for C.O.)
- 2 Stiff wire chamber brushes (for rapid fire)
- 1 Trigged testing weight
- 1 Road smoke torch, covered with a galvanized iron funnel, for blackening sights
- 5 Gallons kerosene

1—Detail of uprights and ridge. 2—Stripped frame, constructed of 2x6 material. 3—Angles to brace uprights. 4—Ridge pole in traveling position. Note the steel brace on base of upright. This brace is essential. 5—Trailer packed for traveling. Field desk end. 6—Trailer packed for traveling, tool bench end. 7—Trailer set up on range.

- 1 Box of cleaning material
- 4 Buckets (1 for live ammunition, 1 for empties, 1 for trash, 1 for boiling soda solution)
- 1 Coffee boiler for ice water
- 1 Package of folding cups.
- 1 Kerosene pressure stove for boiling soda
- 1 Folding iron screen to shield stove from wind
- 1 Shovel
- 1 Pick
- 2 Trowels
- 6 Field glasses
- 1 Micrometer
- 1 Shot hole gauge
- 1 Mechanical pencil sharpener mounted on desk
- 1 Emery wheel, hand
- 1 Vise mounted on work bench

1 Tin box of Ordnance repair tools and spare parts
1 Tent fly mounted on the trailer
6 Guy poles for fly
1 Jar of vaseline and graphite, mixed
1 Belgian aiming device
Necessary tent pins
1 Sledge
1 Extra fly with poles and pins to be used away from trailer for men not firing
1 Telephone
1 Wire incinerator
1 Milk can of extra water
1 Whistle
1 Spare tire

To the above should be added a beach umbrella for the telephone man. This definitely locates him.

This target season was preceded by a three weeks' march where the men carried their Class "A" rifles on the saddle. The trailer was set up in camp each day and was a material aid in keeping the rifles in excellent condition. On the range it materially contributed to the high quality of the men's shooting.

46 R.O.T.C. students shot as follows:
5 Experts
21 Sharpshooters
15 Marksmen
5 Unqualified

While I say that the trailer aided this rather exceptional R.O.T.C. qualification, the major amount of credit is due Captain Clark L. Ruffner, Cavalry, for his energetic and thorough conduct of the firing line. He made little use of the extra chair.

The Fourth Cavalry and Equine Encephalomyelitis

By LIEUTENANT COLONEL ELWOOD L. NYE, *Veterinary Corps*

Much has been written in recent years on equine encephalomyelitis; however it appears that specific experiences with this disease in relation to the animals of the Fourth Cavalry might be related with some benefit.

In that part of western South Dakota, the Black Hills area, which surrounds Fort Meade; encephalomyelitis* has occurred with varying intensity; but in epidemic proportions for a number of years. The writer's experience with the disease in this area began in 1935 and continued uninterrupted for the next three years. It had been present in this region prior to 1935; and it is the writer's opinion that it has existed here for many years unknown or called by various other names as: forage poisoning, blind staggers, etc.

During the first several years of the prevalence of encephalomyelitis in this area cases were confined to civilian-owned animals. The first cases to appear among the horses of the garrison occurred in the fall of 1937. Two animals developed the infection at that time. Both recovered under treatment.

From the time the writer reported at this station in 1935 until the present; the usual precautionary measures have been observed during the season. Herding and pasturage of animals have been discontinued or restricted; horses were stabled except when actually in use; stables were screened and darkened; and insect repellents were used. Every possible effort was made to keep the animals in excellent general condition.

Having found through extensive use on civilian-owned animals that the brain tissue vaccine was at least 90% effective the writer considered its use justified and made recommendations each spring that all animals at Fort Meade be vaccinated. Certainly it was the best thing to be done at that time. All such recommendations were disapproved.

Thus we have the situation as it was in July, 1938, when this regiment departed for an extensive march and maneuvers. It was known at this station; and so reported to higher authority, that the only possible route of march (water) led through an area in which a considerable number of cases of encephalomyelitis had already occurred. As stated above the animals to make the march were unprotected by any sort of vaccination; however, the start was made on July 19, 1938, and for 18 days either marching or in camps, until Laramie, Wyoming, was reached; the horses were more or less exposed to infection. Mosquitoes and other biting insects were not a problem of importance except in and around Wheatland, Wyoming. At this point, infection was known to exist among civilian-owned animals, and flies and mosquitoes were plentiful. It is significant to note the date of the camp at Wheatland. It was July 29, 1938.

Laramie was reached August 5th and on this date three cases of encephalomyelitis developed, two of them very severe. Two days later a fourth case appeared. No serum was available in time to be beneficial; so the animals were given medical treatment and all recovered. It is of course difficult to treat such cases successfully under field conditions.

Telegraphic reports as to the situation were made to higher authority and on August 11th the War Department by radiogram authorized vaccination of all animals present with the command in the field. It was suggested that the new chick-embryo vaccine be used. This vaccine was procured in Denver, Colorado, and on August 12th, 486 head of horses were given the initial dose of vaccine. Regardless of unfavorable field conditions the site of injection on each animal, a spot centrally located on the rear side of the neck was shaved and swabbed with alcohol. Injections were made deeply into the muscles; experience having indicated that there was much less local reaction following such injections than with the subcutaneous method.

The writer had been assured by persons familiar with the use of chick-embryo vaccine that there was little, if any, local or systematic reaction following its administration, and that animals so treated could be worked immediately following injection. However, the horses were rested during the afternoon of August 12th and the following night. The return march was started the morning of August 13th. It quickly became apparent that many of the animals were not normal. The usual spirit and ambition were decidedly lacking; and there was pronounced lassitude and indifference on the part of many. However all horses completed the day's march, which fortunately was rather short. Upon arrival in camp about twenty-five head which had reacted most actively were checked at the veterinary dispensary. Their appearance was dejected, respiration about 30 per minute, and temperatures varied from 102° F. to 104° F. Each of the above animals was indifferent to food and some ate not at all. This was also true of a number of the others, of the regiment. For the second day's march, a rather long one, those horses continuing to manifest pronounced reactions were placed in a detachment which followed the main column at a slow walk. The above conditions continued for three days, and some temperatures remained above normal for four days. Thus our experience indicates that a definite and persisting reaction in about 35% of individual animals may be expected following the use of the vaccine in question. This is supported by a similar experience when the second injection was made at Fort Meade fourteen days later. This time the animals were given absolute rest yet reactions were apparent for two days.

The question may be raised as to why the march was resumed so soon after the initial injection and before any immunity could have been established. Experience of others than the writer had indicated that considerable immunity was developed five days after the first injection; and as stated above, it was reported that no reactions followed. Therefore since the area surrounding the camp where vaccination was started was known to be infected, and since all the territory to be traversed on the return march was in the grip of an extensive and virulent epidemic; there seemed little choice as to where the animals were at any particular time. The march was continued.

This return march gave a severe and thorough test to the new vaccine. Only one dose had been given and it was impossible to avoid close contact with the disease for over two weeks. The question of water supply made it impossible to change route; and had it been possible nothing would have been accomplished as the infection was so widely spread that it could not have been avoided. Camps were made on ranches where animals had recently died of encephalomyelitis; and on several occasions active cases of the disease were within a half mile of the camp. Insects were never a special problem on the return march but some mosquitoes and flies were found at several camps. The animals came through this severe test without the development of a case of encephalomyelitis; and the second injection was made the day the command reached Fort Meade. As stated above there was also considerable reaction following this dose. The epidemic terminated soon after and no cases ever developed among the vaccinated animals.

The writer is firmly of the opinion that there is at last available a cheap and effective means of preventing equine encephalomyelitis. Certainly the severe test made by the return march indicates it most emphatically. It may confidently be expected that no animals of any command will ever encounter more adverse conditions than those described above; and yet the animals came through without difficulty.

Experiments so far conducted indicate that the vaccine is effective for about six months. This is sufficient to protect through any single epidemic; but in the state of our present knowledge it will be necessary to vaccinate all animals each year. This should be done early, probably in May, in order that immunity may be developed before natural infection occurs.

The question naturally arises: "Should all equines everywhere be vaccinated each year for a period of two or three years and no cases of encephalomyelitis occur; would the disease spontaneously disappear?" A negative answer is indicated. It has been definitely established that this disease is due to a virus or organism; and experimentally, at least, that it can be transmitted by certain varieties of mosquitoes, flies, and ticks. It has also been proven that the virus is found in certain poultry, pheasants, quail, rats, mice, gophers, and cattle, and man. Therefore if all the above may furnish reservoirs of infection it becomes apparent why a systematic and general vaccination of horses probably would not eliminate the disease.

The writer has highly recommended the chick-embryo vaccine. It must be remembered however that any vaccine can fail at times. No biological product is 100% effective, and this will be true with the vaccine under discussion. It will fail to protect in a very small percentage of cases. This is due to the difference in individuals; assuming that a standard and uniform product is used in each instance. Certain animals fail to respond in developing immunity, as rapidly or as completely as the majority. Others may fail almost completely to acquire protection. This, however, should in no way destroy confidence in a product which has proved so highly effective and offers protection against the greatest equine scourge of modern times.

*Sleeping sickness.

Wounded Knee

Dear Sir:

The article "Wounded Knee" by Brigadier General E. D. Scott, Retired, published in your last issue of The CAVALRY JOURNAL (January-February, 1939) was certainly an accurate and most deserving account of the Battle of Wounded Knee. General Scott is to be heartily congratulated for his successful effort to correct the misrepresentations and the misunderstandings which have been published during recent years concerning that battle.

I was particularly interested and thrilled over General Scott's historical masterpiece, as General Whitside (then Major at Wounded Knee) is my grandfather. At the time of the battle my mother, Mrs. Archibald Miller, of Washington, and my uncle, Colonel Warren W. Whitside, now commanding the Remount Depot at Front Royal, Virginia, were children at Fort Riley, Kansas, then the home of the famous Seventh Cavalry. I am inclosing an old photograph of members of that regiment taken on the target range at Fort Riley in 1888.

The fact that Colonel Forsythe and Major Whitside the two ranking officers at Wounded Knee, were both promoted to the grade of general, the former within two years after the battle, substantiates General Scott's research and also the justification of the action at Wounded Knee.

Very truly yours,

WHITSIDE MILLER,
1st Lieutenant, 2nd Cavalry.

* * *

Borium

Dear Sir:

As a member of the San Francisco Sheriff's Mounted Posse I think that you will be interested in knowing that by shoeing our horses with Borium the shoes not only last longer but have practically eliminated the danger of slipping on pavements and car tracks.

In one of the parades preliminary to the World's Fair out here, I rode for a solid hour on Market Street in the midst of several hundred thousand people with bands playing, sirens screaming and people shooting off guns. I was riding a rather nervous horse. During that time he stepped on street car tracks at least a thousand times, and not once did he slip. As a matter of fact, I felt as secure as if we had been on a dirt road. I think that the non-skidding angle is one that we should develop further because to us who are parading constantly on pavement it means safety and we certainly aren't going to overlook anything that will keep our horses from going down.

PAISANO.

HAPPY DAYS

Left to right, Seated on ground: **Miss Hattie Bache, Miss Bessie Forsythe, Mrs. Wm. J. Nicholson, Master Wm. C. F. Nicholson, Miss Nicholson, Mrs. Winfield S. Edgerly, unknown, Miss Marion Forsythe, Miss Mary Hare, Miss Madeline Whitside, unknown.** ***Seated in chairs:*** **First Lieutenant Edwin P. Brewer—7th Cav. Miss Berta Bache, unknown, unknown. unknown, Mrs. James W. Forsythe, unknown, Mrs. S. M. Whitside.** ***Standing:*** **Miss Mary Forsythe, Lieutenant Glennon, M. C., Miss Kerr, unknown, Master W. W. Whitside, Major Dallas Bache, Med. C.**

* * *

Training

Dear Sir:

From time to time during recent years I have enjoyed several interesting conversations with junior officers of the cavalry. On several occasions their discussions have warranted much consideration. This conclusion holds particularly in their remarks on training which one encounters among the scattered posts of the cavalry.

Some initimate that troop officers rarely see the senior field officers of the regiment on the drill field or during the conduct of exercises covering the field of minor tactics. Perhaps the absence so noted may be the result of lack of time consumed in matters of an administrative nature, for there is no doubt that on posts involving CCC affairs much time is required in that activity. Again, it may be based on the opinion that the presence of a field officer during troop training is a detriment to the initiative of troop commanders and troop officers. Under either occasion or for any other reason, it is believed that the junior officer is the loser. The field officer, with definite ideas on the conduct of tactical training, covering for example the conduct of a point of advance guard, may well inject friendly counsel and comment to the profit of all. The mere presence of a field officer should not necessarily denote an air of critical supervision but rather one of friendly coöperation. True it is that the training of a troop is a responsibility of a troop commander, but in no wise is this responsibility lessened or deterred by the presence of senior officers who are there in an atmosphere of curious interest or perhaps with a word of suggestion or advice given upon an opportune moment. With a fund of genuine knowledge of his profession, the field officer can exercise profound influence in matters of training on the drill and tactical fields.

Again one hears the junior officer regret that he had not encountered more hours of tactical field training at his last post. One has even heard him state that tactical exercises seemed to be the exception rather than the general rule; that the initiation of tactical exercises seemed to involve such ponderous detail that they were approached with reluctance. Should this state of affairs be true, the junior officer is indeed unfortunate to find himself in those surroundings. All drill should be formulated upon its future application to a specified tactical end. Drill is but a means to a definite end. To avoid that consideration is but the wastage of time, energy and invaluable manpower.

AGRIPPA.

The United States Cavalry Association

Organized November 9, 1885

The aim and purpose of the Association shall be to disseminate knowledge of the military art and science, to promote the professional improvement of its members, and to preserve and foster the spirit, the traditions, and the solidarity of the Cavalry of the Army of the United States.—Article III of the Constitution.

THE CAVALRY JOURNAL is published under the auspices of the Cavalry Association. It is not an official publication. Articles appearing in the JOURNAL represent the personal views of the author and are published to stimulate interest in, provoke thought on, and provide a free forum for the decorous discussion of cavalry affairs. In no wise do contributions appearing in the JOURNAL reflect official thought or indorsement.

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CHANGE OF ADDRESS: Prompt notification of change of address to the Editorial Office is requested.

EDITOR'S SADDLE

Contents

During the past several months a large portion of The CAVALRY JOURNAL has been devoted to articles dealing with the higher aspects of war and with the larger picture of cavalry in the national defense.

Lieutenant Colonel Schwien in the past year has discussed cavalry operations in the days of 1914. He has attempted in his studies to focus analytical reasoning toward those channels in which the cavalry masses available at that time might have been used to better advantage. Colonel Schwien continues his research drawing attention to a situation in which the inherent mobility of cavalry was not utilized. The cavalry leader, as well as the army commander, must be capable of visualizing the situation on a large scale. His horizon must not be dwarfed by vascillation and hesitation. It is the old story of the frequent necessity of fighting to gain vital information and lift the fog of war.

With the exception of the foregoing article on "Neglected Mobility" the current issue is devoted more to basic technique and administrative matters. The careful reader will find much data for reflection in the comments of General Hawkins on musketry and combat firing. Those interested in supply and logistics will find interest in Major Perry's comments on supplying a mechanized brigade. While Captain Yale's remarks on organization will appeal more to those in the higher echelons of command, others may find value in subjects discussed under "Special Activities."

* * *

Memberships

Interest in and support of cavalry affairs through the Cavalry Association is registered in these figures:

Regular Cavalry Officers—98% are members.

National Guard—103rd Cavalry, 100% membership.
104th Cavalry, 100% membership.
112th Cavalry, 100% membership.
113th Cavalry, 100% membership.
114th Cavalry, 100% membership,

Cavalry Reserve—308th Cavalry, 61% membership.
(Highest in that component.)

Forty per cent of the commissioned cavalrymen in the country are carrying the load. Subscription dues alone maintain and support The JOURNAL. May the above roll of honor continue to grow until the majority of our 57 regiments of cavalry (14 Regular, 19 National Guard, 24 Reserve) appear on this list.

Horsemanship

One has heard a successful high ranking cavalry officer remark, "He is an excellent officer, but I am uncertain about his horsemanship. Only infrequently have I seen him on a horse engaged in that type of riding which a cavalry action will demand."

Cavalry is led from the saddle. There may be merit in the statement of this "old-timer."

IN MEMORIAM

Headquarters, Seventh Cavalry
Fort Bliss, Texas

The Regimental Commander regrets to announce the death of Colonel Selah R. H. Tompkins, Retired, on February 5th in San Antonio, Texas.

Besides having been an integral and vital part of Seventh Cavalry history, Colonel Tompkins, affectionately known as "Tommy," was one of the most picturesque and widely known figures of his time in the U. S. Army. A man of magnetic personality and outstanding character, brusque but kind, Colonel Tompkins was known either personally or by reputation wherever an army post exists.

The funeral services of Colonel Tompkins will be held at Fort Sam Houston, Texas, at 10:00 A.M., C.S.T., on Thursday, February 9, 1939.

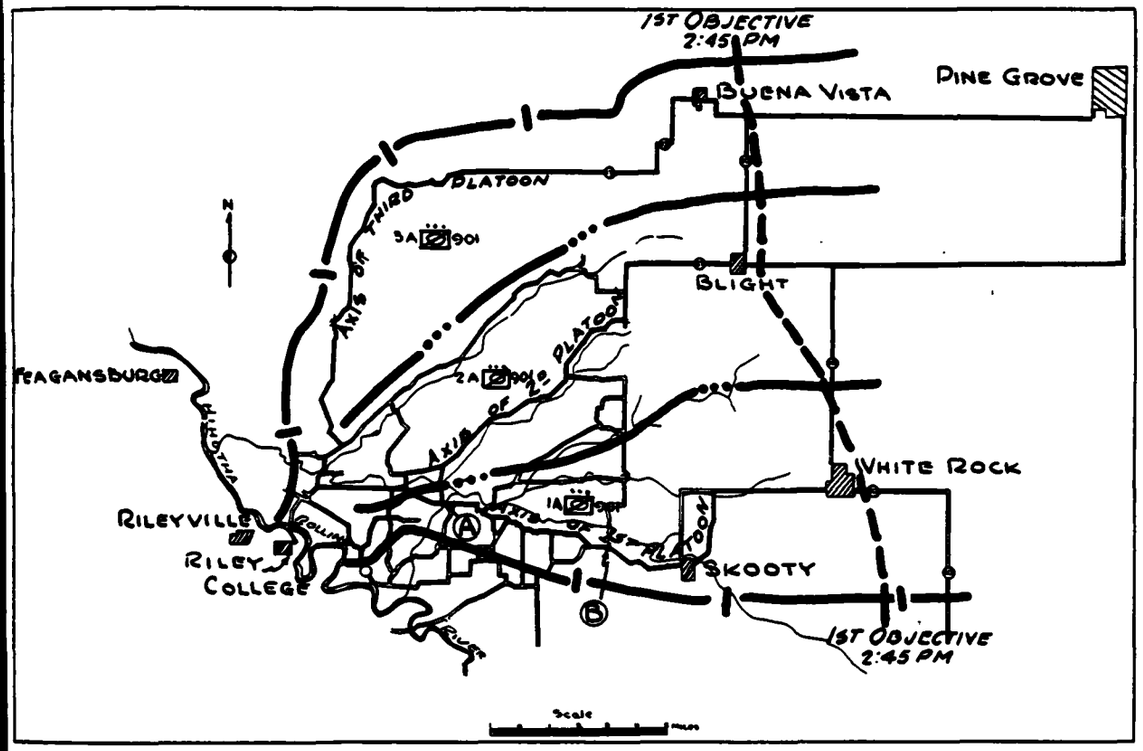
As a tribute to his memory, all members of the Seventh Cavalry at 9:00 A.M., M.S.T., Thursday, February 9th (Fort Bliss time corresponding to the time of the funeral services), will cease performance of all duties, except as noted below, and remain silent for a period of one minute.

The Band and Buglers, 7th Cavalry, will assemble at Headquarters at 8:55 A.M., same date. Promptly at 9:00 A.M., the buglers will blow the Seventh Cavalry call followed immediately by Taps. Upon the completion of Taps, after a suitable pause, the Band will play "Garry Owen," which will typify the spirit of our beloved "Tommy" carrying on in the regiment forever.

W. W. WEST,
Colonel, 7th Cavalry, Commanding.

May "Old Tommy" fall in with the gallant Custer as the intrepid host of Garry Owens gallops forever over the Elysian Fields.

NOTES from the CHIEF of CAVALRY



What Would You Do?

DEAR "ED":

Thank you for your letter and the $200.00 check for my last treatise. However, being a famous writer like Pete Kyne and Tommy Wadleton has its drawbacks. Only last week I received a short note from one of my friends stating that if my last article was caused by New Year's Eve, he was in favor of my discontinuing its observance completely.

Therefore I shall have to ask you to treat the following episode as confidential.

Yours,
"SLINKOVITCH."

P. S. The following dream happened while I was having my teeth extracted by Capt. Ivan K. M. Outte, M.C.

* * *

You will recall in the last episode, that I was a lieutenant in Troop A, 901st Cavalry (Mecz), the Reconnaissance Troop. At 12:00 noon our troop had arrived at "Rileyville College of Applied Aids" and had just received the following message from the regimental commander:

"Several motorized infantry regiments, some horse cavalry with mechanized elements and truck-drawn artillery are reported in the PINE GROVE area. At 11:00 AM these forces had not yet moved.

The 901st Cavalry (Mecz) will advance at 2:00 PM via RILEYVILLE and FEAGANSBURG against the enemy concentration reported near PINE GROVE.

Troop A, marching at 1:30 PM, will reconnoiter the zone as shown on attached map.

First objective to be reached not later than 2:45 PM. That line will not be crossed until further orders.

Missions:

(1) Report the location, strength, composition and movements of any enemy forces encountered in your reconnaissance zone.

(2) Determine the suitability of the road net for the advance of the regiment to the east or northeast.

(Signed) PRESTONE, Colonel, 901st Cavalry."

Upon receipt of the foregoing orders, Captain R. Moore Carr assembled us platoon commanders and gave us the dope. He assigned each platoon a zone as shown on the above map and he, with troop headquarters and the 4th Platoon (reserve), planned to march via Highway 57 which was the axis of the 2d Platoon.

This time I was in command of the 2d Platoon. We moved out via Highway No. 57 and reconnoitered the assigned zone without incident until my leading car turned east four miles west of Blight. As it turned the corner it encountered a defended road block. It was surprised and disabled by this hostile fire but was still able to fire.

(At this point everything went blank. Probably the dentist's hand slipped and poked the forceps in my ear.)

The scene changed and we moved east along Highway 57. About two miles west of Blight, I perceived a hostile armored vehicle move on to the highway from a field about 500 yards to the east and move rapidly toward Blight. Apparently at least two of my cars were observed by the hostile car.

(At this point I was rudely awakened by the following spoken words, to wit: "I have extracted four of your teeth and they are all healthy. So that is not what caused your headache New Year's morning. Maybe you have fallen arches. Come in again. Good morning.")

Well, there I was. I didn't mind losing my teeth, but what in Sam Hill should I have done in the foregoing situations? I walked out of the hospital a beaten man with head bowed low. The CAVALRY JOURNAL ruined. I thought. Two situations without a solution. Editor chewing his cigar and presses silenced, waiting for my copy. Then it came to me like a flash on my pan. But before I divulge the solution, tell me

WHAT WOULD YOU DO?

(For solution, see below)

☆ ☆ ☆

Motorized forces are now an integral part of armies. However, the proposal that motors replace all animals is an extreme view not warranted by experiences in China and Spain and certainly not in the terrain surrounding this CPX. At the same time, we must realize the practicability of transporting animals by motors. This is being done in commercial life daily. We can retain our speed by motor transportation and our capabilities of operating off highways or in difficult terrain by transporting animals as well as men by motors. We should develop the possibilities of animal transport by motors, particularly for field artillery and infantry commands.

—MAJOR GENERAL HUGH A. DRUM, U.S.A.
Comments on Second Army CPX.

☆ ☆ ☆

A Solution

FIRST SITUATION

I sent a report to the troop commander at once and then supported the first car by opening fire with the command car while maneuvering the second section around the flank in order to gain a position from which road block might be reduced by fire attack from flank.

SECOND SITUATION

I attempted rapid limited pursuit and endeavored to cripple this vehicle by fire without permitting myself to be drawn into a trap. This entailed stopping the platoon before getting within effective range of the town. We split the platoon just west of the town and attempted observation of it from two directions.

If observation produced nothing, I intended then to enter town in such formations that all sections would be mutually supporting.

If something should be seen in the town, I intended to remain in observation from such a position that the east and north exits of the town could be observed, and report to troop headquarters.

General Hawkins' Notes

The Support of Cavalry by Motorized Infantry

The support rendered to cavalry by motorized infantry has sometimes given splendid results. But some persons have let the idea of motorized infantry run away with them. They visualize whole Army Corps tearing along the roads towards the enemy, preceded by mechanized cavalry as a covering force. But they are going to do nothing of the sort. Huge columns of infantry may use trucks for transportation just so far, as they might use railroads when railroads lead in the right direction. Just so far and no farther! Even though the roads are ample and lead in the right direction, though there is no menace from hostile air force or cavalry, and though there are no difficulties presented to movement at night, nevertheless, there is a limit beyond which infantry in trucks cannot go, just as there is a limit beyond which infantry in railroad trains cannot go. A large body of infantry cannot move in trucks in tactical formation toward the enemy: it must detruck at a safe distance sufficient to permit ease of deployment unmolested by the enemy. Beyond this limit, large infantry forces must be developed into tactical columns. And these columns must be covered by forces of cavalry.

Strategical movement may be another matter. Railroads, however, can also be used for strategical concentration, and can carry artillery and cavalry as well as infantry.

It will do no good to try to use motor trucks for transportation and mechanized cavalry to cover the motorized columns. In the first place, mechanized cavalry is unfit for covering force duty unless backed up by stronger forces of horse cavalry. This will be discussed later.

So now, we come to our subject, the support of cavalry, horse and mechanized cavalry, by comparatively small columns of infantry in trucks, or special organizations of motorized infantry.

Infantry in trucks cannot be depended upon to support cavalry in all missions. Most of the important cavalry missions will require it to move across country. Trucks cannot do that. Even if trucks are specially made with tractors or caterpillar means of locomotion, they cannot carry thickly packed soldiers at speed across country without unduly fatiguing or injuring the men. Furthermore, such machines are very expensive and require unbelievable quantities of gas and oil.

There might be occasions when roads lead in convenient directions and the nature of the mission does not indicate that the force concerned is in much danger of being outflanked or surrounded by superior forces of enemy mobile troops. In that case, this would justify the use of infantry in trucks to back up the cavalry. If such an occasion arises, then, by all means, send infantry in trucks for this purpose. But those occasions will not be frequent. A cavalry force, sent around the enemy flanks or in rear to hold up and delay the withdrawal of enemy forces, will often find itself in a tight situation. It may be surrounded or threatened with complete envelopment by constantly increasing forces of the enemy. In order to avoid a very serious defeat or destruction, the cavalry would have to extricate itself by moving quickly and rapidly in a certain direction whether roads lead in that direction or not. If the force has been engaged, the infantry will have detrucked and left their trucks parked at a safe distance in rear. If threatened by envelopment the infantry will have to make a run for their trucks, entruck their men, get their trucks turned in the right direction and move off in a crowded truck column unable to defend itself from possible attack by enemy cavalry or aircraft or both. Then too, the only possible direction of retreat might and probably would be such that no road leads in the right direction, and cross-country movement is the only way that a withdrawal may be possible.

Horse cavalry possesses qualities that fit it specially well for such emergencies. It can mount quickly and withdraw rapidly in any direction. And during withdrawal, it is always able to fight instantly; whereas, infantry in trucks must halt on or near roads, detruck and deploy across-country, before it can fight even a defensive battle.

Although, with convenient roads, infantry in trucks can often support horse cavalry, and has done so, it is an entirely different matter when we attempt to support mechanized cavalry. The infantry in support of horse cavalry would be placed and used in a different way. It would be used in reserve or as a rally point, and if actually engaged in the first line of attack or defense, it would be supported by the cavalry. Its flanks would be guarded and defended. In case of a delaying action, so often required of cavalry, the infantry support could withdraw in time while the cavalry protects its flanks and fights defensively to ease the pressure on the infantry.

When the horse cavalry is sent to perform a mission in rear of the enemy, where it takes the risks of finding itself opposed by important enemy forces both in front and in rear, it would usually have no infantry support.

But mechanized cavalry must always have support—either of infantry or horse cavalry. Infantry in trucks,

supporting mechanized cavalry, must detruck to go into action, leaving its trucks parked on or near roads. If the mechanized cavalry attacks, the infantry must follow it up closely, thus committing itself to an advanced and exposed position. And if the mechanized cavalry is repulsed, or is fighting a delaying action, it can only turn and move off the field, leaving the infantry unsupported. The mechanized cavalry is not good at fighting defensive actions, and its cross-country mobility may not be sufficient on the terrain in question to guard and defend the infantry flanks during retreat. The roads leading to the rear will be partially occupied by carrier cars and other motor vehicles pertaining to the mechanized cavalry. They may not be entirely free for the use of the infantry trucks. And also, they may not lead in the proper direction for withdrawal; and then, indeed, the combination of mechanized cavalry with infantry in trucks is a sorry affair. There will be *some* cross-country whereon mechanized cavalry might withdraw slowly from a delaying action. But there never will be found a terrain on which trucks could move cross-country for more than a few hundred yards in any one direction.

Even at the very start of the operation, mechanized cavalry might have to go where the infantry could not follow.

And even though the infantry has been able to follow the mechanized cavalry, the light tanks, in making an attack, depend partially upon speed to render them less vulnerable. But the infantry, having detrucked and deployed, cannot begin to keep up with the tanks. And thus the value of their support is very much reduced.

In delaying actions, mechanized cavalry must rely largely upon their machine guns, which, during movement, are carried in the carrier vehicles which are very vulnerable to hostile fire action. When these machine guns are withdrawn, they must be loaded into the carriers. The carriers must have very favorable ground in order to move with sufficient speed across country. They will, therefore, seek roads for that purpose. The infantry trucks will find their roads very much blocked by these machines. The get-away from delaying actions will be exceedingly confused and interrupted.

When a large force of horse cavalry is acting as a covering force for a large force of infantry, the cavalry is not called upon to move around enemy flanks and rear as it is in some other missions. In that case, it is safe enough to support the cavalry by infantry in trucks, especially if the roads lead in the right directions, or the trucks are constructed for cross-country movement, like the Panzer brigades in the German Army. But movements on the flanks or rear of the enemy are not safe for infantry in trucks, especially if the enemy has important forces of cavalry and knows how to use them. When a distant point is to be seized and held at all costs or for a reasonable time, infantry in trucks, preceded by mechanized cavalry, can be sent for this mission under favorable circumstances. Mechanized cavalry is suitable for attack. Attack against small enemy forces may be necessary in order to reach the desired point. The point may be held by the enemy, and attack only be necessary in order to seize it. Upon the successful seizing of the point, the infantry prepares to hold it. The mechanized cavalry assists by lending its machine guns to the defense. The combat cars could be placed in rear to be used for counter-attack if necessary.

There are exceptions to every rule, but this matter may be summed up as a guide as follows:

Infantry in trucks should not be sent to support cavalry when the latter has a mission which takes it far around the enemy flanks or rear.

Infantry in trucks may support cavalry when the latter is acting as a covering force. But, in that case, the infantry should be kept on or near the axis of movement of the main force.

Infantry in trucks is not a suitable support for mechanized cavalry unless the mission requires the seizing of a distant point and holding it at all costs.

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The allotment of the Regular Army to overseas garrisons, harbor defenses, antiaircraft and air force has already been considered, and totals 103,700. To this must be added . . . four cavalry divisions at 5,000 each, totalling 20,000. . . .

—Page 300, *The Ramparts We Watch*, by GEORGE FIELDING ELIOT.

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At the Cavalry School

The Regular Noncommissioned Officers' Class, The Cavalry School, completed their six months' course of instruction and graduated March 11, 1939. Those completing the course were:

Sergeant John Augustine, Machine Gun Troop, 2d Cavalry
Sergeant Roger L. Billings, Headquarters Troop, 14th Cavalry
Corporal Lonnie M. Black, Machine Gun Troop, 8th Cavalry
Corporal Joseph A. Burney, Troop A, 9th Cavalry
Corporal Kenneth Carver, Troop F, 6th Cavalry
Corporal Vernon T. Davis, Headquarters Troop, 2d Cavalry
Corporal Clifford R. Goman, Troop B, 4th Cavalry
Sergeant Vernon T. Hanlon, Machine Gun Troop, 2d Cavalry
Private 1st Class John E. Holmes, Troop C, 9th Cavalry
Corporal LaVern V. Ives, Troop B, 14th Cavalry
Private 1st Class Calvin Johnson, Troop B, 9th Cavalry
Corporal James E. Jolley, Troop A, 2d Cavalry
Corporal Richard E. Kirkpatrick, Troop E, 2d Cavalry
Corporal Rudolph Knapp, Troop B, 12th Cavalry
Sergeant Raymond Lovesee, Troop B, 2d Cavalry
Sergeant Raymond L. McBrayer, Troop F, 12th Cavalry
Corporal Homer Pitts, Battery B, 84th Field Artillery
Sergeant Clint H. Putman, Battery D, 3d Field Artillery
Corporal Robert L. Robertson, Machine Gun Troop, 8th Cavalry
Corporal Fred Running, Troop F, 2d Cavalry
Corporal William Schnicke, Troop F, 2d Cavalry
Corporal Robert B. Seney, Troop F, 11th Cavalry
Corporal Alonzo E. Shearer, Troop A, 9th Cavalry
Private 1st Class Frank L. Strasheim, Quartermaster Corps
Sergeant Sam W. Truett, Battery C, 84th Field Artillery
Sergeant Curtis E. Watkins, Troop B, 10th Cavalry
Corporal Charles Wilson, Machine Gun Troop, 10th Cavalry
Corporal Preston K. Wise, Troop E, 7th Cavalry

The following members of the above class were selected for detail as students in the Noncommissioned Officers' Advanced Equitation Class, from March 13th to June 16th, 1939:

Corporal Lonnie M. Black, Machine Gun Troop, 8th Cavalry
Corporal Clifford R. Goman, Troop B, 4th Cavalry
Private 1st Class John E. Holmes, Troop C, 9th Cavalry
Corporal LaVern V. Ives, Troop B, 14th Cavalry
Corporal James E. Jolley, Troop A, 2d Cavalry
Sergeant Clint H. Putman, Battery D, 3d Field Artillery
Corporal Robert L. Robertson, Machine Gun Troop, 8th Cavalry
Corporal Fred Running, Troop F, 2d Cavalry
Corporal William Schnicke, Troop F, 2d Cavalry
Corporal Robert B. Seney, Troop F, 11th Cavalry
Private 1st Class Frank L. Strasheim, Quartermaster Corps
Sergeant Curtis E. Watkins, Troop B, 10th Cavalry

A week of competition in the Graduation Events of the course decided the winners in the following events:

REMOUNT COMPETITION, SCHOOLING PHASE

Won by—Corporal Fred Running, Troop F, 2d Cavalry
2d—Corporal Clifford R. Goman, Troop B, 4th Cavalry
3d—Corporal Kenneth Carver, Troop F, 6th Cavalry
4th—Corporal Robert B. Seney, Troop F, 11th Cavalry

REMOUNT COMPETITION, JUMPING PHASE

Won by—Corporal LaVern V. Ives, Troop B, 14th Cavalry
2d—Corporal Kenneth Carver, Troop F, 6th Cavalry
3d—Corporal Richard E. Kirkpatrick, Troop E, 2d Cavalry
4th—Corporal Homer Pitts, Battery E, 84th Field Artillery

FOR THE BEST REMOUNT

Won by—Corporal Kenneth Carver, Troop F, 6th Cavalry
2d—Corporal Clifford R. Goman, Troop B, 4th Cavalry
3d—Corporal Fred Running, Troop F, 2d Cavalry
4th—Corporal LaVern V. Ives, Troop B, 14th Cavalry

TROOPERS MOUNT, JUMPING COMPETITION

Won by—Corporal James E. Jolley, Troop A, 2d Cavalry
2d—Sergeant John Augustine, Machine Gun Troop, 2d Cavalry
3d—Private 1st Class John E. Holmes, Troop C, 9th Cavalry

(Continued on page 175)

"The Cavalry Board invites any individual, whether or not a cavalryman, to submit for consideration constructive suggestions or ideas relating to new equipment, improvement of standard equipment, or to any problem or project under study by the Board. The Board will also welcome suggestions as to new problems that may properly be considered. Communications should be addressed to the Director, Cavalry Board, Fort Riley, Kansas."

Cavalry Field Manual: The Cavalry Board is engaged in preparing changes for the Cavalry Field Manual, Volume I and Volume III, to make it conform to the present revised Tables of Organization for Cavalry, which have recently been received.

Basic Field Manuals: A new Basic Field Manual pertaining to each of the following weapons is being prepared: U. S. Pistol Caliber .45, Machine Gun, Caliber .50 (HB) Ground, and the Light Machine Gun, Ground. These manuals when completed will contain all material necessary for training with these weapons.

Revision of Manuals: The War Department is planning to make a revision of the Staff Officers' Field Manual and, possibly, to replace the present Field Service Regulations and Manual for Commanders of Large Units with a new Field Service Regulations. Comments and recommendations concerning the general and detailed features of these proposed revisions, as they pertain to Cavalry, are now being prepared.

Due to recent changes in Cavalry organization, and the development of mechanization in the Cavalry, it has been found necessary to revise and bring up to date practically all of the subject matter of the manuals referred to which pertains to the Cavalry arm.

81 mm. Mortar: Hangars to pack the 81-mm. mortar on the Cavalry pack saddle have been fabricated at Fort Riley, Kansas, under the supervision of the Cavalry Board. These hangars together with a mortar will be employed in a field test to determine the feasibility of carrying this weapon in pack. The test is in connection with a current study of supporting weapons for the Cavalry.

Browning Automatic Rifle, Caliber .30, Modified: A Browning Automatic Rifle, Caliber .30, Modified has been received, equipped with a bipod, butt rest, and a device for reducing the cyclic rate. Another similar weapon with a heavier barrel has been shipped to the Board. These two weapons will be employed in a test in the near future in connection with a study of the Cavalry light machine gun.

Cover Latch, Group Assemblies: Four modified cover latches for various types of machine guns, caliber .30, have been received for test to determine whether or not they are suitable to replace the present latches which frequently allow the cover to open during firing.

Rust Resisting Material: Four rifles, M1, have been received, which have been finished with a rust resisting material known as "Penetrate." These rifles will be subjected to an extended service test to determine the suitability of this finish.

Horseshoes Treated with Borium: The Cavalry Board is experimenting with horseshoes treated with Borium. It took this work under study during the summer of 1938 but results were not particularly good as on the spring march of the Cavalry School the shoes treated with Borium wore nearly as much as untreated shoes. Tests at other stations have apparently been more favorable towards the use of Borium and test by the Cavalry Board is continuing.

Watering Troughs: The watering troughs of the 2d Cavalry are being modified so as to replace the rope lacing by metal rings, web straps or leather straps, in order to obtain a more satisfactory method of fixing the canvas to the metal standard.

Small Arms Armament for Motorcycles: Scabbards are being made for the Thompson submachine gun and also for the semiautomatic rifle, M1, to provide a satisfactory method of carrying each of these weapons on the motorcycle. When the scabbards are completed, tests will be made to determine which weapon is more suitable for use by motorcyclists.

Neck Strap Hobble: A combination neck strap hobble submitted to the Cavalry Board by Major Rinaldo L. Cox, Cavalry, is being tested in the 2d Cavalry. This article is normally used as a neck strap in place of the issue halter. By means of a special type ring, it can also be used to hobble the horse's forefeet.

Marking of Individual Equipment: Efforts are being made to obtain rubber or metal stamps which will produce more lasting and legible markings on individual equipment and clothing.

Horse Gas Masks: The Cavalry Board has tested a German gas mask for horses. This mask was well made but did not supply an adequate amount of air for horses undergoing exertion. It was heavy, bulky and could not be packed in a manner suitable for service use by Cavalry.

Light Reconnaissance Vehicle: Using the chassis of a commercial 4 x 4 Marmon-Herrington (Ford) ½-ton cargo truck, the Board is now engaged in improvising and fabricating a so-called light reconnaissance vehicle for test to determine its possibilities, if any, for use in horse cavalry.

This vehicle will be unarmed. Its gross weight (including crew, armament, ammunition, etc.), will be approximately 4,500 pounds. It will carry a crew of 4 men to include driver, car commander, gunner, and radio operator.

Its armament will consist of one or possibly two .30 caliber M1919A4 guns, mounted on pedestal mounts for fire from the vehicle. Guns will be quickly detachable for ground fire when needed. Two M1 rifles will be carried as crew equipment.

The body of the vehicle will consist of a plain sheet steel platform upon which will be erected four bucket seats to accommodate the crew. A small box or "pick-up" body on the rear of the platform will carry ammunition and equipment.

The objective in the construction of this vehicle is to produce a type car which will be lighter, more mobile, and with a lower silhouette than anything we have had heretofore. Another aim in this experiment is to develop a vehicle which, if found to possess desirable tactical features, will lend itself readily to commercial quantity production.

It is expected that the model referred to will be completed and ready for test during the Cavalry School maneuvers to be held in May. After this experiment it is anticipated that it will be sent to the First Cavalry Division for further tests.

Bullet-Seal and Sealed Air Tubes: Experimentation is now being conducted in the service to develop a suitable type of puncture or bullet proof tube for use in the pneumatic tires of military motor vehicles of both combat and cargo type. If successful this type of tube would:

a. Eliminate the necessity of carrying a spare tire.
b. Eliminate the delays and dangers incident to punctures, blowouts, etc.
c. Replace tires with sponge rubber fillers which sometimes blow out when subjected to extreme heat.

Several of the commercial rubber companies have developed tubes which show promise of meeting the needs of the service. The Cavalry Board will, in the near future, start a test of so-called Bullet Proof and Air-Sealed tubes produced by the Seiberling Rubber Company. These tubes will be installed on Indiana 1½-ton, 4 x 4, cargo trucks and will be subjected to a service test extending over a period of about one year.

Audible Signal Devices: The board has been conducting a test of audible signal devices over the period of the past eight months, with a view to selection of a device for use on motor vehicles for the following purposes:

a. As a traffic signal.
b. As a means of "alerting" a command to attacks by aircraft or mechanization.
c. As a means of communication.

Various commercial types such as sirens, exhaust whistles, air horns, and electric horns have been tried, but none have been found entirely satisfactory, and none have been recommended for adoption. An attempt is now being made to secure a special type of electric horn for continuation of the test.

Airplane Liaison: Efforts are being made to obtain a method by which ground troops may signal to a friendly observation plane at night if radio communication fails or is not available. Position lights are considered unsuitable because they cannot be quickly extinguished, can transmit only a few signals, and their colors are difficult to discern. Flashlights or spotlights directed toward the plane, then upon displayed panels may prove satisfactory, but the air-traffic-control signaling lamp is considered to be the most suitable means. This lamp throws a red, green, or yellow beam which may be broken into dots or dashes by means of a trigger in the handle.

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At The Cavalry School

(Continued from page 173)

4th—Corporal Richard E. Kirkpatrick, Troop E, 2d Cavalry

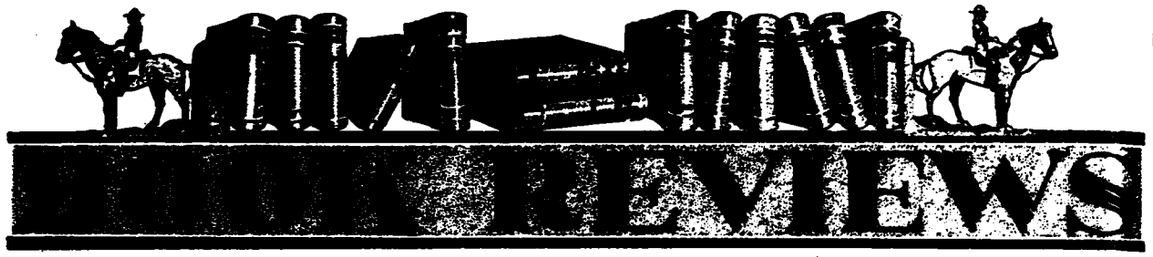
Corporal William Schnicke, Troop F, 2d Cavalry, won the trophy as the noncommissioned officer who had demonstrated the highest efficiency in the duties of a cavalry noncommissioned officer, based on his individual work in all departments of the school.

Graduation exercises were held at the West Riding Hall, starting at 10:00 AM, March 11th. The events consisted of exhibitions of the winning remounts in the Schooling Phase and in the Jumping Phase, and the finals in the Jumping Competition in which troopers' mounts were ridden.

Upon completion of the events, the class was formed mounted and all winners were awarded suitable trophies and ribbons by the Assistant Commandant of the Cavalry School, Colonel Clarence Lininger, Cavalry.

The class was then dismounted and Brigadier General Robert C. Richardson, Jr., U. S. Army, Commandant, The Cavalry School, addressed the class, stressing the value of the training received at the School to noncommissioned officers and the importance of passing on to other enlisted men of the cavalry regiments the lessons learned. He extended the best wishes of the Cavalry School to all members of the graduating class.

The Assistant Commandant then announced the names of the noncommissioned officers selected for the Noncommissioned Officers' Advanced Equitation Class, and the exercises terminated with the National Anthem, which was played by the Ninth Cavalry Band.



AMERICAN RACE HORSES, 1938. By John Hervey (Salvator). Foreword by Alfred Gwynne Vanderbilt. The Sagimore Press, New York, 1939. $5.00.

Reviewed by Lieutenant Colonel John F. Wall, Retired.

In "American Race Horses 1938" Mr. A. G. Vanderbilt, who writes its foreword, gives the *raison d'etre* of this publication. One cannot but agree that this work which has appeared annually three times, fills a great gap in turf history. In it is found the summary of racing for a twelve-month, giving a reasonably complete history of racing.

It is true that "American Race Horses" differs from the spectacular and often inaccurate accounts of the daily press, from the cold facts disclosed in a racing chart, or the drab records in the stud book which relates the breeding of the animal. In "American Race Horses" John L. Hervey, better known as "Salvator," seems to have assembled the most select of all that he has written of the best horses during the year and has arranged the material in a logical manner making it easy to learn just what took place on the race-course.

The inimitable style, the charm, the accuracy and knowledge well recognized as belonging to "Salvator" are again in evidence in this volume for 1938.

Along with Mr. Hervey, Mr. Bert Thayer, one of our leading horse photographers, has contributed to the value of the work. The credit for the general arrangement, it is understood, must go to Mr. Vaughn Flannery and to Mr. Peter Vischer who should be accredited with a most excellent accomplishment.

Those who are interested in the horse are particularly concerned with the Thoroughbred because from him come all light-breeds. And horsemen know too that the race-course is the means of keeping up the standard. The text with accompanying photographs and pedigrees makes it apparent that good bloodlines, good performance and good conformation usually go hand in hand.

Racing survives because of differences in opinions. It may be that some facts and some opinions advanced also will be cause for controversy, but the style, the arrangement, and the stimulation to the memory of the performances of 1938 make "American Race Horses" well worthwhile. In years to come these volumes published from year to year will prove of greater value. This book can properly find a place in the library of the Cavalryman as well as in those of the breeder and trainer.

"HEALTH, HYGIENE AND HOOEY." By W. W. Bauer, M.D. The Bobbs-Merrill Company, New York, 1938. 309 pages. $2.50.

Reviewed by Colonel M. C. Stayer, Medical Corps, The Cavalry School, Fort Riley, Kansas.

This book, written for the layman, is different. The author calls attention to the fact that so much interest has been aroused in health that there is a vast amount of both information and misinformation (entirely too much of the latter) peddled by all sorts and kinds of people. It is important to be able to distinguish between authentic sources and those that are not; therefore, instead of naming names, as he expresses it, he devotes his efforts to general principles. He says, "The best safeguard against exploitation is a knowledge of principles. Individual exploiters come and go; nostrums rise, flourish, and vanish: quackery is different every day and yet, fundamentally, the same. A person who understands the characteristics of charlatanism will not be fooled by the individual exploiter." The general argument is summed up in his last chapter, "Common Sense, Preferred," and his last words warn the health seeker that his best security will be found in "Common Sense, Preferred, and Skepticism. Unlimited."

The author has a gift for striking titles, such as "Swivel-Chair Hygiene," "Dispelling Dietary Dilemmas," "A Fake for Every Ache," "Soft Soap and Skin Games," etc. We particularly recommend Chapter XIV. "Who Pays the Piper." In addition to formulating striking titles, he also has a humorously impressive way of putting facts. For example, in speaking of mascara, he says, "Making up the eyelashes is a safe procedure if only mascara is employed. This formerly put the lady at a disadvantage, because tears played havoc with it. Now all that is changed with the advent of waterproof mascara, which allows a lady to weep and still be lovely." The ordinary materials of everyday make-up are called "war paint" ". . . hope springs eternal in the baldest heads, and the shining pink cranium is always good for a rub of something or other which raises hope if not hair." The author does not believe that a book list should be given in a work of this kind since books come and go and such lists should be kept up-to-date to be of real value. However, he gives 22 books now on the market which may be consulted, and 5 health magazines.

The book is interestingly written and will hold the attention of readers. It goes well with "The Traffic in Health" and "Poison, Potions, Profits." It is accurate and can be recommended without any reservation.

MEIN KAMPF. By Adolph Hitler. Complete and Unabridged, fully annotated. Published by Reynal and Hitchcock, 1939. New York. 993 pages. $3.00.

Mein Kampf is essentially the political, social and economic philosophy of Adolph Hitler. At the same time, it serves to develop the basic doctrines of the National Socialist German Workers Party known to the world as the Nazi Party.

The book covers very briefly Hitler's youth and early environment. His family background is given little space.

On the other hand his years of young manhood prior to the World War, spent in Vienna, is given considerable attention. There he developed his predominating spirit of anti-Semitism, based largely, according to his words, on his observations of the Jewish intellectuals.

His service in the World War evidently aroused his admiration for the organization of the German arms, but more importantly aroused his fundamental respect for and belief in the value of discipline in any mass movement.

Discharge from the army found him in Munich much disturbed over existing conditions in Germany at that time, these conditions he accredited to subversive elements that, also, had played a part in the subjection of the nation and the attending disorganization and confusion. Joining the German Workers Party he set forth with intensity in formulating it into a national entity. The struggle of those days emphasized in his mind the power and force of oratory over the written word. His views on the need of an interior force to guarantee a well policed meeting gave birth to the now famous Storm Troopers. He believed that any movement whose operations exist only through outside police protection could not succeed. As a party needs the vital energy of determined leadership so also does a nation in order to reap the full benefit of its inherent resources. He therefore advocated a government through highly centralized authority in order that the national leadership might be held personally accountable. He visualized the power of propaganda and the necessity for its organization in these words, "The greater and the more revolutionary, essentially, an idea is, the more active will its members become, since for its supporters the revolutionary force of the doctrine involves a danger; which appears suitable for keeping off small and cowardly petty bourgeois. . . . Through this, however, the organization of a truly revolutionary idea receives as members only the most active followers, won by propaganda."

Basically, Nazi policy has been one of constant and bitter antagonism to Communism. As Hitler wrote in respect to any possible future alliance between Germany and Russia: "Thus the fact of the conclusion of a treaty with Russia embodies the declaration of the next war. Its outcome would be the end of Germany. . . . The present rulers of Russia do not at all think of entering an alliance sincerely or of keeping one."

Nazi national policy is expressed in these words. "The National Socialists must guarantee the German nation the soil and territory to which it is entitled on this earth."

The complete and unabridged edition of *Mein Kampf*, published by Reynal and Hitchcock, appears to be carefully and scrupulously translated. An appreciable portion of the book is devoted to editorial annotation, which is of assistance in appreciating many of Hitler's dissertations that the reader, unfamiliar with German background, might otherwise misinterpret.

* * *

MY BATTLE. By Adolph Hitler. Houghton and Mifflin Company. $2.50.

This version of Hitler's original *Mein Kampf* is translated in more general fashion than the current unabridged edition. It appears, however, that the essence of Nazi doctrine, though in modified terms, has been substantially and adequately covered. The outstanding aims of Der Fuhrer have been treated in a manner to give the reader a satisfactory draft of Nazi aims and philosophy. The unreserved and vicious attack, couched in the language of an intense and passionate leader such as Hitler, is not found in this edition to the extent one encounters in the unabridged document. For one, however, who is more interested in calm presentation of the Nazi movement this volume will serve every purpose.

* * *

ALONE. By Rear Admiral Richard E. Byrd. Published by G. P. Putnam's Sons. $2.50.

This is Admiral Byrd's own story of his experiences during that four month period in 1934 that he spent alone in an ice buried shack—15 feet long, 11 wide and 8 deep—at 80° 8′ South.

In this book the author departs from his usual scientific exposition and tells an enthralling story of his intimate reactions, not only to the elements of an Antarctic night, but the psychological effect on a human being isolated from all other humanity.

In the early part of the book telling of the preparations for the experiment and the transportation of supplies, the reader is given much insight into the explorer's understanding and consequent handling of men, his orderly manner of preparation, and his attention to the minutest details.

As the cold became more intense strange things were found to happen. At 50° below zero a flashlight dies. At −55° kerosene freezes. "Below −60°," he writes, "cold will find the last microscopic touch of oil in an instrument and stop it dead." Even the protection of silk gloves did not keep his fingers from freezing and the flesh stuffing off. Later, as the fumes from the kerosene stove exhausted his physical reserve, the aloneness became more acute, and the battle for physical survival became a matter largely of moral fortitude.

Admiral Byrd tells this story with evident reserve. For that reason it looms even larger as a masterful account of fortitude, moral stamina, and man's humility in the presence of the raw elements of the Universe.

ORGANIZATION ACTIVITIES

1st Cavalry—Fort Knox, Ky.

COLONEL HENRY W. BAIRD, *Commanding*

Since the 1st of January the efforts of the regiment have been concentrated on preparing officers and men for the Spring Training Season. The Brigade Motor School and the Motor and Radio Schools for enlisted men are approaching the completion of their courses. The regiment has continued its combat firing and its testing and development work in coöperation with the Mechanized Cavalry Board. On January 21st the regiment was inspected by the Commanding General who expressed himself as well pleased with the condition of the command.

Early in February, the Regimental Commander, Colonel Henry W. Baird, paid a visit to Kansas City and to the Cavalry School.

A detachment from the Regiment, together with other elements of the brigade, under command of Captain R. B. Evans, 1st Cavalry, marched to Cincinnati on February 17th, where they participated in Defense Week ceremonies. The mayor of Cincinnati and Colonel Sherril the city manager inspected the display and were highly complimentary in their remarks.

The First Cavalry pistol team won first place in the Cavalry Small bore Championships. The team consisted of:

Captain R. B. Evans, Instructor
St. Sgt. McGannon, Machine Gun Troop
Sgt. Kellerman, Troop "A"
Cpl. Mitchell, Troop "A"
Pvt. Cornwell, Headquarters Troop
Pvt. Miller, Service Troop.

The Fort Knox basketball team has been undefeated in Corps Area competition this season. The First Cavalry is well represented on this team.

In spite of bad weather and muddy terrain, the regiment has continued its weekly tactical exercises throughout the winter.

Master Sergeant Ben H. Harris retired February 28th after completion of 30 years service. Sgt. Harris was the only Cavalryman ever to win the National Individual Pistol Championship. The Machine Gun Troop gave a dinner in honor of Master Sergeant Harris where he was presented with a wrist watch and a framed guidon of his old troop. Brigadier General Adna R. Chaffee was the speaker of the occasion.

On March 2d the Regiment celebrated its 106th birthday. In the morning, a review was held. This review was a final ceremony in honor of Master Sergeant Harris, a commemoration of Organization day, and the occasion for the decoration of the Regimental Standard with the Streamer "Luzon—1902." The streamer was the 61st battle honor to be awarded the 1st Cavalry. Brigadier General Chaffee and Master Sergeant Harris received the review. The standard was decorated by General Chaffee. After review the troops were released. Special dinners were served in organization messes and a most successful supper dance for the men was held in the post dance pavilion, in the evening.

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1st Squadron—3d Cavalry
Fort Ethan Allen, Vermont

LIEUTENANT COLONEL THOMAS H. REES, JR., *Commanding*

Aside from the usual winter training, interest has been running high concerning the Cavalry Regimental Team Matches. Troop "A" had the high score in the Rifle Match with 8,310 and also high score in the Pistol Match with 5,741.

The individual high shots were as follows:

First Sergeant Blazejevski, Troop "A"—high score "old" rifle shot, and high score "old" pistol shot.

Corporal Fay, Troop "B"—high score "new" pistol shot.

The rifle and pistol teams of Troop "A" have also participated in a number of local matches. On January 20, they defeated a team at Vergennes by a score of 1,334 to 1,187. On February 6, the team was again victorious in a 25-foot match defeating the Ledgemere Team of Burlington by a score of 1,317 to 1,269. On February 13th in a 50-foot match with four other teams, Troop A's Team won with a score of 1,366. Second place was won by the Burlington Police Dept. Team with a score of 1,301. The Ledgemere Team of Burlington was third with a score of 1,298. The Capitol A Team of Montpelier was fourth with a score of 1,266.

On February 10th the Squadron presented the second Gymkhana of the winter season. Despite the inclement weather and icy highways there were over nine hundred spectators in the audience.

The program and winners are given below:

Event No. 1. Relay Race:
Won by Team from Troop "A," composed of Pvts. Horan, Tibbets, Kimball and Goodspeed.

Event No. 2. Bareback Polo:
Won by Team from Troop "A" composed of Sgt. Wood, Corp. Yurza and Pvt. Fekety.

Event No. 3. Privates Jumping:
1st—Pvt. J. F. Ross Troop "A" on *Frankie*.
2nd—Pvt. Short, Troop "B" on *Peanuts*.
3rd—Pvt. Pfeffeckuch, Troop "A" on *Reckless*.
4th—Pvt. J. N. Ross, Troop "A" on *Mary Mary*.

Event No. 4. Tandem Ride:
This was a demonstration by members of Troop "B" who rode one horse and drove another in front, using tandem hitch.

Event No. 5. Mule Race:
1st—Pvt. Chicoine, Troop "B."
2nd—Pvt. Noye, Troop "A."

Event No. 6 Officers' Jumping:
The course for this was once and a half around over a hedge, stone wall, barber pole and barrels, and down the center over a single jump consisting of a chicken coop hedge and rail. The same system of handicapping horses three and six inches was used as in previous Gymkhana, which led to a spectacular jump off with the winner having to top five feet to get the blue ribbon.
1st—Lt. Col. Rees on *High Time* (6-in. handicap)
2nd—Lt. Townsley on *Greta* (no handicap)
3rd—Capt. Jadwin on *Black Beauty* (6-in. handicap)
4th—Capt. Wenzlaff on *Milly Russell* (6-in. handicap)

Event No. 7. Rodeo Ride:
This was an exhibition of trick riding by members of Troop "A" who showed the "spread eagle" "tail drag" "air plane" and other stunts of the "Wild West." The ride finished by all members going through a fire jump. Cowboy songs were sung by Pvt. Parsons, Troop "A," accompanied by Privates Daniels, Cebula, Larsen and Boscombe.

4th Cavalry—Fort Meade, South Dakota

COLONEL R. C. ROGERS, *Commanding*

A series of Indoor Horse Shows for the winter months have been inaugurated with the purpose of developing green horses and riders and raising the general standard of horsemanship. The results of the first show, held in the Riding Hall on Friday afternoon, January 27, 1939, are as follows:

Class I. Green Jumpers—E.M.:
1st—Pvt. 1st Cl. Merow, Troop E, on *Soak*.
2nd—Pvt. 1st Cl. Wudel, Troop B, on *Droopy*.
3rd—Sergeant Hatty, Troop A, on *Frisky*.

Class II. Officers' Chargers:
1st—Lieut. Culp, on *Brown Cat* (Private Mount)
2nd—Captain Hine, on *Ute*.
3rd—Captain Robinson, on *Mink*.

Class III. Troopers' Mounts:
1st—Pvt. 1st Cl. Jezek, Troop B, on *Blatz*.
2nd—Pvt. Gillis, Troop B, on *Nigger*.
3rd—Pvt. Collins, Troop E, on *Chester*.

Class IV. Novice Jumpers—Enlisted Men:
1st—Pvt. Pierce, V. C., Troop B, on *Snapp*.
2nd—Sgt. Rice, Hq. Troop, on *Chico*.
3rd—Corp. Mabry, MG Troop, on *Spot*.

At the close of the Christmas holidays the post had the pleasure of welcoming two brides, Mrs. F. T. Turner, formerly of New Orleans, La., wife of Captain Turner, and Mrs. Neil Van Sickle, formerly of the Dalles, Oregon, wife of 2nd Lt. Van Sickle. Other new arrivals are 2nd Lt. and Mrs. J. H. Swenson, who joined the regiment in December from Randolph Field, Texas.

Competition is keen throughout the regiment in the preliminaries for the Cavalry Rifle and Pistol Team Tryouts. A number of excellent young shooters are being developed. The post is in the midst of an inter-organization basketball tournament; much interest is being shown in both the officers' and enlisted men's bowling leagues; monthly boxing matches, with many civilian fighters providing color, have furnished excellent cards, and have brought large numbers of fight fans from throughout the Black Hills to the post. Under the supervision of Captain M. A. Giddens, Post Athletic officer, a team from Fort Meade competed at Fort Lincoln, North Dakota from January 26th-28th, with results as follows:

BASKETBALL

Jan. 26—Mandan 19—Fort Meade 32.
Jan. 27—Fort Lincoln 14—Fort Meade 28.
Jan. 28—Bank of N. Dak. 23—Fort Meade 41.

BOWLING

Jan. 27—Fort Lincoln 2,213—Fort Meade 2,166.
Jan. 28—Fort Lincoln 2,368—Fort Meade 2,631.

BOXING

Jan. 28—
Fort Lincoln was the winner of seven of the eight bouts. Van Slyke of Fort Meade being the lone winner in the 127 pound class. A return engagement of the teams from Fort Lincoln will be held here early in March.

5th Cavalry—Fort Clark, Texas

COLONEL CUTHBERT P. STEARNS, *Commanding*

The Inter-troop Basketball season came to a close on February 16th when Machine Gun Troop beat Brigade Headquarters Troop in three straight games of the play-off series—Brigade Headquarters Troop having won the first half of the season's games, Machine Gun Troop the second half. The Post Basketball team finished its season in fine style on February 26th, by defeating Brooks Field 54—38. It lost only once during the season—to Fort McIntosh in a return game by a score of 43—19.

By the middle of March baseball should be well under way. An Inter-Troop league will be run for the following two months, after which a Post team will be organized to play games throughout the summer.

On Washington's Birthday, the Fifth Cavalry held a track and field meet combined with elimination boxing bouts. Machine Gun Troop came out on top with the highest aggregate score. After the fights, General Wainwright presented the winning troop handsome awards for both the basketball Championship and the track, field and boxing championship.

The Regiment celebrated its anniversary on March 3rd. At 11:00 AM, of that day the troops were formed in Las Moras Park where they heard in brief the history of the Regiment delivered by its junior officer, 2nd Lieut. John J. Carusone, and an address by Colonel Stearns. A picnic lunch was served in the Park followed by competitions among the men which required various and humorous types of mental and physical agility. A tea dance was held at the Post Officers' Mess later in the afternoon.

There has been no change in officer personnel of the Regiment since the last issue.

6th Cavalry—Fort Oglethorpe, Georgia

COLONEL GEORGE DILLMAN, *Commanding*

Training of the regiment during the period January-March, 1939 consisted mainly of field training. Troop, Squadron and Regimental Field Exercises being held throughout this period, with a view to bringing the regiment to a high state of proficiency just prior to its participation in the Fourth Corps Area Maneuvers to be held at Fort Benning, Georgia, during the month of May, 1939. Regimental Field Exercises covered dismounted attack, combined attack and delaying action. Troops and Squadrons held similar problems prior to the regimental exercises.

Troops of the regiment are now undergoing instruction in antiaircraft firing with the sub-caliber rifles. Part of the instruction being held on the Post proper and later on at the Catoosa Target Range.

During the months of February and March, 1939, fourteen Cavalry Reserve Officers were ordered to active duty training with the 6th Cavalry. These Reserve officers were attached to various troops of the regiment and underwent the actual training being given troops at the particular time they were on active duty.

An inter-troop small bore rifle match was held during the month of January. This match consisted of five shoulder to shoulder matches, with Troop F winning the team trophy.

Upon completion of the inter-troop firing a regimental small bore rifle and pistol team was organized and competed against all other Cavalry regiments of the regular Army.

RECREATION

Troop F won the regimental basketball tournament after a very close and exciting race.

Troop B was declared the winner of the Fort Oglethorpe Bowling Tournament which was completed in February.

HUNT

The pack seemed to understand their obligations since we were recognized by the Master of Foxhounds Association in November and have given us some great runs.

The Hunt has enjoyed a very active season. Up to the beginning of the rainy season (latter part of January) the new country west of the Park was hunted regularly. The open country, varied terrain and many fences have added greatly to the sport and enjoyment of hunting here. It is a welcome change from constant hunting in the Park. The last hunt in the outside country (Washington's Birthday) was probably the fastest hunt of the season. Hounds ran so fast that at times even the hunt staff could barely stay in sight of hounds. The Commanding Officer of the Regiment, Colonel Dillman, was the first one of the field over every fence and set a great pace for the rest of the field.

On December 31st we killed our first fox in the Catfish section. So far that is also the only one killed, although on the live hunts conducted early on week days hounds have given good fast runs, marking their fox to the ground 5 times and losing him 3 times.

On February 21st, the Hunt had its first annual hunt ball at the Officers' Club. It was well attended and greatly enjoyed by everybody.

The annual Point to Point ride on April 8th will be combined with a party for the farmers and land owners. It will be held west of the Park through the farming country over a distance of 4 miles and about 14 fences. The last official hunt of the season will take place on April 2nd.

PERSONNEL

Major Candler A. Wilkinson and Captain Gordon Rogers have been ordered to the Regiment, effective upon completion of their tour at the Command and General Staff School.

7th Cavalry—Fort Bliss, Texas

COLONEL WILLIAM W. WEST, *Commanding*

The Seventh Cavalry Polo team defeated the team of the New Mexico Military Institute at Roswell, New Mexico, on Sunday, March 5th, in an extra period game by the score of 8 to 7.

A regimental horseshow was held on February 18th. Great interest was shown by everyone and similar shows will be scheduled in the near future.

Work is being done on Garry Owen Field to get the diamond in shape for the troop baseball league which will start soon. The regimental basketball team finished in the cellar in the inter-regimental league, but gave a good account of itself with all teams from the champions down, losing most games by very few points.

The regiment was saddened by the death on February 5, 1939, of our old regimental commander, Colonel Selah

R. H. Tompkins at San Antonio, Texas. Besides having been an integral and vital part of the Seventh Cavalry, Colonel Tompkins was one of the most picturesque and widely known figures in the United States Army. A man of magnetic personality, and outstanding character, brusque but kind, "Tommy" was known either personally or by reputation wherever an Army Post existed. Private First Class Chavez, Colonel Tompkins' old orderly, was sent to San Antonio to blow taps over this Old Soldier's grave as expressly requested by him some time before his death. On the date and at the time that the funeral services were being held in San Antonio the whole Seventh Cavalry observed a period of one minute's silence, during which taps was blown followed by Garry Owen to represent Tommy's spirit carrying on forever in his old regiment.

Regimental training during February and March has generally looked forward to the Division Commander's tactical inspection the last week in March and the Corps Area Commander's tactical inspection scheduled for April.

Field exercises have included a regimental problem the first Thursday of each month in addition to monthly brigade and division exercises. Combat and known distance firing has been conducted monthly at Dona Ana Target Range. The regiment has also participated in one regimental and one division ceremony each month.

Losses since last notes:

Major Strawn to detail in Quartermaster Corps.

Promotions to Lieutenant Colonel:

Edmund M. Barnum and Edward F. Shaifer.

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8th Cavalry—Fort Bliss, Texas

COLONEL INNIS P. SWIFT, *Commanding*

On January 21 the regiment was paraded, mounted, in honor of First Sergeant Mack N. Wolfe, Headquarters and Service Troop, on the occasion of his retirement after thirty years of service. The regimental commander expressed to Sergeant Wolfe the congratulations of the regiment for a long and distinguished career in the military service and extended to him the regiment's best wishes for an equally long and happy retirement.

The regiment participated, during the week of February 6-11 in the making of news reel pictures. A mounted review was filmed and the regiment also furnished a war-strength troop (Troop B) which staged a mounted attack through smoke.

On February 16 a very interesting exercise was held involving a movement by rail. Actual railway equipment was available for one Standard train. The 2d Squadron with one platoon heavy machine guns and one section of scout cars attached, was designated as the loading unit. All personnel, animals, equipment and wheeled transportation was loaded. All transportation was blocked and secured as for an actual movement. Kitchen cars with field ranges were provided. A noon meal was served from the kitchens as if en route.

During February the regimental commander announced that Troop "A" commanded by Captain William J. Reardon, had won the famous Slocum Trophy for the year 1938. This is the second year in succession that Troop "A" has won this honor.

The Slocum Trophy award has become a popular tradition in the 8th Cavalry. In 1928, Lieut. Colonel Stephen L'H Slocum, Cavalry-retired, who served 23 years in the 8th Cavalry, presented the trophy to the regiment. The trophy is a beautifully wrought statuette by the well known sculptor A. P. Proctor, showing an Indian warrior in full mounted flight. This subject is considered very appropriate in that the 8th Cavalry spent all of its early years pursuing the Indians of the Southwest.

Lieut. Colonel Slocum, having spent all of his 23 years service in the 8th as a troop officer, desired that no special competition be held, but the prize be given to the troop judged by the regimental commander to be the most generally efficient in its work throughout the year.

The award was based upon rifle marksmanship, machine gun marksmanship, pistol marksmanship and the number of desertions. The board made many frequent and informal inspections throughout the year to rate the troops on paper and property administration, appearance of barracks, stables, and personnel, and also the condition of animals and equipment. The efficiency of the troops in field training was also judged. It can thus be seen that the award was not merely for a specific competition, but for the efficiency displayed by a troop throughout the year.

All ranks are glad to see this triumph for their First Sergeant, Van C. White, who retires this summer. Sergeant White's ability and his devotion to Troop "A" have kept the black horsemen on top for years. He attributes the troop's success this year to the discipline and the coöperation of his fine troopers.

On February 24 the regiment was again paraded in honor of Master Sergeant George E. Stone who retires in the near future after thirty years of service. The Regimental Commander expressed to Sergeant Stone the distinct loss to the service of so fine a soldier and assured him of the best wishes of the regiment in his retirement.

On February 25 the regiment participated in a Division Review.

During this hunting season the Master of Fox Hounds of the First Cavalry Division Hunt has arranged for a number of hunts for the troops. Much interest and enthusiasm has been shown and these troop hunts are expected to continue as a valuable and enjoyable part of the hunt program.

For the seventh time in the last eight years the 8th Cavalry Regimental Basketball Team won the Championship of the Fort Bliss Post Basketball League.

Three rounds of play were held between the 7th Cavalry, 82d Field Artillery, Special Troops, Wm. Beaumont General Hospital and the 8th Cavalry. Of the twelve games played the 8th lost only one game, and that to the 82d Field Artillery by a two point margin in an extra five minute period. The Field Artillery won second place with eight wins and four losses.

The long string of league victories in the past years proved the incentive to this year's team. Four of the last five games of the schedule were played with seven of the seven-man squad ill with influenza or suffering from bad colds. Hard luck hit the squad early in the season when Ed Kelly, Team Captain, and outstanding player of the league suffered a fractured jaw. Marvin Wheeler, formerly of the Texas Tech Squad was called home on an emergency furlough, thereby depriving the team of two of their best players.

Despite sickness and the loss of two excellent players, the team handily won their eighth Post Trophy since 1930.

The entire first team placed on the All-Star Team of ten men that is picked by the officers and the Physical Director of the Army YMCA of El Paso. James Nunn (F), Arthur Doyle (C), and Ben Simpson (G), were selected on the first team, while Raymond Meyer (G) and Ernest Nunn (F), received berths on the second team.

The roster of the entire squad is as follows:

Sergeant Jack Mann, Troop A, Guard
Sergeant Raymond Meyer, Headquarters and Service Troop, Guard
Corporal Ed Kelly, Troop A, Guard
Corporal Paul Hester, Troop F, Forward.
Corporal Waymon Snelgrove, MG Troop, Forward
Private First Class David Gragg, Troop F, Forward
Private First Class Marvin Wheeler, Headquarters and Service Troop, Forward
Private First Class Arthur Doyle, Headquarters and Service Troop, Center
Private James Nunn, Headquarters and Service Troop, Forward
Private Ernest Nunn, Headquarters and Service Troop, Forward
Private Calvin Maxwell, Troop F, Center
Private Francis Dorsey, Headquarters and Service Troop, Forward
Private Ben Simpson, MG Troop, Guard
Private Jack Williams, MG Troop, Forward
Sergeant Gilbert H. Appler, Headquarters and Service Troop, Manager
Sergeant John Dugger, Headquarters and Service Troop, Equipment Manager
First Lieutenant William V. Martz, 8th Cavalry, Coach

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10th Cavalry—(less 2d Squadron and Machine-Gun Troop)—Fort Leavenworth, Kansas

LIEUTENANT COLONEL W. H. W. YOUNGS, *Commanding*

During the winter, the three troops here are each holding a Gymkhana in the riding hall. The first one held January 27th was sponsored by Troop A. The events and results of this show are:

CLASS I—Potato Race.
1st—Private First Class Lambkins, "A" Troop
2nd—Private First Class Britton, "A" Troop.
3rd—Private Ginn, "A" Troop.
4th—Private Dale, "A" Troop.

CLASS II—Hack Class.
1st—Corporal Oliver, "A" Troop.
2nd—Private First Class McKinney, "A" Troop.
3rd—Private Holmes, "B" Troop.
4th—Private Early, "Hq." Troop.

CLASS III—Pony Express.
Private First Class Oliver and team, "Hq." Troop.

CLASS IV—Mounted Wrestling.
1st—Private Taylor, E., "A" Troop.
2nd—Private Young, "A" Troop.
3rd—Private Holland, "A" Troop.
4th—Private Thomas, "A" Troop.

CLASS V—Enlisted Men Jumping.
1st—Corporal Marks, "A" Troop.
2nd—Private Taylor, "A" Troop.
3rd—Private First Class Pickinpack, "B" Troop.
4th—Private First Class Ellis, "Hq." Troop.

CLASS VI—Dismounted Tug O'War.
"Hq." Troop Team.

CLASS VII—Musical Chairs.
1st—Private Webb, "Hq." Troop.
2nd—Private Ginn, "A" Troop.
3rd—Private First Class Young, "A" Troop.
4th—Private First Class Oliver, "Hq." Troop.

CLASS VIII—Needle and Thread Race.
1st—Private First Class Pickinpack, "B" Troop.
2nd—Private First Class Thomas, L., "A" Troop.
3rd—Private First Class Oliver, "Hq." Troop.
4th—Private Summers, "Hq." Troop.

The second Gymkhana, sponsored by Troop B, was held on February 16th.

RESULTS:

CLASS I—Potato Race.
1st—Private First Class Pickinpack, "B" Troop.
2nd—Private Young, "B" Troop.
3rd—Private Dunbar, "A" Troop.
4th—Private Webb, Hq." Troop.

CLASS II—Egg and Spoon Race.
1st—Private Hudgins, "B" Troop.
2nd—Private First Class Young, "A" Troop.
3rd—Private Webb, "Hq." Troop.
4th—Private Holland, "A" Troop.

CLASS III—Pony Express.
Private Belcher, "B" Troop.

CLASS IV—Musical Chairs.
1st—Private Beasley, H., "B" Troop.
2nd—Private Dunbar, "A" Troop.

3rd—Private First Class Young, "A" Troop.
4th—Private Ginn, "A" Troop.

CLASS V—Mounted Wrestling.
1st—Private First Class Green, "B" Troop.
2nd—Private Williams, A., "B" Troop.
3rd—Private Collins, "B" Troop.
4th—Private Tate, "B" Troop.

CLASS VI—Enlisted Men Jumping.
1st—Private Webb, "Hq." Troop.
2nd—Private Beasley, H., "B" Troop.
3rd—Corporal Marks, "A" Troop.
4th—Private First Class Hand, "A" Troop.

Both of these shows have been well attended and all are looking forward to the last one to be held March 30th and sponsored by Headquarters Troop.

In the recent Golden Gloves Tournament held in Kansas City, Missouri, Private Robert Sessions, Troop B, 10th Cavalry, won the Novice Championship at 175 pounds and Private Leroy Green, Troop B, 10th Cavalry won the 160 pound Novice Championship. Private Guthrie McKinney, Troop A, reached the finals in the 147 pound class of the Open, only to lose by a close decision to the defending champion. The regiment is justly proud of the achievement of these men who were the only members of the Post Boxing Team to win a championship.

The regimental small bore team has been working under the guidance of Captain R. D. Palmer, 10th Cavalry and has fired in many local and interunit matches.

The indoor polo season closes the week ending March 18th. A local tournament is now in progress between teams of officers on duty at Fort Leavenworth.

There is much interest in the coming baseball season. The regiment has a team in the Post League and also plays many games during the season with outside teams. Weather permitting it is hoped to start practice in the near future. Practically all of last year's team will be out and there is some fine material among the men who have joined since last year.

Master Sergeant William F. Brown retired on February 28th and states that he plans to go to California. We are all sorry to see him leave and wish him every success and happiness in his new home.

Orders have been received assigning Captain Donald H. Nelson to the 10th Cavalry from duty in the Philippines.

11th Cavalry—Presidio of Monterey, California

COLONEL HOMER M. GRONINGER, *Commanding*

In the Chief of Cavalry Matches, the Rifle Team shot well on the first and third weeks' firing but dropped off nearly 100 points from the average on the second week's firing. We tied for fourth place on points, but on final standing dropped to sixth place.

The Pistol Team shot average scores on all their weeks' firing and ended up in sixth place also.

At least three of our best shooters were on furloughs or could not fire.

Rifle Matches with Infantry Regiments: Fired nine matches and lost to all by close scores. Again best men did not fire.

Men who fired: Sergeant Farrell, E Troop; Sergeant Gayne, F Troop; Sergeant Foster, MG Troop; Private Tyler, MG Troop; Sergeant Gibson, Hq. Troop; Sergeant Black, E Troop; Private O'Neill, A Troop; Sergeant Hettrick, B Troop; Sergeant Nash, F Troop; Sergeant Clark, Hq. Troop; P.F.C. Knoles, E Troop; Sergeant Shantz, B Troop; Corporal Kan, E Troop; Sergeant McKinley, F Troop.

A Post Horse Show was held March 4, 1939. The competition in the various classes was keen and there were several excellent performances in jumping and schooling.

The results of the classes were:

Class I, Field Artillery Teams.
1st—Battery E.
2nd—Battery D.
3rd—Hq. Battery.
4th—Hq. Battery.

Class II, Enlisted Men—Open Jumping.
1st—Corp. Weeks, Battery E.
2nd—Corp. Kullick, Troop B.
3rd—Corp. Grossman, Troop A.
4th—Pvt. Frevele, Troop F.

Class III, Remount Jumping.
1st—Sgt. Pusel, M.G. Troop.
2nd—Pfc. Wilcox, Troop F.
3rd—Sgt. Hettrick, Troop B.
4th—Pfc. Ross, Troop E.

Class IV, Officers' Schooling and Jumping.
1st—Captain Callicutt, on *Octavia*.
2nd—Captain Callicutt, on *Bay Bridge*.
3rd—Captain George, on *Billy D*.
4th—Lieut. Thackeray, on *Colleen*.

Class V, Officers' Jumping.
1st—Captain Callicutt, on *Octavia*.
2nd—Lieut. Thackeray, on *Colleen*.
3rd—Captain George, on *Jimmy*.
4th—Lieut. Edwards on *Betsy*.

Preparations are under way for the Seventh Annual Presidio of Monterey Horse Show. The classes will be shown on Soldier Field and the Del Monte Hunter Course. Interest is high and everything indicates it will be a highly successful show. Hunters, jumpers, dressage and polo horses will all get a chance to show their worth.

The winter polo season at Del Monte has been very successful. Major C. H. Gerhardt, Captain L. L. Judge, Captain Alexander George, Captain F. J. Thompson and Lieut. R. G. Fergusson, have been active on the Post squad this year. Several younger officers who joined in the summer have gotten a good start at the game.

Major General Ben Lear, who commanded this regiment and post from 1931 to 1933, was a visitor the latter part of November, en route to Panama.

Master Sergeant Michael Creighton, 11th Cavalry, for many years First Sergeant of Headquarters Troop, retired November 30, 1938, and was given an appropriate send-off by the troop. He departed on a visit to New York, after which he will return to live on the Monterey Peninsula.

The annual practice march of the regiment takes place during the period May 11th to 17th, ending at Camp Ord where field training and the annual tactical inspection will continue to June 2, 1939.

The following personnel changes affect the regiment:

2nd Lt. R. G. Fergusson has been relieved from the regiment and is now Aide-de-Camp to Brigadier General Burgin, with station at Fort Scott in the San Francisco Area.

2nd Lt. Thomas W. Chandler transferred from the Infantry and joined the regiment, from Hawaii.

Officers ordered to the regiment include Major W. B. Augur from Fort Leavenworth, 1st Lt. A. E. Harris from West Point and 1st Lt. Charles M. Iseley from The Cavalry School.

13th Cavalry—Fort Knox, Kentucky

COLONEL CHARLES L. SCOTT, *Commanding*

The tactical training of the regiment continues with weekly brigade and regimental exercises. All problems are drawn to include team-play with the 12th Observation Squadron and the 68th Field Artillery (Mech.). The close coöperation of the air reconnaissance units and artillery is essential to the efficient handling of mechanized cavalry and much improvement is being made along this line. Under certain conditions, cavalry officers with the reconnaissance elements may observe for attached and supporting artillery. Panels to be displayed from stationary and moving command vehicles are being developed to facilitate communication with the air.

Winter combat firing of all weapons, as indicated in a previous issue, continue. Valuable data and experience is being gathered to form a basis for the future adoption of a standardized combat qualification course for all weapons of a mechanized cavalry regiment.

Qualification course with the pistol began on March 1st, under the direction of Major Charles R. Johnson, Jr.

The final results of the Chief of Cavalry's small bore rifle and pistol matches show the standing of the 13th Cavalry and Pistol Team as follows:

First Match			
Rifle	Score 2.674	Sixth Place	
Pistol	Score 1,224	Sixth Place	
Second Match			
Rifle	Score 2.734	First Place	
Pistol	Score 1,331	Second Place	
Third Match			
Rifle	Score 2,799	First Place	
Pistol	Score 1,347	Second Place	
Final Results			
Rifle		Second Place	
Pistol		Third Place	

The 13th Cavalry pistol team fired matches with the 1st Battalion, 10th Infantry, and 1st Infantry, with results as follows:

13th Cavalry, 1,331; 1st Battalion, 10th Inf., 1,308.
13th Cavalry, 1,331; First Infantry, 1,328.

The Thirteenth Cavalry Regimental Bowling Team is at present leading the Post League, with a standing of eleven games won and one game lost.

The Regimental Officers' Bowling Team finished the season in first place, with a total of thirty games won and eighteen lost.

The Headquarters Troop of the regiment completed the bowling season with a total of thirty games won and six lost, to win the Championship of the Red League, and then went on and defeated the Champions of the Blue League for the Post Organization Championship.

First Lieutenant Gerard C. Cowan reported for duty on February 16th and has been assigned to Troop "A."

26th Cavalry (P. S.)—Fort Stotsenburg, P. I.

COLONEL CLARENCE A. DOUGHERTY, *Commanding*

Intensive field training of the regiment terminated with our participation in the annual Philippine Department Maneuvers, January 9 to February 7, 1939, inclusive. The entire regiment apparently has that feeling of having participated in work well-done.

Troops are engaged in range practice, the first squadron on rifle range and the remainder on the regiment (less Troop F) firing the machine guns, light machine gun and the pistol both mounted and dismounted.

Troop F will leave Fort Stotsenburg on February 15th, for the purpose of participating in Philippine Department Military Tournament and Horse Show. Their monkey-drill and musical drill squads will be worth-while attractions in the tournament. The regiment will be well represented by entries in most of the classes in the horse show.

The Fort Stotsenburg annual Sports-week will be held March 16-23, 1939, inclusive.

Several members of the regiment and numerous friends are looking forward to a trip to Pinatubo in the near future, when they will be given an opportunity to become full-pledged members of the "Ancient and Aromatic Order of Balugas of Pinatubo" provided they stand the rigid tests of the ordeal.

By no means the least important of the regimental activities is our participation in the post softball league. The play-off is scheduled February 20-26, 1939, inclusive.

Captain Juan S. Moran, 26th Cavalry (PS), one of the

winners in the recent Department Tennis Tournament will be one of the strongest tennis contestants in the Philippine Department Military Tournament.

Lieut. Colonel Edgar W. Taulbee, Captains Paul A. Ridge and "Rufe" Land will return to the United States on the March transport.

Four cavalry officers: Major Heywood S. Dodd, and Lieuts. R. E. Arnette, Jr., Wm. G. Bartlett, and H. W. Stevenson, have been ordered to the Philippine Department. We hope to have them for duty with the 26th Cavalry.

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103rd Cavalry—Tyrone, Pennsylvania

COLONEL BENJAMIN C. JONES, *Commanding*

Annual federal and state armory inspections have come and gone. The federal inspection of units of the regiment was conducted by Lieutenant Colonel Richard L. Creed, regular army instructor stationed at Harrisburg. The state inspection was conducted by Major Maurice Rose, regular army instructor stationed at Tyrone. The units of the regiment performed quite creditably and definite progress was noted in many phases of training activities.

The annual meeting of officers of the regiment was held in late February at Philadelphia. The conferences and discussions presented were most instructive. And a highly enjoyable feature of the week end was a Saturday evening program of polo and exhibition mounted drill.

It is with regret that we note the transfer to the inactive list of 2nd Lieutenants Robert E. O'Brien of Troop C and Truman J. Norris, Jr., of Troop I. Lieutenant O'Brien requested transfer by reason of the removal of his residence from Philadelphia; Lieutenant Norris requested transfer because of pressure of business.

It is a pleasure to announce the appointment of Sergeant Irvin L. Basler of Troop C to be 2nd Lieutenant assigned to Troop C and of Russell K. Broscious, 2nd Lieutenant Engineer Reserve, to be 2nd Lieutenant of Cavalry assigned to Troop E.

The indoor polo season has closed. The winter months found the Philadelphia armory of the regiment a popular rendezvous for polo enthusiasts on Saturday evenings. The 103rd Cavalry Indoor Polo Association, comprising a number of teams in and about Philadelphia, had a most successful season.

All troops of the regiment are making strenuous effort to complete mounted pistol firing prior to May 1st. This is a popular phase of training in the regiment and officers and men go at it with much enthusiasm.

The regiment goes to Indiantown Gap on June 17th as part of the 52nd Cavalry Brigade for two weeks' field training. There are strenuous days planned for camp and every member of the regiment is looking forward to these two weeks with keen anticipation of pleasure.

106th Cavalry—(Illinois Component)

MAJOR RALPH G. GHER, *Commanding*

A scalene triangle drawn on the map of Illinois with Chicago at the upper angle and Springfield and Urbana at the lower angles would represent the relative positions of the Illinois units of the 106th Cavalry.

Troop E and Band are located in Chicago, Machine Gun Troop and Troop F in Springfield, with Headquarters, Headquarters 2nd Squadron, Headquarters Troop, and Medical Detachment in Urbana.

From Chicago to Springfield is a distance of 200 miles, from Springfield to Urbana 100 miles and from Urbana to Chicago 150 miles.

The regimental adjutant is located in Springfield, the personnel adjutant in Urbana, the adjutant 2nd Squadron in Chicago, and the supply officer in Evanston, a suburb of Chicago.

Despite the widely separated stations, the regiment maintains a closely knit organization which functions smoothly and effectively during the armory training period with the assistance of Major E. A. Franklin and Staff Sergeant Delmar L. Hughes, of the Army, who act as instructors.

The first change in commissioned personnel of the regiment to occur in a number of years took place when 2nd Lieutenant Paul Yoggerst, Troop F, requested transfer to the inactive National Guard. Master Sergeant John T. Walker, Headquarters Troop, who was assigned to duty in the office of Captain W. A. Crookston, Regimental Adjutant, has been appointed 2nd Lieutenant of Troop F to succeed Lieutenant Yoggerst. Lieutenant Walker began his military career in the Machine Gun Troop and advanced through the various grades to Master Sergeant. In addition to being a cavalryman, Lieutenant Walker is an aviator holding an amateur pilot's license.

Machine Gun Troop and Troop F participated in the American Legion sponsored Lincoln Day pilgrimage on February 12th, Lincoln's Birthday. The two troops escorted nationally known visiting dignitaries to the tomb of Abraham Lincoln, where the annual ceremony was held in commemoration of the birth of the martyred president.

A membership committee has been named in the Band to pass on the qualifications of prospective recruits. The committee is headed by Lieutenant William F. Hewitt, commanding, and Warrant Officer Madden. A representative of each instrumental section composes the membership. The first recruit to appear before the committee was a physician, whose qualifications were judged after four rehearsals and drills.

Sponsored by Captain Mark Plaisted, Machine Gun Troop, and Captain M. G. Peter, Troop F, riding groups have been conducted through the historic and picturesque Sangamon River country. These rides are informal and civilian riding dress is worn. An extended trip is contemplated in the spring which will follow the trail covered by Abraham Lincoln between Springfield and the village of New Salem, the early home of Lincoln. This is the trail also used by the pioneer circuit rider and Methodist minister, Peter Cartwright.

An innovation in training will follow the annual federal inspection of Troop F and Machine Gun Troop. Sound films of training at Fort Riley, the employment of machine guns in attack, and against mechanization, as well as short scenes taken of the 106th Cavalry at the summer camps in 1937 and 1938 will be shown. The federal inspection will be held on March 15th and 21st and will be conducted by Major Alton Howard, Cavalry, DOL.

Announcement has been made of the date and place of the 1939 tour of duty of the 106th. The official field training schedule names Camp Williams, Wisconsin, as the location, and July 1st to 15th as the dates. The entire regiment consisting of Regimental Headquarters, Band, Machine Gun Troop, and 2nd Squadron from Illinois, and the Commanding Officer and 1st and 3rd Squadrons from Michigan, will be together for the second time in history, the first being the 2nd Army Maneuvers in Michigan in 1936.

The 105th Cavalry, Wisconsin National Guard, will complete the brigade and this will be the first cavalry brigade encampment for the 106th.

The last Armistice Day was a reminder that the ranks of World War veterans in the regiment have been decreasing, but the 106th Cavalry can boast of a greater percentage of World War veterans than can many National Guard regiments. Lieutenant Colonel Kenneth Buchanan (now on duty with the War Department General Staff) heads the list. He served as a first lieutenant of field artillery in France. Major Ralph G. Gher also served in the field artillery. Captain W. A. Crookston, Adjutant, served as a first lieutenant of field artillery with the A.E.F. and as a captain of field artillery in the United States. Captain Max Flewelling, Headquarters Troop, held the rank of sergeant of field artillery in France, while Captain Mark Plaisted, Machine Gun Troop, served with the infantry in the Army of Occupation in Germany. 1st Lieutenant Charles Bean, Machine Gun Troop, was awarded the Purple Cross for his services with the 124th Field Artillery. Captain Frank C. Sleeper, Supply Officer, served in the Navy. Major Clyde D. Gulick, Medical Detachment, Captain H. P. Macnamara, Medical Detachment, and Captain S. P. McGilligan, Medical Detachment, all held commissions in the Medical Corps during the war. Captain A. E. Dickerson, V.C., served with the Veterinary Corps in France. In addition to their World War service, Captain Crookston and Captain Flewelling saw service on the Mexican Border in 1916. A number of enlisted men of the regiment are veterans of the World War.

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110th Cavalry—Massachusetts-Connecticut

COLONEL PHILIP L. BROWN, *Cavalry*

An exhibition of military and semi-military events, arranged, directed and staged by the enlisted men of the 110th Cavalry attracted more than 1,000 relatives and friends of troopers in the National Guard horse regiment to the Commonwealth Armory, Friday evening, Feb. 24.

The two small balconies in the armory with a capacity of 570 seats were overtaxed by the great outpouring and corners of the large drill hall overflowed with spectators who remained throughout a 2½ hour program to applaud without favoritism the efforts of the horse soldiers.

There were four military events, the best trained remount, the best turned out troopers' mount, jumping, and the best squad in full field equipment. In addition there were three highly amusing chukkers of "broom" polo in which representatives of Headquarters Troop, Troops E, F, I, and K, and the Medical Detachment competed. The annual Enlisted Men's night closed with an exhibition of pyramid and Roman riding by members of Troop E and dancing in Curtis Guild Hall followed with music by the 110th Cavalry Band orchestra.

The best trained remount class brought out the latest shipment of young horses received by the cavalry several weeks ago. The animals had been assigned for training to selected men in the regiment and those men engaged in competition to show the effect of their horsemanship efforts with the remounts. The winner was Pvt. 1cl. Robert S. Chisholm, Troop I. Other ribbon winners were Corp. Aldo Saporito, Troop E, second; Pvt. Robert N. Turner, Troop F, third; Sgt. Joseph P. Moran, Troop E, fourth.

The troopers' mount class, judged on appearance of the horse and the trooper's equipment was won by Pvt. John J. Campbell, Troop E; second, Sgt. William S. Gibson, Troop F; third, Pvt. William V. Gorski, Headquarters Troop; fourth, Pvt. Robert W. Harkins, Troop E.

Jumping brought forth a number of plain and fancy cavalry mounts each required to take eight three-foot jumps, the performance of the rider being the basis of judging. First was Staff Sgt. Harry J. McGrath, Headquarters Troop; second, Pvt. Gerald F. Hogan, Troop K; third, Sgt. Joseph P. Moran, Troop E; and fourth Sgt. Edward L. Hopkins, Troop I.

Each troop sent out a squad complete in steel helmets and full field equipment to compete for the title of best squad in the regiment. The class was won by Troop E led by Corporal William T. McQuade. Judging was based on gaits, mounting and dismounting, to fight on foot and link in couples.

The judges were all regular army Cavalry officers assigned to this area. They were Colonel Frank K. Chapin, Colonel John Millikin, and Major Thomas J. Heavey.

Master Sergeant Leroy A. Davison was chairman of the committee that included Master Sergeant Francis J. Breen; First Sergeants Walter C. Newman, Troop I; Gilbert J. Woodworth, Troop K; William L. Joyce, Troop E; Frederick R. Green, Headquarters Troop; Roscoe L. Cummings, Troop F; Staff Sergeants Frank J. Dooley, Harry J. McGrath, John T. Woodworth, Walter J. Green, Walter J. Gilbert; Technical Sergeants Henry

J. Hurley, George E. Donovan, Peter Easson, and Warren C. Gibson of Headquarters Troop.

112th Cavalry—Dallas, Texas

COLONEL CLARENCE E. PARKER, *Commanding*

All units of the regiment are hard at work preparing for the Annual Federal Armory Inspection, which will be conducted by Lieutenant Colonel Rex E. Willoughby, Cavalry, during the period 12th to 19th March.

These preparations together with the squad tests and Cavalry Leadership Tests, for small units being conducted in the regiment are keeping everybody on their toes, from buck privates to the colonel. One troop commander recently remarked, "The Old Man sure is turning on the heat, this Armory Training Period."

As scheduled, the Troop Period and Dismounted Phase of the Intermediate Period, in the Platoon Leadership Test, were completed on January 15th and February 19th, respectively, and the results are most gratifying.

The scores awarded the competing platoons from each troop were very close, and as this phase only counts 98 points out of a possible 1,000 it is anybody's race to date.

The 2d Quarterly tests in the squad and individual competitions being conducted in the Medical Detachment and Band were completed on February 15th and 27th, and Colonel Parker was very much pleased at the marked improvement in initiative of non-commissioned officers shown over the last training test conducted for these two units.

On January 1st, Captain Beecherl, Lieutenants Fenley, Cowman, and Leonard, officers of the Machine Gun Troop, were hosts to all officers of the regiment at their annual New Year's party held at the troop club house at Letot.

General Walter B. Pyron, the Brigade Commander, was the guest of honor and principle speaker of the evening.

After sufficient drinks, a barbecued venison dinner was served, and the fine buck that furnished the tender venison for this delicious repast, was drilled through the head by "Unk" Beecherl, according to his own statement, at 600 yards, which shows old Unk can shoot a rifle darn near as well as he can a machine gun.

The regiment received a shipment of 26 remounts from Fort Reno, on January 6th. These animals all arrived in excellent shape, are of suitable type, have good dispositions and show the result of excellent handling and gentling at the remount depot.

The troop commanders drew for the remounts by lot, and without exception, were tickled to death with the type of animal drawn for their respective troops. All state that they are by far the best received to date, from any remount depot.

Colonel Parker was so pleased with the excellent type of remounts furnished and with their good dispositions and tractability, which is most necessary for National Guard Cavalry, that he wrote a personal letter of thanks to the Commanding Officer of the Fort Reno Depot.

Colonel Robert M. Cheney, Senior Instructor of Cavalry, Texas National Guard, notified the regiment on February 6th, of the sad death of our Honorary Colonel, "Tommy" Tompkins, who was loved and respected by every member of the 112th.

Ever since the regiment's first field training period at Leon Springs, Texas, where Colonel Tompkins was in command and who was then elected our Honorary Colonel, "Tommy, God Bless him," has never failed to pay us a visit during our field training camp, no matter where it was held.

Only last summer, although he was a sick man at the time, he visited the regiment at Camp Bullis, where he was the guest of honor at a regimental party and renewed old acquaintances with officers and non-commissioned officers, who loved and worshipped him, like every cavalryman did, who had ever served under Colonel Tompkins.

At the assembly formation of all troops of the regiment on Sunday, February 12th, the first regimental assembly after Colonel Tompkin's death, Colonel Parker ordered taps sounded and each troop presented arms to the memory and honor of this grand old cavalryman.

The following listed non-commissioned officers and privates won first place in the troop inspection and demonstration competitions conducted by the regimental instructor, for months of January and February, 1939:

Headquarters Troop

Best turned out mounted trooper—Sgt. H. W. Allen. Best turned out dismounted trooper—Sgt. W. D. Sperry.

Machine Gun Troop

Best turned out mounted trooper—Sgt. D. E. Colley. Best turned out dismounted trooper—Sgt. R. A. Lee.

Troop A

Best turned out mounted trooper—Sgt. W. H. Laird. Best turned out dismounted trooper—Sgt. P. D. Hale.

Troop B

Best turned out mounted trooper—Sgt. C. A. McManus. Best turned out dismounted trooper—Cpl. W. B. Shaw.

Troop E

Best turned out mounted trooper—Sgt. E. M. Hockwald. Best turned out dismounted trooper—Cpl. J. L. Phillips.

Troop F

Best turned out mounted trooper—Pvt. W. Burke. Best turned out dismounted troopers—Pvts. W. Burke and D. K. Hott, tied for first place.

NOTE: This is the first instance in the regimental competition where the same man won both mounted and dismounted, and Pvt. Burke deserves great credit.

Someone has said, "Show me how you take care of your animals and I will know how efficient a cavalry organization you are." If this be the criterion of the efficiency of a cavalry unit, and we know of no better one, the 112th Cavalry, Texas National Guard, can well make its bid for a place in the sun perforce what was accomplished by the 1st Sgt. and Stable Sgt. of Troop F, 112th Cavalry, Tyler, Texas. What these two men accomplished was beyond the ordinary call of duty, and reflects not only efficiency but real love of the horse.

Old Abie, Government-owned horse of this Tyler organization, is decidedly not an example of equine beauty or perfection. His twenty-two years of service hang heavy on him. With a head like a gallows-tree, he certainly wouldn't win any prizes in a horse show, and it would be straining a point to say that he had a commercial value in excess of fifteen dollars. But with all that, he possesses a heart of gold and a spirit of loyalty that could belong only to an old trooper, and besides he had been the stable sergeant's horse for years. So when old *Abie* failed to answer present on Sunday evening, October 16, 1938, as Stable Sergeant Forrest S. Norman, was feeding the troop horses, this unheard of dereliction of duty on part of this old troop horse brought about an immediate search. Finally he was found lying down in a corner of the pasture, in a dazed condition and very weak. First Sergeant Charles B. Toliver, Sergeant Norman, and some troopers of Troop F after considerable effort, finally got old *Abie* to his feet and practically carried him to the corral. Dr. J. T. Hawkins, a local veterinarian, was called. Upon examination of the horse he pronounced what was taken to be old *Abie's* death sentence, for the veterinarian said, "This horse has sleeping sickness." For all practical purposes it was a death sentence, because, the veterinarians tell us over ninety-six per cent of sleeping sickness cases, where the horse goes down, are fatal. Dr. Hawkins administered a shot of serum although he believed *Abie's* case was hopeless.

But Sergeants Toliver and Norman (see cut) did not give up; they decided that although the chances were nearly one hundred to one against recovery they were going to do their utmost to swing the balance in favor of the infinitesimally short odds. They established a day and night roster over the horse, and one or both of these sergeants was with *Abie* day and night, for ninety-six hours.

A frame work was built of lumber, constructed to hold the horse upright on its feet and padded to prevent injury, as no sling was available. A canvas cover was put over this framework to give him as much protection as possible from the weather. Due to his condition the horse refused to drink, and water had to be administered to him by means of a rubber tube through the nostrils, and enemas given every four hours.

The horse was fed a hot bran mash, whenever it could be forced down, mixed with a medicine Dr. Hawkins prescribed. After four days of constant attention a few minutes daily exercise was then given the horse and gradually increased until the exercise was given three times each day. At the end of a week the condition of the horse was improved sufficiently to remove it from the frame. A six weeks' isolation period followed, and needless to say

First Sergeant Toliver, "Abie," and Sergeant Norman.

these two sergeants continued to give old *Abie* special care and attention. In two months the horse was completely recovered and was "on the line" for the regular drills of the organization.

Troop F still has old *Abie* with his heart of gold, and the 112th Cavalry is justly proud of this organization and its 1st Sergeant and Stable Sergeant who have demonstrated that they have that "greater love" for an old but faithful servant.

124th Cavalry—Houston, Texas

COLONEL CALVIN B. GARWOOD, *Commanding*

On February 5th the Regimental Staff and Headquarters Troop participated in a Command Post exercise, which was held at Headquarters Troop, 124th Cavalry. The problem was prepared by Lt. Col. R. E. Willoughby, Unit Instructor, and Captain Jules R. Smith, Regimental S-3. The forward echelon and the Commander's group were located in different parts of the city and the rear echelon was at the armory. The problem included the orders from the 56th Cavalry Brigade, who was represented by Brigadier General Walter B. Pyron, and Captain John Mettenheimer, Brigade S-3.

Officers and men in the Regiment were shocked to hear of the death of that fine old cavalryman, Colonel S. R. H. (Tommy) Tompkins. He was in command of Camp Stanley when our Brigade used to have their annual encampment there and he was an honorary Colonel in this Brigade. We all will miss the annual visits from this fine old character who has passed to his reward.

305th Cavalry—Philadelphia, Pennsylvania

COLONEL VINCENT A. CARROLL, Cavalry-Reserve, *Commanding*

Interest in the winter training program and correlated activities of the regiment as evidenced by attendance is better this year than ever before. The Wednesday luncheons have recently been devoted to conferences on last year's Cavalry School problems. The riding on Wednesday evening has generally covered troop drill with some equitation and jumping. Pistol practice has been discontinued due to lack of ammunition. We are in hopes

that hidden away in the appropriation bill now before Congress there are several chests of caliber .45 ammunition for next year's pistol training.

Our ritzy luncheon place, the Arcadia International Cafe has folded up, therefore the noon luncheons are now being held at "The Sansom House." While not quite as classy, it appears to be solvent and likely to continue in business for some time to come.

Early in January, Colonel T. J. Johnston, Chief of the Remount Service, favored us with a talk on horses, stallions, breeding and the remount service. Colonel Johnston knows horses and his talk was very interesting as well as instructive.

The regiment was also very fortunate in having Captain Peter A. Nolan, late of the British Cavalry, as guest speaker. Captain Nolan gave a vivid and thorough description of the cavalry engagement at Nery during the World War. His talk gave new meaning to the words "MOBILITY—FIRE POWER and SHOCK."

On February 1st, the officers entertained the Chief of Cavalry at a dinner at the Rittenhouse Club. General Herr gave an excellent talk on the "Future of Horse Cavalry" which helped allay some of the fears raised by the proponents of mechanization. We welcomed this opportunity of meeting the Chief of our Arm. The arrangements were perfect down to the last detail, due to the untiring efforts of Lt. Sam Naftzinger.

Almost before he had a breathing space, Sam was drafted to run a Cabaret Dance on St. Patrick's Day, March 17th, at the Germantown Cricket Club. The members of the regiment and their guests are looking forward to a gala evening.

Captain Fred Streicher, who, incidentally, is to be promoted to Major soon, gave a talk at noon on Mechanized Cavalry. He covered the topic so thoroughly and in such a manner, that he was asked to repeat the talk for the officers of the 315th Infantry. His success with the Infantry was even greater than his performance for the home team.

Captain Streicher aided by Captain "Doug" Morrow put on a Mobilization Test on February 18th. The orders were received on the 17th—Report by person, wire, telephone, special delivery mail, radio, or messenger to Regimental Headquarters on February 18th. By noon eighty per cent of the officers had reported and over ninety per cent of the enlisted men rang the bell. The general opinion has been that the test was very successful and that the regiment is far from a moribund outfit.

Lt. Riordan has announced that the Mechanized Night Ride will be held on Friday evening, March 31st. Enthusiasm for this competitive event is high and we hope to announce the names of our expert map readers and road finders in this column in the next issue.

Lt. Gentle has promised, as Chairman of the Horse Show Committee, to put on a show in May that will be the talk of the town.

306th Cavalry—Baltimore, Maryland

COLONEL MATTHEW F. JAMES, *Commanding*

Members of the regiment in both Baltimore and Washington are now well along in their preparations for CMTC this summer. All conferences from February on will be part of a refresher course for our active duty at Fort Belvoir.

On January 5th, the Baltimore officers attended a luncheon sponsored by the Department of Maryland, R. O. A. in honor of Colonel John C. F. Tillson, Jr., Senior Unit Instructor of the Baltimore Reserve Units. This affair was well attended by all the Arms and Services.

At the first conference in January, Colonel J. L. Collins, FA, lectured to the Baltimore units on "The Rôle of the Field Artillery." At this same conference Colonel Bruce Palmer showed movies of the march of the Seventh Mechanized Brigade from Fort Knox to Fort Riley, and the maneuver of October, 1938. At the next conference a Training Field of "Cavalry in Dismounted Action" was shown. This was followed by a problem on the same subject given by Major V. J. Blondell and Captain Carroll Wright. Colonel Palmer held a joint conference of Cavalry and Engineers at the first conference in February and the subject was "Engineers with Cavalry." This conference covered the use of Engineers by both Horse and Mechanized Cavalry. At the second conference in February a Training Film on "Map Reading" was shown, followed by "Pistol Marksmanship" by Major V. J. Blondell and "Rifle Marksmanship" by Major W. C. Warner.

Features on the schedule of the Washington units for this period were lectures by Brigadier General H. S. Hawkins, U.S.A. retired, and Colonel John F. C. Tillson, Jr., Senior Unit Instructor of the Regiment. Both of these speakers gave many practical suggestions which are and will be very helpful to those officers who heard them. Officers of the Reserve who addressed conferences during the past two months include Major William Yetton; Captains E. H. Daniel, William I. Irby, Jesse T. Nicholson, Edward Perkins, and Walter W. Woodruff; Lieutenants Robert Curtis and Thomas Rogers.

Rides have been held at Fort Myer twice a month and the officers of the Regiment have shown their enthusiasm in the fine program that is being conducted by the large attendance at every ride.

The birthday of the Regiment was celebrated again this year by a ride at Fort Myer in the morning followed by a Dinner Party at the Army-Navy Country Club. Sixty-one officers of the Regiment attended the ride and dinner. Guests of honor at the dinner were Major General John K. Herr, Chief of Cavalry, and Colonel Bruce Palmer, Chief of Staff, 62nd Cavalry Division. The Regimental Commander, Colonel Matthew F. James was Toastmaster of the occasion. Expressions of regret at not being able to attend were received from His Excellency, Herbert R. O'Connor, Governor of Maryland; Colonel George S. Patton, Commanding Officer of the Third Cavalry, and

Lieutenant Colonel John C. Mullenix, former Unit Instructor of the Regiment. Speakers of the occasion were Major General Herr, who made the principal address; Colonel Palmer, Colonel Tillson, Lieutenant Colonels William H. Skinner, Regimental Executive; Joseph L. Philips, Unit Instructor; Adolphus W. Roffe, 3rd Cavalry; and Edward B. Harry, former Commanding Officer of the Second Squadron. One officer spoke for each rank, and the "Case of the Second Lieutenants" was very ably presented by Lieutenant Ford E. Young, Jr. The Regiment is indebted to Major Edward A. Kane and his committee for a most enjoyable celebration.

Although regretting his absence at the Birthday Celebration the Washington officers were delighted by a prior visit from Lieutenant Colonel Mullenix at the conference held on January 19th.

Recent assignments to the Regiment by Division Orders were: First Lieutenant Lawrence B. Wilson, and Second Lieutenants William S. Covington and Robert C. Tetro. Second Lieutenants Robert W. Brown and Walter L. McCaddon were transferred to the 462nd Armored Car Squadron, and First Lieutenant Howard Baker was relieved from assignment to the Regiment.

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307th Cavalry—Richmond, Virginia

LIEUTENANT COLONEL R. B. H. BEGG, Cavalry-Reserve *Commanding*

The annual activity in home work, to qualify for active duty, started with a bang in February. Our old friend Major John P. Dean, 154th Cavalry Brigade, is keeping the instructor busy marking his 50 series lessons at the rate of about one per day. He is boning for the spring session at Leavenworth.

The regiment regrets the loss of 2nd Lieut. Mark L. Robinson, due to his change of residence to 4716½ Franklin Avenue, Hollywood, California, and of 2nd Lieutenant John L. Grimes, to the AGD-Reserves, February 7, 1939.

Captain Robert S. Cochran, 1717 Hanover Avenue, Richmond, Va., was assigned to the Regiment, January 1, 1939, from the 462nd Armored Car Squadron.

Lieutenant Grayson R. Headley, is now wearing his first lieutenants bars having been promoted February 7, 1939.

Lieutenant Colonel Glass, unit instructor, has received orders detailing him on a mission to Guatemala. The 307th will miss him.

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308th Cavalry—Pittsburgh, Pennsylvania

COLONEL GEORGE H. CHERRINGTON, Cavalry-Reserve. *Commanding*

As usual, the midwinter period has cut into the outdoor activities of the regiment. Although a few hardy individuals have ridden almost every Sunday, the weather has discouraged most of the officers. The indoor activities, however, have increased over each of the past three years, the attendance at conferences being especially gratifying. All conferences are conducted by officers of the regiment and have been more than satisfactory in every way.

This year the regiment did not stage its annual military ball during National Defense Week, this feature having been adopted by the Reserve Officers Association, the National Guard and the Naval Reserve. Instead of the ball, the regiment held a private dance at the Webster Hall Hotel on Saturday, February 25th, with about twenty-five members of the regiment and their ladies attending.

On February 13th the regiment lost one of its original members, when Major James M. Graham decided to decline reappointment. Major Graham attended Officers Training Camp in 1917, was commissioned Provisional Second Lieutenant of Infantry, soon transferred to Cavalry and served in Panama with the 12th Cavalry. After the war he resigned and completed his college course and law school. He was commissioned a Captain, Cavalry Reserve, immediately after resigning and was one of the most active officers of the regiment for many years. All members of the regiment regret that Major Graham decided to retire from military service. They are happy, however, to welcome Major John P. Dean, Cavalry Reserve, of Chambersburg, Pa., who has been assigned to the vacancy created by Major Graham's separation from the service.

Colonel Cherrington, regimental commander, is now absent in Arizona on his regular winter holiday of several weeks. He is the guest of Mr. Bliss Flaccus, a former member of the regiment, at the latter's beautiful ranch, Rancho del Lago, near Vail. Colonel Cherrington always returns from these visits greatly refreshed and in good condition to tackle the various strenuous duties of a Pittsburgh business man.

The regiment feels very fortunate in being permitted to send two of its members to schools this spring. Captain Jean T. Ross has been ordered to the Command and General Staff School at Fort Leavenworth, and Lieutenant J. Roy Degenhardt has ben ordered to Fort Riley. Both are outstanding members of the regiment and much is expected of them at school and upon their return.

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Reserve Affairs—Kansas City, Missouri

The 14th annual banquet of the Cavalry Reserve Officers of Greater Kansas City was held on February 4, 1939, to commemorate the organization on February 2, 1901, of the 15th U. S. Cavalry.

Regular cavalry officers attending were Colonel Hugh H. Broadhurst, coördinator for Reserve affairs in Kansas City; Colonel Henry W. Baird, CO, First Cavalry (Mecz); Lieutenant Colonel D. G. Richart, instructor, Iowa N.G., who was principal speaker; Lieutenant Colonel H. Thompson, Unit Instructor for Cavalry, Kansas City; Captain Gordon Rogers, student, C&GSS, Fort Leavenworth; General (Major General) E. M. Stayton,